

free flight

Mar/Apr 81

vol libre



President's Notes:

As these are the last President's Notes of my term of office, I am taking the opportunity to review briefly the highlights in the development of the Association during the recent two years.

Of great significance was the first official correspondence I received from the Federal Government after taking office that served notice of drastically reduced funding in 1979 and a complete funding cut-off in 1980. Through appeals and membership lobbies, interrupted by two general elections, we were able to maintain a low level of funding and a commitment that when we met the newly established criteria, we would be reconsidered favourably for full funding. Diligent efforts by rapidly formed provincial associations and the submission of a new SAC development plan resulted recently in the Association again meeting the criteria and the initiation of new funding negotiations. The benefits of such activity will be reduced membership fees, a stronger provincial base, and the recognition of being part of the sport mosaic of Canada; the costs are the increased administrative burden on our already stretched staff and volunteer core. As an Association, we have consciously chosen to accept the burden to achieve the benefits.

It also became obvious during my first year in office that, because of the ever-increasing load assumed over the years by our national office, a second member had become essential if the system was not to stagnate, or worse, collapse. After obtaining the membership approval at the last Annual general meeting, we were fortunate to obtain the services of Jim Leach as our Executive Director in June 1980.

With Jim on board we have been able to devote more time to developing detailed plans for the future of soaring in Canada, and its growth both as a sport and a recreation. Plans for increased competition and advanced soaring, membership growth and public relations will be followed this season.

A major area of concern being addressed is the increased competition for both the recreation time and money of our population in a general period of economic retrenchment. Only imaginative and outgoing recruitment will allow our sport to flourish. Very few of our clubs are operating at capacity and yet the advantages of doing so both from the point of view of reduced individual costs and time demands are clear. Five more members in each club will increase the number of people soaring in Canada by 250 or by 15% of the SAC membership.

Our working relationship with federal government agencies have in general improved markedly, particularly with Transport Canada. For example, our authority for undertaking the work, at considerable cost saving to the membership, leading to the type approvals of new gliders was re-established, and constructive negotiations are presently underway to ensure that gliding operations are not adversely affected by proposals for the reorganization of airspace.

Internally, one of our biggest disappointments this year has been the spasmodic appearance of Free Flight. Under the new editorship of Ursula Burton and the management of the production by the national office, we believe the problem has finally been overcome. The next months will tell. On the positive side, our initiative with the SAC calendar. Sales to external non-gliding people have been considerable this year and hopefully some of these buyers or their visitors who see the calendars will eventually turn up at our airfields as potential members.

Our brochure too has proved to be invaluable as a means of stimulating enquirers to visit clubs. More clubs should take advantage of these.

Our competitions at the National level are becoming bigger and better, interest in local and regional competition is increasing and our fleets of gliders are visibly improving. An excellent team has been selected for the Internationals (as usual, for support for the team is solicited) and we are hopeful for another good showing.

Where do we stand now? From the initial shock provided by the reduction of the federal government funding which had subsidized our operation (for ten years, the difficulties regarding type approvals of gliders and a retrenching economy, we have emerged leaner, with much more crystallized objectives, an Executive Director to complement the Secretary Treasurer in the National Office, and the resolution with full membership support to enhance the growth and popularity of soaring in Canada. As outgoing president I can happily report to you, the members, we have excellent staff and volunteer leaders working on your behalf, and with your help as well as your continued critical appraisals we cannot but succeed in getting ever more enjoyment from our sport. Thank you for your support.

K.H. Doetsch
President



free flight

Mar/Apr 1981

The Journal of the SOARING ASSOCIATION OF CANADA
Le Journal de L'ASSOCIATION CANADIENNE DE VOL À VOILE

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Cover

Spring can be the worst time of the year for the home-builder. The last 10% of the project has taken all winter, and the ship still isn't ready to fly. Photo shows an RS-15 tail surface going together.

Photo Tony Burton

Executive Director Notes

by *Jim Leach*

CANADA'S NATIONAL SOARING TEAM HAS NOW BEEN CONFIRMED

The following pilots have been selected in accordance with SAC procedures to represent Canada at the World Gliding Championships in Paderborn West Germany 21 May – 9 June 1981.

Helmut Werneburg, 41 of Ancaster, Ontario
Paul Sears, 31 of Toronto, Ontario
Ulli Werneburg, 34 of Ottawa, Ontario
Jim Carpenter, 43 of Toronto, Ontario

Helmut is certainly not new to the international soaring scene having attended the World Championships 1976 and 1978. Helmut has been the Canadian Champion in both standard and 15 metre classes in 1976, 77 and 78. Helmut is expected to provide strong leadership to our national team.

Paul Sears, while relatively new to world level competitions, brings a strong showing in Canadian Championships. Paul was the Canadian Champion in 1979 and 1980 in the Standard class.

Ulli Werneburg will also experience the taste of world class competition for the first time at Paderborn. Ulli brings considerable experience from United States Regional and National Championships and was runner-up to brother Helmut in 1979, 1980 in the 15 metre Class.

Jim Carpenter's sixth place finish at the World Championships in 1978 represents the second best Canadian effort at the World Championships. The late Wolf Mix finished fourth in 1972. This will be Jim's fourth appearance at the World Championships and is therefore the veteran member. Jim was the Canadian Champion in the Open Class in 1972 and the runner-up in the Standard class in 1979.

I'm sure I speak for the total SAC membership when I say that Canada will be well represented at this year's World Championships.

To the National Team, congratulations, good luck. We look forward to acclaiming a World Champion on your return.

There's ONE place down at Chipman
Which is everybody's friend,
Providing rest and sweet relief
Though vapours oft offend.

ONE PLACE AT CHIPMAN

There's no spot so sought after,
A most popular retreat,
There's no discrimination,
But again — you'll have to wait!

by *Freya Crane, Nov. 1980*

Edmonton Soaring Club

This little house is made for ONE,
It's just a sheltered hole;
But what a dire disaster
When no paper's on the roll!

The
SOARING ASSOCIATION
OF CANADA
L'ASSOCIATION
CANADIENNE
DE VOL À VOILE

is a non-profit organization of enthusiasts who seek to foster and promote all phases of gliding and soaring on a national and international basis. The Association is a member of the Royal Canadian Flying Clubs Association (RCFCA), the Canadian national aero club, which represents Canada in the Fédération Aéronautique Internationale (FAI, the world sport aviation governing body composed of national aero clubs). The RCFCA has delegated to SAC the supervision of FAI-related soaring activities such as record attempts, competition sanctions, issuance of FAI Badges, and the selection of a Canadian team for the biennial World soaring championships. *FREE FLIGHT* is the Association's official journal.

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CANADIAN TEAM NEWS

PADERBORN UPDATE

by *Al Schreiter, Chairman World Contest*

Time is running out. There are less than four months left as I write this, and of course there will be even less time when you read this.

Material published in *FREE FLIGHT* is contributed by individuals or clubs for the reading enjoyment of Canadian soaring enthusiasts. The accuracy of the material is the responsibility of the contributor. No payment is offered for submitted material. All individuals and clubs are invited to contribute articles, opinion, reports, club activities, and photos of soaring interest. Prints (B & W) are preferred, colour prints and slides are acceptable. No negatives will be used.

FREE FLIGHT also serves as a forum for opinion on soaring matters and will publish letters-to-the-editor as space permits. Publication of ideas and opinion in *FREE FLIGHT* does not imply endorsement by SAC. Correspondents who wish formal action on their concerns should contact their SAC Zone Director. Directors' names and addresses are given elsewhere in the magazine.

All contributions to the magazine will be acknowledged on receipt. We will endeavour to say when it will be used. All material is subject to editing to the space requirements and the quality standards of the magazine.

The contents of *FREE FLIGHT* may be reprinted; however, SAC requests that both *FREE FLIGHT* and the author be given attribution on any such reprint.

First the good news. We have four excellent aircraft secured for the contest. Willi Krug of Calgary has kindly consented to have Hal Werneburg fly his brand new Ventus, so there will be at least one Canadian registered sailplane at Paderborn. We will be leasing a ASW-20 and a ASW-19, and have just received confirmation that a new LS-4 will be available in time for the contest. So as far as equipment is concerned, we are in great shape.

Now the bad news. Although a few dedicated supporters have made contributions to the Team Fund, the total response so far has been very disappointing. I cannot believe that several hundred SAC members are totally indifferent to Canadian representation in Paderborn. Please prove me wrong. Remember, contributions to the team fund are tax deductible, so you can be a hero and beat the taxman at the same time. If you are going to assist the Canadian Team financially, please DO IT NOW. We have just received news about the prices to be charged at Paderborn, and it's not good. Entry fees are DM 750 (approx. \$475) per sailplane, tows are DM 25 (approx. \$16) each, the cheapest lodging in a hostel is about \$15 per day per person, and food will run at least that much. With gasoline at about \$1 per litre, we hope there will be few retrieves.

Dave Puckrin of Edmonton Soaring Club has made copies of the book "Yawstring" by Garnet Thomas available so that we can give one away with every \$10 donation to the fund. Thank you, Dave and Garnet, on behalf of the Team.

Send your tax deductible donation to Canadian Team Fund, Soaring Association of Canada, Box 1173, Stn B, Ottawa, Ont. K1P 5A0.

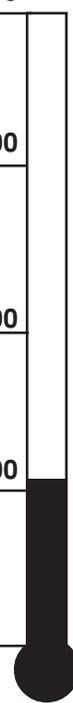
\$ 40,000

\$ 30,000

\$ 20,000

\$ 10,000

\$ 0



Last summer I had the privilege of managing the Start Gate at the Canadian Nationals at Claresholm. This was quite an experience, and I would like to share a few thoughts with you.

One must wonder who would volunteer for a task like this. Well, this particular individual was standing about when Rainer Zimm, Cu Nim CFI and one of the organizers of the contest, approached me to manage the "gate". He offered power, beautiful women, wonderful experiences, romantic summer nights, and excellent benefits; all included in a package deal for two weeks of very easy work. (He also had options on some lovely waterfront property in Florida!)

At this time I was very busy with Cu Nim as president, and employed by a certain Alberta Corporation: "John, *we* are the ones who are paying your salary ... remember?!"

I left shortly thereafter and joined another company on the condition of two weeks leave to run a "start gate". Just for fun someday, try to explain a "gate" to a new employer. . . "sailplanes fly through a 1000 x 1000m window, we yell "Mark", and ... oh, never mind". Enough hearts and violins! If one adopts the correct frame of mind (I'm willing to adopt any mind, old, new, used, etc), it really can be rewarding ...

Now the helpful hints ...

- **I strongly recommend** that anyone considering running a "gate" refer to an article by Rudy Allemann. SOARING, June 1978, and by using this article as a guide, one can readily grasp the principles and adapt to suit his own particular situation.

- **Practice days** are for the contest crew and should be used to full advantage. Unfortunately, we as a gate crew, did not apply enough pressure to ourselves during the practice days.

Also, the original plan called for alternating gate managers, a plan that was dropped after practice day #2; because our alternate thought better of the idea, so back to one manager.

This system of alternating managers can help reduce the load on one individual. If one chooses to use an alternating day system, remember, one manager must stay put for each day. This helps the pilots (they can get used to the voice, etc.) and ensures a uniform method for any given day.

- **Designate one tow pilot** as the "calibration pilot". The same pilot should run every calibration flight. This speeds up the procedure of gate calibrations, and

REFLECTIONS ON MANAGING A START GATE

by *John Weber*

also assures proper communication and understanding between tow pilot and gate crew. The designated tow pilot should be ready to re-calibrate at any time, should wind speeds change during the time the gate is open.

The pilot to use is the Chief tow pilot as he/she is already part of the formal contest staff.

Unfortunately, at the start of the contest, with the start gate people doing the "book-keeping", many pilots called IP (Identification Point) just to get listed, and in fact were nowhere near the IP and ready for run-in. This phenomenon has been seen at many contests in the USA, and I guess we are much the same here.

We introduced another system which worked very well for the remainder of the contest with pilots doing their own organizing and spacing for start runs:

Only *one* sailplane at a time is allowed at IP with twenty second intervals between runs. If too close, the next sailplane at the IP was told to "orbit once, then proceed". Succeeding sailplanes maintained their own traffic separation and proceeded towards the IP in an orderly fashion.

The twenty second interval was pared down slightly, after gate and pilots gained the necessary experience. The last day we ran 9 gliders through the gate in just under 3 minutes!

This is a real compliment to pilot discipline, and an indication of lessons learned by experience.

- **The recorder** at the start gate ideally should be the scorer. This eliminates many headaches and questions after the time sheets are completed.

- **All ships must display contest letters** as required by FAI. It is too difficult identifying ships and registrations with binoculars; contest letters really help.

May I suggest (so you may understand the difficulty) that one day you take a pair of field glasses and try to pick up the registration of a sailplane at 1000 m and at the same time check the appropriate

contest letters on a long list of registrations!

In future this rule of using contest letters must be enforced.

- **Sometimes a pilot realizes** he will be too high before completing a run and aborts it. If a pilot is breaking off, please radio in contest letters and "breaking off". This helps our record-keeping and frees the gate for the next pilot.

- **The Contest Director** required recognition runs to be run as if an actual start was attempted. "Recognition" runs should be incorporated for identification times. Why pretend a real run? The sailplane should be required to cross the start gate and "be recognized". This procedure would help everyone, makes clear a pilot's intention, and alleviates confusion as to whether or not the gate is open.

- **When calibrating the gate**, margins for error in the speed and height calculations were made. Obviously, one has to draw a line somewhere, in our case 100 knots, 1000 m, etc. Of course, 1 knot doesn't make a difference, however, we are in a contest and have to establish a line and stick to it. We measure speed etc. by the same method for everyone, and one knot over is just that — TOO FAST. In fact, one had to be about 8 knots too fast before a call was made. This "error" margin was set for everyone before the gate opened.

- **Glider pilots are individualists** and in a competition they make high self-demands. Everyone is there to win, personal errors are not forgotten, and mistakes or seeming anomalies are not easily accepted under the pressure. Remember, we are all there to have a good time!

Just a reminder that Start Gate Crews (like everyone of us)

- a) are not paid
- b) would rather be flying
- c) are not pleased with non-constructive criticism
- d) are not out to "get" you

- **Thank you all.** The vast majority of the pilots were highly cooperative and quite understanding. My sincere thanks for patience and encouragement — it really helped.

I will be pleased to answer any questions you may have. I can be reached at (403) 232-3887 (business) or (403) 243-6196 (home) anytime.

Would I do it again? Well, I heard that the Brooklyn Bridge was being offered in addition to some more Florida land ... □

Some people have recently asked what does this committee do, and have suggested that it is too restrictive and wants to regulate us too much. Surely, they argue, freedom is the essence of the soaring movement. I have also heard that we are not strict enough, why don't we set exams, for example.

Without a central organization such as SAC, clubs would be much more on their own, and would have to rely on their CFI and/or other experienced pilots to come up with instruction schemes. Some people might be able to do this well, perhaps using all the manuals and books they could lay their hands on. However, there is the problem then of non-uniformity between clubs, and the danger that the club's pilots and instructors would concentrate on the flying without the confusion of such matters as safety and flying standards.

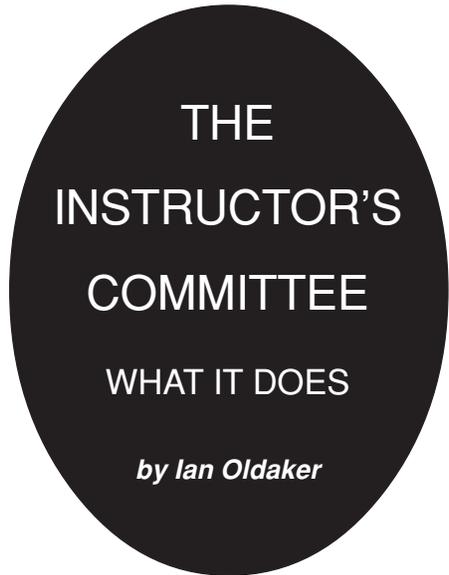
We are all for freedom, and in Canada we have a surprising degree of freedom. However our flying must be conducted within a framework of sensible practices which over the years have been found to be necessary. The SAC executive has appointed chairmen to various committees, the Instructors' committee being one of them. With the assistance of several highly experienced instructors, this committee is responsible for the administration and rating though not the "licensing" for instructors. The committee ensures that the instruction manuals are kept up to date and are revised as necessary. It monitors and sets flying standards, excluding sporting aspects (e.g. badges and contests) and when needed monitors and/or sets examinations.

It should be mentioned that Transport Canada controls and issues all licences and glider instructor endorsements, and sets the glider pilot licence written exam. SAC, through the Instructors' committee, becomes involved with the Department when they wish to review licensing requirements or written exams. The Instructors' committee is also responsible for setting the syllabus for, and for organizing and running instructors' and other courses.

The instructors' courses are a very important part of gliding, and considerable effort has gone into our courses' contents. The basic course, for example, include a very full flying syllabus so that by the end of the week of the course (weather permitting) all exercises in the Soaring Instruction Manual* will have been covered. Instructing standards are very important — sound basic training and good supervision for the neophyte pilot are our sport's lifeblood. If we had no new members who need to be trained the club (or the sport) would eventually collapse. Clubs need new members to keep them solvent. The job of the chairman of the Instructors' committee is to ensure that new pilots (the innocent members of the public) get value for their money. This leads back to the sound basic training and later, good supervision provided by club instructors.

Flying instruction often differs from club to club, however standardization is vital. How do we achieve this? First we have our manuals, with the Soaring Instruction Manual having been completely revised and updated in the last four years. This provides the basis for a standardized syllabus and a standardized approach to each flying exercise.

Second we have the basic instructors' courses. Through these we attempt to achieve a high quality of instructor so that whatever club a person joins he or she can be assured of a known standard. Proper training of instructors to a definite syllabus will help ensure similar training in all clubs. The syllabus will help ensure similar training in all clubs. The advanced courses will be an extension of the basic courses and will cover items of interest to experienced instructors and CFI's. Following the year's first course we hope to offer similar courses at more than one location in future years.



A classification system, introduced in the Association in 1965, is an attempt to keep track of instructing standards; the committee evaluates and institutes changes when needed, for example the recent introduction of the requirement to renew a rating on a regular basis provides a continuing check on an instructors' competence.

The Training of Instructors

Professional flying training, for example in the Canadian Forces, involves many hours of basic training before the pilot even moves from the basic training unit. In soaring we can't afford this luxury, and so it is surely all the more reason that we should aim for the highest possible standards and that the syllabus be uniform from club to club. The Forces' training programmes have been developed from perhaps more than 50 years experience in instructing — we have to do with far less. What we are aiming to do in the SAC basic courses is to train our instructors as well as possible, and to do this in a standard manner. Parenthetically I should mention that it is not a requirement for pilots to pass a written exam in order to obtain an endorsement (some of our members say we should set our own exam). Power pilots have to pass an exam, and they obtain an instructor rating following a flight test(s) conducted by Transport Canada; it is also likely that the training of pilots to become instructors will in future only be possible by the holder of a Flight Instructors Training Endorsement. There are no such proposals for soaring; we still enjoy a great deal of freedom. However, if this freedom means that our "instructors" can give to someone who trusts

them, and who pays money to be taught to fly sailplanes, such bad instruction that their life is endangered (now or several years hence), then we ought to be more restrictive.

This year for the first time we are running an advanced course for instructors, and a cross-country flying course for the aspiring cross-country or competition pilot. They will be offered in a variety of locations in future years. More details on both of these will be found elsewhere, or your CFI will have details and application forms.

The Chief Flying Instructor

This person is perhaps one of the most important if not the most important person in a gliding club. It is he who bears the responsibility for all that goes on at his club's flying field. His main responsibility is to ensure that all student pilots (and licensed pilots) get the best possible instruction and supervision. To do this he has to see that the instructors are teaching properly and to a standard syllabus. They should also be teaching the syllabus in a standard manner. For example it is a waste of time for one instructor to say one thing, only to be contradicted by the next; the student will get confused and frustrated, and will leave to go sailing.

A CFI has to spend time with his instructors to ensure standardization, and at the same time must do enough instructing to keep himself current.

A pilot becomes CFI for a host of different reasons, the main ones being, he is the only one qualified, or willing, or he may be talked into it because no one else will do the job. Maybe he gets to be CFI because he is the most suitable pilot in the club, the best reason! However politics often dictate the choice which is unfortunate as problems can arise.

Whatever the reason for his selection a CFI will do his job to the best of his ability. Some, knowing their limitations (a great virtue) will send their potential instructors to be trained elsewhere. However the CFI must remember that these instructors must be advised, encouraged and given assistance while they gain experience as a new instructor. This encouragement is vital, and helps maintain competence and prevents non-standard teaching techniques from creeping in.

A new CFI is not given the right to change the principles of flight by being appointed! If he trains his own instructors it is only fair that he do so according to the current SAC manual (the Soaring Instruction Manual). This manual has remained essentially unchanged since a major revision in 1977 so every club should by now be teaching by it. Instructors change clubs and so instruction, in everyone's interest, must be the same everywhere. Any special club rules can be handled during the instructor's check flights at his new club.

My hope is that this article will go some way to explaining what the Instructors' committee believes in. We want to see the prospective soaring pilot given the best instruction that will make him safer and hence reduce accidents, and in the final analysis give him or her more enjoyment with less frustration. By doing this we will hopefully keep our sport free of more government involvement to allow us to enjoy this pure form of aviation. □

* This used to be called the SAC Instruction Manual Part III — Student's Notes.

THE GREAT ADVENTURE

— ROMANIA to AUSTRALIA by MOTOR GLIDER

by **Bill Schoon**

We had not planned to reprint more from "Australian Gliding", as we are currently using their series on Atmospheric Convection as they become available. This extraordinary story, however, demands exposure in the northern hemisphere, so here goes... editor.

It was Thursday May 8th, 1980 and at last we were ready to depart from Brasov in Romania, on our flight to Essendon, Australia by motor glider. We were to cover the distance of 11,292 nautical miles (21,000 km) in 146 hours and 5 minutes actual flying time, thereby averaging 77 knots (143 kph).

Our route would take us over almost every type of terrain, from wide green valleys to fierce rugged snow capped mountains, fertile flood plains, several different historic seas, deserts and waste lands so eroded and forbidding as to make us wonder if we were still on planet Earth. Through sandstorms and monsoons, across India to the Himalayas, down the sacred Ganges, along the Chindwin and Irrawaddy of Burma, past the fascinating myriad of Islands of the Mergui Archipelago, through Malaysia and Singapore, then to Indonesia with its monstrous chain of volcanoes, many over 2 miles high, finally reaching Timor and then Australia. The weather was to vary from zero to well over 47° C, winds from calm to gale force, visibility from nil to 50 miles. We were also to encounter a phenomenon which we termed a 'blue-out' — similar to a 'white-out' at the poles, with sea and the sky blending into one indistinguishable mass, absolutely no horizon and only the sun to tell us right side up.

Why did we undertake this venture? Bill Riley, the importer of these machines, had been quoted \$14,000 as the shipping cost for 3 motor gliders — so why not fly them out ourselves? By doing so we could have a working holiday, see many interesting sights, and prove the reliability of this type of aircraft.

The pilots would be Bill Riley, Bert Persson and myself. Bill would be our leader — he served on Sunderland flying boats in the RAAF during the war, then as an electronic engineer. He has devoted his talents to promoting the sport of gliding, his ability in this field being well known, as at Tocumwal in southern NSW, he established a most comprehensive gliding complex with Riley Aeronautics, Sportavia Soaring Centre, and glider repair and overhaul services. Bert is Swedish by nationality but Australian by adoption having been many years at Alice Springs as an

Aeronautical Engineer. He holds several gliding records and as an expert aerobatic pilot, he was the star of our award winning film 'The Quiet Challenge' filmed at Tocumwal by the ABC 'Big Country' team. I also served in the RAAF, on Fighters, Boomerangs, Spitfires and Mustangs. After the War with John Gray and Geoff Williams, I kept my hand in for many years with the 'Cherokee Eagles' formation display team. Fire spotting and control for the Country Fire Authority as well as gliding instructing maintained by interest in aviation.

Now to our aircraft. IS28M2 is the official designation. IS the initials of designer Joseph Silimon, the 28 signifies the 28th production model, while the M2 indicates it is a motor glider 2-seater with side-by-side seating.

It is all-metal using IS28 glider components, a wing span of 17 metres, T-tail, retractable dual undercarriage, both positive and negative flap, air brakes, and dual control. The power plant is a 1700 cc Volkswagen-Limbach which at 3600 revs delivers 68 hp, fitted with a 3-position Hoffman propeller, fine for takeoff, course for cruise and fully feathered for glide. Glide angle on the order of 1 in 25, an AUV of 750 kg, normal fuel 40 litres of either 100 octane avgas or premium gas, using about 12 litres per hour at 2800 revs for a respectable 81 knots.

Manufactured by 'Intreprinderia de Constructii Aeronautice', ICA for short, the workmanship is first class. During the war the Germans used the facilities to produce ME-109s. Now the Romanians, apart from building gliders, also manufacture under licence French military helicopters and British twin-engined aircraft. The wing is exceptionally strong having already been subjected to over 200,000 hours of fatigue testing without problems. The air foil is by Wortmann.

For our journey the second seat had been removed and an auxiliary 100 litre fuel tank substituted, this gave us 140 litres with an endurance of 11 hours. Emergency gear — dinghy, flotation type beacon, water, rations and first aid were stowed between the rudder pedals and the tank, with the second stick having been removed. When we added our

huge number of charts and maps, navigation gear, supplements, spare oil, tools and tie down gear, there was little room for our personal luggage, camera or souvenirs. We wore our Mae Wests, and stuffed our soft luggage behind our heads making sure to leave a tunnel to the fuel selector. Behind our seats we had portable oxygen. We proposed to fly around Mt Everest. My canteen stood on the floor behind the undercarriage lever. Our pilot relief system was ordinary hot water bottles. Every item and each machine was carefully weighed by the ICA crew, but with full fuel, I must admit we cheated a little and were about 15 percent over weight but well within the CofG limits.

Each aircraft was fitted with a VOR, ADF and 2 radios, one being short range for inter-aircraft communication. There would be no blind flying instruments as this was to be a VFR flight. Australian registrations, VH-SSQ, VH-SSR, VH-SSU, were painted on, while on the rear fuselage I had affixed a map of the world with our route dotted in. As we would be landing at eighteen international airports and passing through fifteen different countries, I felt that one picture was worth a thousand words and would overcome communication problems. Finally stickers of the Australian flag, the inevitable kangaroo and our Tocumwal Gliding Centre, finished off the design.

Romanoff, our test pilot spoke no English so our check flights were carried out by sign language, some school-boy French and a smattering of pidgin German picked up from our German visitors. Ghimbau is the name of the field at Brasov. It is all-over grass, still soggy from the recent snow, about 2000 elevation, and the home of numerous moles, small burrowing animals who tunnel just under the surface.

The news of the abortive American attempt to rescue hostages in Iran had just reached us and the international scene did not look encouraging. Then Marshall Tito died and our clearances through Yugoslavia would be delayed at least 10 days. Bill arranged an alternate route through Turkish airspace, and we were ready to go.

Bert being the lightest was first off after Romanoff. We watched him intently as with the conditions described, we needed every inch of hard ground to get our speed. About three-quarters of the way across he lifted off and was away. My turn next — throttle wide open, revs OK, but nothing much happened, as I was on a soggy patch of turf. With full forward stick I managed to get the tail up and waited for the inevitable bounces off the uneven surface as a result of mole activity. Don't back stick otherwise one gets behind the 'drag curve' and will stay there. With the boundary fence coming up the airspeed began to register, then the Wortmann wing having attained its proper speed, lift off. Hold it down to gain safety speed, gear up, and free of the additional drag we climbed without effort to join the leader.

As we circled over the historic City of Brasov we climbed through the inversion and the layers of industrial pollution so evident in socialist countries, 'Produce, comrades' is the slogan with no one appearing to care about the environment. Civil liberties, as we know them, simply do not exist. Armed guards and police appeared even in our hotel lobby. Yet even though the Romanians work six days a week, those we met and spoke with seemed happy. Certainly they are polite and industrious, despite such a drab environment, lack of consumer goods, and no toilet paper. Over the field we looked down and dimly saw the wonderful factory staff waving us a last farewell, while ahead and on our left, Count Dracula's Castle and the snow-capped peaks over 6000 feet high which we were to cross. Marking good use of the thermals which by now were breaking through the scattered cumulus we soon reached 7000 feet and set course. Underneath us now were the jagged rocks and crevasses with the melting snow cascading down in small streams at tremendous speed, to join the river in the misty valley, while above us scattered cumulus with the penetrating sunlight gleaming on our aircraft which were gently rising and falling with the varying air currents, looking resplendent in white and red paint work.

Ahead lay the fertile flood plains and the 'collective farms'; thousands of acres without one solitary tree. On our left, Russia, then the Danube and the Black Sea with Constanta airport coming up. Into line astern for our landing and as we taxied in we noted we were on a fighter base with MIG-21s and 25s in neat lines with sharp noses and swept back wings.

Next morning after some 'security' problems we were cleared over the Black Sea. I obtained clearances from Istanbul and we skirted the city towards the Dardenelles and Gallipoli, the bleak and barren landscape where so many Australians lie buried far from home. Alexandroupolis, NE Greece, ahead and we were given a friendly clearance: 'Make straight-in visual approach — maintain own separation'.

Saturday 10th. Over the enchanted, historic Aegean Sea, ancient civilisations and forgotten wars. The blue is so penetrating one has to look away to avoid eye strain. Below an occasional yacht, white sails billowing in a gentle breeze, while in the background the yellow sand of an island beckons.

Through the Athens FIR and on to Iraklion 'Approach' we were to report over the small

island just offshore, then cleared behind a Boeing 737 for a right base. Watch out for 'wake turbulence' and conscious of the snow on the 8000 foot peaks in the background, we taxied in to receive another very friendly welcome, for Australians are held in high regard here for their heroic defence of the island in 1941.

A stroll through the city is most fascinating as the ancient walls are still intact, the narrow winding streets and quaint limestone buildings seem right out of a history book, but a 20th century touch is evident with TV aerials and air conditioners sticking out at odd angles. Meals at a sidewalk open air cafe, watching the 'passing parade'. The artifacts and handcrafts make one wish for more space and money to bring some home.

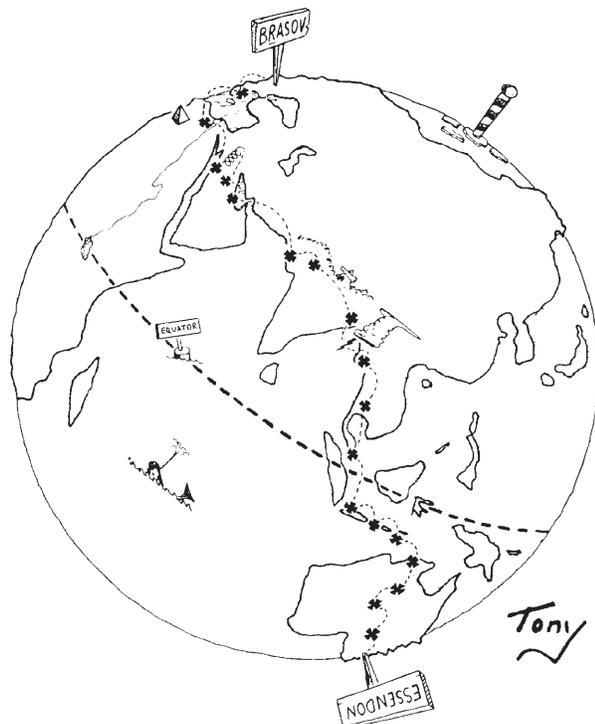
The weather report for Cairo seems OK so we depart the following day. About one hour out over the Mediterranean we encounter an ominous front with cloud and rain right down to the sea. Bill does not hesitate. We do a smart 180 degree turn and enjoy a low level run over the island, past old monasteries, olive groves and small villages, through narrow valleys and along the beach till we have to pull up to join circuit at Iraklion. The Gods were kind to us this day, for it is confirmed that Cairo had its worst dust storm in over 40 years with visibility down to 100 yards.

Tuesday 13th — it is still blowing a gale but after a discussion we opt to go as the winds are favourable. As we approach the eastern end of Crete near the Sitia VOR, we notice a huge build-up of cloud on the adjacent mountains. It is mountain wave and without hesitation we head straight for it. Soon we have 12 knots up on our variors, and in no time reach 9000 feet altitude. With this wind we must have a ground speed over 110 knots. Down below the Mediterranean is literally boiling with this strong wind — giant waves and deep troughs with plumes of white spray breaking away from the huge whitecaps that are forming. No place for a ditching but with

such a groundspeed we forget about our point-of-no-return, and Bert soon has El Daba on his VOR. We are smack on track! Then quite suddenly the sky ahead changes colour from a cold bluish-white to a brownish orange with fierce red streaks. Bill suggests we are encountering a dust storm, but as we make landfall we ascertain that it is the reflection of the sun off the desert onto the base of some fairly low cumulus. The wind has dropped. We are abeam of El Alamein, the battle ground of Montgomery and Rommel, the desert of the Romans, Napoleon, and Alexander the Great. Today there is no movement, no tracks, no vegetation, nothing to show the passing of vast amounts of men and machinery, nor the graves of yet more gallant Australians in this forgotten wasteland.

The ancient pyramids of Cheops — tombs of the pharaohs, wrapped in mystery, surrounded by argument, often read about, not to be seen. I grab for my camera only to be interrupted by Cairo Control. Approach is exceptionally busy with traffic. Finally we are cleared for runway 23 right on this huge airport where parallel runways are nearly two miles apart.

Cairo — one could write a whole chapter. The overwhelming impression is of traffic and noise. Each vehicle drives on the horn, pedestrians are fair game, no one seems to give way, crowded diesel buses crammed to the very roofs with humanity clinging on precariously to overcrowded doorways, standing on the bumper bars, gaining entrance and exit via the windows, arms and legs everywhere. On more than one occasion we saw some hapless individual fall off. Taxis and motorcycles, some of the latter with from 3 to 5 persons astride, donkeys either pulling a vehicle crammed with produce or carrying enormous loads that defy one's imagination. Interspersed with this an odd camel and a few goats. Fumes, dust, and heat, then the streets with a host of stalls piled with food or junk, dimly lit but well-stocked shops, Arabs



and Nubians with flowing robes plus other swarthy looking individuals, contrast with neatly dressed, attractive young women. Set this against a backdrop of huge international hotels and towers with the Nile and its gardens. Add the countless loudspeakers constantly calling the faithful to prayer from the many mosques scattered throughout, and you have a pulsating, modern day Cairo of several million people.

May 20th, and after several days of frustration we depart, having battled security. With the help of an American Colonel Air Attache we finally pass the guards and get to our aircraft. It is already 47°C, sitting in our cockpits it must be 55°C. Even the guard has sought shelter under the tail of a nearby 707. Cairo is busy and for 32 minutes we sit and dehydrate before obtaining start up and taxi clearances to depart into a strong headwind for Luxor over the wastelands, where we land some 4-1/2 hours later in an even hotter climate. After refuelling, my throat is all but closed over and as I pick up my canteen it is so hot I nearly burn my hands but drink I must. Somehow I swallow the almost boiling liquid.

'Baksheesh' — payola, an early morning wait for the officials, a huge Russian-built helicopter (the biggest in the world) and we depart for Saudi Arabia. Over the Red Sea we encounter our first 'blue-out'. With no wind and a calm blue sea reflecting a clear blue sky, no clouds, no land, and no ships, the whole area melts into one translucent mass, with absolutely no horizon. It is an eerie sensation with only the sun to tell us we are still right side up. Maybe it will disappear at higher or lower levels but here we sit. I switch on my turn and bank but I find it has gone U/S. Bert and Bill are weaving about so I guess they too have the same problem. I look down into the cockpit and out and suffer instant vertigo!

Thankfully, landfall at Weijh. As we pass the airfield a jet fighter takes off. Are we to be intercepted? Jeddah acknowledged my call and gave us our clearance so what now! We soon lose sight of him and set course for Hail over the most bleak and forlorn landscape one can imagine, erosion so severe it has removed every vestige of soil eons ago; there are no trees, no shrubs and no grass. Knarled, rocky, forbidding hills, mountains and valleys, some spot heights reaching 5000 feet. Pinnacles of rock stand like sentinels or towers of Babel over a valley of death, contours scoured by some tremendous cataclysm with the old courses of lava flow or rivers winding down the lower reaches. It makes one wonder if we are not flying over a lunar landscape. Height control is difficult as the thermal activity produces great areas of sink. Soon we are down to 7000 feet and Bill, who has given the lead to Bert as the VOR and ADF in Bert's machine have much greater range than either of ours, has dropped slowly behind, I ask Bert to slow down. A muffled response and I see him turn so I follow then I've got 20 knots. Tightening my turn I hit the core of the best thermal I have ever encountered. At an incredible rate we rocket up, while Bill wonders where we have disappeared to, so looking down I direct him: 'Turn 30 degrees left — a little more', then he replies 'I've got it now' with our variors pegged we spiral up and at 13,000 foot level off.

Fresh in heart and with cooler bodies we resume track.

Our maps are liberally dotted with phrases such as 'Data incomplete', 'Aircraft may be fired on without warning', and 'prohibited area'. The position of Hail A/D is 'approximate only'. Over a black mountain range we see a large town and a modern airport, but there is no response to our radio calls. Bill makes the decision. In we go, watching for red lights or tracer but all is quiet as we touch down and taxi in. A Jeep appears and a friendly American voice bids us welcome. The Saudis do not engage in manual work and the Americans under contract look after all the maintenance. Quickly we are refuelled and they invite us to their own mess for a good meal and accommodation. That evening they drive us through the city — in the middle of nowhere this modern metropolis with wide freeways, fluorescent lights, high-rise buildings, and a tracking station for communication. One can dial anywhere in the world without delay. Modern shops, but no women for this is a strictly Moslem country.

On our way in we pass a town square and are advised that this is the public execution arena! Last week 5 men were beheaded here and at least one more is listed in two days' time. The punishment for thieves is to cut off a hand; a harsh country, with harsh penalties.

Thursday 22nd — up before dawn and we buzz our friends to show our appreciation and set course for Bahrein and Abu Dhabi, 732 nautical miles away. Soon we are over real desert and after about 1-1/2 hours we notice eddies of sand on the desert floor 9000 feet below. Gradually these increase to fair size willy-willys which join up into one enormous cauldron of boiling red sand. We are in for a real sandstorm. We claw for height and at 10,500 ft we sit just above the top layers and hope that it does not get worse. Americans having no details, we are on our own. After two hours it begins to abate with the odd patch of desert becoming visible under our aircraft, then a Gulf Air jet reports to Bahrein so I contact him with our details and ask him to relay for us. A well-educated accented voice advises us that all details have been passed and I thank him for this courtesy. At least we are now in the system. A pin point and then the VOR locks on.

We are on track and now in direct contact with the English controllers at Bahrein. Bill thinks it a good idea to get a wind at 10,000 ft for our next leg over the Persian Gulf. So I ask them for one: 'Standby, we will get a readout for you in two minutes'. As we wait I hear a Concorde takeoff, then right on time the pilot comes back, "Wind at 10,000 ft is 330/28 knots". I thank him, suggesting that next time I am in London I'll get one of those gadgets for my aircraft. He laughs and seems more interested in our motor gliders and our destination — Australia! The camaraderie of the air, both ends of the speed spectrum meet and pass unseen.

At Doha they hold a jet on their huge runway till we are over the aid, then the Persian Gulf, a kaleidoscope of colour below us now. As the depth of the water varies so do the colours, fading from pale yellow into greens and blues with other colours such as bronze, jade, and ochre mixed in abundance. Shoals and reefs show their skeletons under the water while the gentle waves make white

splashes against their exposed seams — meanwhile the bright sun reflecting its light beams off the surface, produces a thousand mirrors to enhance the picture. There is a contrast. On the horizon the smoke from the various oil wells produces a thick haze as far as the eye can see. Another blue-out later on, then Abu Dhabi bids us welcome and we touch down after 8 hours and 30 minutes, for an average ground speed of 86 knots.

The Emirate States, oil rich and modern, form more than an oasis with desalination plants, high rise buildings, wide boulevards, tropical trees and flowers and exorbitant prices.

Karachi, 743 miles to go as we take off at first light into the rising sun, tracking out over the land to pick up our drift angle and then 550 miles over the Arabian Sea and yet another much prolonged blue-out. We keep well clear of Iran. Nothing moves, no ships, no land, and no clouds; the sea is calm as we drive over maintaining 9000 feet. For hour after hour we continue until the sun has passed overhead and is well behind us. We have an interesting conversation with an Australian aircraft, one from New Zealand, and an American who relays to Karachi for us and promises to call after his departure in another aircraft. Some two hours later he calls again. Karachi have our details, are we OK? I reply 'operations normal', but as we have no way of checking our ground speed our original ETA still stands. It is nice to know one has friends even if we never meet. A smudge on the horizon should be the Iran-Pakistan border, but where is the river? Then with the setting sun illuminating it, we see its graceful curves as it enters the sea. An interesting run along the Pakistan coast — dry, desolate and forbidding — another dust storm generating but this will not affect us as we are still over the water. An isolated fishing village at the end of the world, then Karachi and we step out after 8 hours and 45 minutes, stiff and tired but knowing the worst of the trip is behind us. To date we have covered 3898 miles in 49 hours and 15 minutes.

Karachi — 'baksheesh' — urgurs, smells, traffic and substandard conditions with an almost total disregard for hygiene. No wonder there are epidemics in such conditions.

New Delhi is 725 miles for some obscure reason we cannot track direct. We flight plan their way and cut the corner when it suits us. Initially the country is barren and desolate, gradually improving, but the monsoons are late and so are we. It is hot and dry. Death is about, for Bert suddenly calls 'Lookout for the birds'. There must be 200 of them and one just misses my wing. They are vultures, soaring magnificently on the thermals with white heads and dark plumage, with an enormous wing span. They soar in the cooler air waiting to descent on the unfortunate victims in the heat below.

New Delhi. Wide boulevards lined with tropical trees and flowers, roundabouts, spacious, well kept homes (of the rich) and modern hotels. Fortunately we are spared to sights of Old Delhi. Next stop Katmandu, Nepal, after a hassle over fuel which was finally settled by no less than the Minister for Petroleum whose Beech 18 was parked next to our motor gliders.

Delhi wants to separate us by 3 minutes so I refuse the clearance. This shakes them a bit,



The IS28 M2

then they ask if we are Air Force? I reply 'Ex Air Force but endorsed for formation take-off. Finally I state that we only have one aircraft with Nav gear and our permit to fly is only 'in company'. Reluctantly they grant us a line astern take-off and we are away. As we approach the Himalayas the country improves. Licknow below, I strain for a view of the old fort. Reciting a few lines from the poem 'The Relief of Licknow' I salute the memory of those gallant British soldiers and the unknown Scottish maiden, and we pass on to our first view of the Himalayas. Simra on the VOR, and Bert turns towards the pass and I obtain clearance: 'Report at the valley entrance with field in sight'. The pass looks menacing enough with great mountains disappearing on either side into layers of cloud, steep gorges and precipices with small streams of melted snow cascading down to join the main river, while in the narrow valley floor a mountain road winding about its tortuous path, then quite suddenly through the light mist we see the green covered wide valley of Katmandu. Intrigued, we press on, like sneaking a look into someone's back yard. Ahead, Shangri-La, China, and Mt Everest which remains enshrouded in heavy cloud. Waiting jets, and we are cleared to land. Bill goes off to attend to the usual paperwork and to meet Val Carson who has gone ahead of us at various ports to arrange accommodation, while Bert and I refuel and talk to the various jet captains and others who are intrigued with our motor gliders, and our map showing our route.

The weather prevents our flight around Everest. We are already two weeks late and Bert has to return to Sweden to fly in the Swedish Nationals on the 6th. We leave reluctantly. It is Wednesday 28th, and for 20 minutes we climb on the eastern side of the field to get sufficient height to enter the pass, then we turn leaving behind the postcard tourist Mecca with its shrines, temples, market places, and enchantment. The pass looks marginal but Bill weaves his way through and we follow. Soon we are clear and Bert resumes the lead over the sacred Ganges, with thousands of small holdings, each about the size of a suburban house block where a peasant family earns enough to sustain them for one year. Calcutta; poverty, degradation, men and women replacing cattle as beasts of burden. Little children begging and looking so

pathetic one has to avoid their glances, people living on the street, the pavement being their bed, lounge and living room, the gutter their toilet and the hydrant their bathroom. What could one do even with \$1,000,000? The old Colonial Great Eastern Hotel with huge rooms and ceiling fans and a bevy of servants.

None of us is likely to forget Thursday 29th. We depart Calcutta over the spiderweb of waterways and islands that form the huge Ganges delta. The met briefing was good but we can expect isolated CB build-ups and rain, as we are now in the Intertropical Zone and the monsoons are due. A pleasant crossing of the Bay of Bengal and Bert has Akyab on his VOR before we see it, way out on our left the Chin Hills. Some hills these, 9000 ft spot heights are common, and then the Arakan Yoma Range. A huge CB south of Akyab draws some comment — it must have a head of 40,000 ft and still growing so we keep an eye on it. We turn at Akyab for our run down the coast, then rain and broken cloud appear ahead. An innocuous bank of stratus lies under us as we turn to pick our way through.

I am about 200 yards behind Bert and maybe 200 feet lower, Bill is 300 yards back and 300 feet lower and it is from him we get our first warning. 'Better turn back' he calls, Bert up above thinks he can continue for a few minutes so I try and close the gap. At 7000 feet we are already on full throttle and have no reserve left. Suddenly I feel my aircraft shudder and looking down I am surprised to see the airspeed down to 42 knots — with negative flap I am about to stall. Obviously a false horizon! Reflexes and memories of wartime experiences trigger may actions, stick forward and turn. I grab the microphone and call Bert. 'Turn 45 degrees right, we are in trouble'. I see his wing go down and lose him behind a hill of rising cloud. Without a second to spare I regain speed, level my wings and then enter cloud without any instruments and without a turn and bank to keep me level. Feet off the rudders and with only my thumbs and forefingers resting on the top of the stick, I wait. Initially I can feel the warmth of the sun on the back of my neck filtering through the thin top layers of cloud, but that is soon gone and it is much cooler now. The cloud is dense, few seconds in cloud without instruments and loss of control is inevitable. However, it is

stable and so is the aircraft. No point in looking inside, so I rivet my gaze on the area ahead. My ears tell me the airspeed is normal and so too are the revs. Terrain clearance (if any) not known, I hear Bill call but the details do not register as my total concentration is on the task ahead. The seconds drag on and it seems like a year, but perhaps it was less than 3 minutes. I sense a lighter area ahead. Is it an optical illusion? No! Sure enough, a fracture in the otherwise solid overcast and a faint blue hole, rapidly closing over, as luck would have it, right on track. I slip through this escape tunnel and am clear, Bert is about 700 feet higher and a kilometre out on my left, so I home on him.

Bill calls and Bert tells him to steer 235, he acknowledges. Later we find out he sank into the same cloud as I did but it was rougher where he was, so he opened his airbrakes and came out about 1000 feet above the hills. I guess he said a few prayers but his only comment was 'I didn't enjoy it'. Now to rejoin as Akyab has closed over and ahead it looks like the inside of a cow. Fortunately there is a small area of clear sky with one cell of heavy precipitation standing out from the rest. I ask Bill if he can see it. After a few seconds he confirms and that then will be our rendezvous at 7000 feet. We rejoin and then we turn 80 degrees off track towards the hills. We will outrun the front.

I pick up my map and hurriedly draw a freehand pencil line along our new track and note the time. On our right the CB has now grown to an enraged monster. Huge flashes of lightening are across the black sky, our ADF needles swing crazily as the monsoon releases its pent up energy. Picking our way across the cloud now building up, I follow the lower contours and am dragging my feet. For nearly one hour we fly just above the build-up racing it from point to point, then a break, and below I see a river. It must be a tributary of the Chindwin, for we are over the watershed now. I call Bill to advise that if unable to keep up I will let down and follow the river out to flat ground. He replies that it looks better ahead. About 5 minutes later I am relieved to hear him say he can see around the back of the storm. We have succeeded!

A pinpoint along my rough pencil line and we turn to follow the Irrawaddy down the Rangoon. The country below has been deluged. Great streams of muddy water pour off the high ground and the sun now shining weakly through, has begun to evaporate it, generating small patches of thin mist. The monster still on our right must be 100 miles long by now and I realise just how lucky we were. During the war 613 Squadron RAF encountered a similar build up with sixteen Spitfires. Only eight survived. In Borneo we escorted 8 Kittyhawks into a far less ferocious cell and after a rough ride we emerged with two aircraft missing, never to be found again!

Rangoon Approach clears us for a 'straight in' and we slip into line astern, lining up on the glistening runway, surrounded by a virtual lake of water, as all fields, roads and streams are awash. They must have had 10 inches of rain. Touch down and taxi in, we are relieved for we have been in the air for just over 9 hours and covered an estimated distance of 660 miles. The Gods were kind to us again.

The Inya Lake Hotel, built by the Russians

some years ago, is a building of enormous size, possibly to double as hospital. Wide corridors and doorways are the order of the day, with spacious reception, lobby and banquet areas, and hundreds of rooms. Set beside the beautiful lake, it is idyllic with tropical plants and flowers of every possible description, hibiscus, tulips, rhododendrons, lilies, palms interspersed with flame trees, jacarandas, coconuts and rain forest trees, all set in lovely green lawns and divided off by wide paths and entrance roads. At night, alight with fluorescent tubes, it attracts enormous numbers of birds who keep up a constant chatter in the artificial day.

The Golden Pagoda, native stalls in tree-lined streets. Fuel is a problem but with the help of the Romanian Embassy, we are soon attended to. It is now June 1st and we leave for Penang. A special VFR clearance is needed as the delta is covered with mist and low cloud, for it rained all night. Careful fuel drains, and I am number three for takeoff. Bill and Bert depart and I follow on the water strewn runway. Lift off and my engine falters so back on again, closing the throttle. I open it slowly and the motor picks up. I climb out. As I turn at about 100 feet to join up it falters again. Christ! What a splash I am going to make, as I am too low to turn back. I close and then reopen the throttle and at about 30 feet it roars into life again and the trouble disappears. Maybe carbon on the plugs or ice from the water. Fortunately it is gone. We climb to 4000 feet over the Gulf of Martaban with Kipling's 'Old Moulmein Pagoda' some 50 miles on our left, we pass Tavoy and then the Mergui Archipelago, a myriad of Islands

and rocks, no doubt a sunken mountain range caused by some enormous cataclysm eons ago, which forced up the nearby Isthmus of Kra. A kaleidoscope of colours with an almost hypnotic atmosphere, tranquil today, as we pass by under a mantle of broken cumulus about 500 feet above us. Blue and green waters with an occasional splash of white, from a school of fish or a nearby shoal, yellow beaches, bronze sheer faced rocks, steep sided islands, covered with mantles of lush tropical growth set against a blue sky, and bright sunlight reflecting the various patterns which are broken by the shadows from the drifting clouds. It is in this area that Sir Charles Kingsford Smith, caught in bad weather, probably monsoonal like we had recently experienced, low down in heavy rain, peering out, desperately trying to remain in visual contact hit one of the obstructions and then oblivion. We salute his memory and his achievements.

Phuket, Thailand. We report at the Causeway and are cleared to join downwind after a DC9 has taken off. A happy, helpful refueling crew, some refreshments and we are off. Penang Approach clears us past Butterworth and we taxi in and tie down at the base of their huge tower.

Monday 2nd — Bert busies himself to obtain a flight to Sweden — he has less than three days.

I manage a ride in the jump seat of a Boeing 737 to Singapore to join my wife Joy, as we have 14 days to fill in till Bert returns. Bill ferries our machines to RAAF station Butterworth where the Commanding Officer and his staff have made us very welcome!

Monday 16th, Joy returns to Melbourne with Qantas, while I return to Penang to meet Bill and Val. Bert has been delayed. Bill and I discuss the situation as our Indonesian visas are due to expire and so is our ferry permit. We are to take two RAAF staff to Ipoh with us to inspect some old gliders. I take W/C Peter Coutts and Bill takes LAC Bill Bartlett, and Electrician on Mirages, but a GFA instructor and current power pilot. Our day is highlighted by a invitation from the captain of the King of Malaysia's VIP jet to sit with him in airconditioned comfort in the King's own suite, where we discuss our trip and the uses of motor gliders in Malaysia.

On our return to Butterworth, Bill confides in me that he has asked Bill Bartlett to fill in for Bert. A few problems of leave and transport are rapidly sorted out by Peter and his charming wife and we are ready. A few circuits with Bill and I send him off solo to get familiar. Bill Riley meanwhile attends to the masses of paperwork, and we then give a few of the helpers some local flying. It is the first time we have been able to soar with the propeller fully feathered and we are both impressed.

A cheery farewell, thanks to the RAAF personnel, and we fly back to Penang for Customs and fuel. On the way to Singapore the next morning, we 'street' along some good lift towards the Johor Baru NDB, getting a no-hassle clearance into Selectar despite the huge amount of traffic, and the close proximity of several other airports, cleared again without hassle over Singapore International for Jakarta. Soon we are crossing the Equator and Sumatra with rain showers and poor vis-

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ibility across huge swamps; no roads here, only rivers. An occasional plume of smoke betrays the presence of the small village, a small motor boat towing a huge train of log rafts and scarcely moving, then the Java Sea and the occasional oil well burning off excess gas and adding to the haze already rather dense. Jakarta Approach is busy but we are soon slotted in for a landing at Kemayron. After landing we taxi to a small parking bay and make haste to push our aircraft back as we are parked right against the main taxiway with a huge number of turboprop aircraft constantly coming and going. The tarmac is busy with at least 20 different aircraft loading or unloading, air reeking with kerosene fumes. Jakarta is the capital over 3000 islands and 100,000,000 Indonesians, hence the activity. Fuel is cheap. On our drive through teeming traffic we pass the famous statue of 'The man breaking his shackles', standing in an open park well above the trees and dominating the area. It signifies the determination of the Indonesians to forge ahead.

Next leg Bali, a right turn after takeoff soon clears us from this beehive of activity and we pass over intensely cultivated land, rice, sugar and other produce, several railways, neat villages and farms with typical Dutch-style designs, at the Cirebon NDB we follow the coast past numerous fishing villages, each with dozens of single man dugout type canoes. How the owners identify their own is a good question. Lurking in the background are monstrous volcanos with jagged peaks and craters, many over 11,000 feet high with a ring of snow girdling their upper levels. I think of Krakatoa which in 1883 blew an entire island out of existence and created huge tidal waves, the sound being heard over hundreds of miles and the dust causing magnificent sunsets over much of the world for nearly 6 months.

We avoid Surabaya zone due to traffic and I look at the harbour where a good friend of mine and his Catalina were lost laying mines during the war. Cutting the corner between two volcanoes we head straight for Bali and even though we are at 3000 feet we low-fly over the lava flows between. Then the yellow beaches of Bali appear and low cloud gathers. Across a wide estuary and past a village we are forced to descend to maintain VMC. The beaches now change colour as we pass coconut plantations, following the coast till we sight the airport and join for a landing. There are two jet aircraft waiting and I land number two. I note Bill touches down and taxis, so I hold mine up with power about two feet off the runway for about 2000 feet and as Bill clears I cut power and drop on ready for an immediate exit feeling rather smug with the comment from the jet, 'Well, how about that!' We tie down among the skeletons of five old DC3s, refuel and out to our hotel along narrow, tropical edged roads and heavy traffic. Enchanting Bali, it is all the travel brochures say, and we relax and spend a day sightseeing, buying carvings and visiting sights too numerous to mention.

Thursday 26th, Kupang is 565 miles away but there are head winds. We depart and keep down fairly low, island hoping in the early morning sun. Lambok with its 12,224 foot crater lake, dark and ominous, slumbers on our left. The Sumba Strait and the large island lie ahead. We have Waingapu on the

Aid but low cloud and rain develop. We fly over land now, trying to get around the huge cell building up, across terrain very similar to Australia's north — not very fertile with patches of scrub and a few cattle. Eventually we are forced to turn and head back to the inviting strip of Mau Hau, to land just before the rain hits us, in a screaming crosswind. We tie down beside a sick-looking DC3, which is minus one propeller. A 44 gallon drum props up one undercarriage leg. It appears it did a ground loop, with a full load of passengers, a few days earlier!

The off-duty controller and the manager turn up plus a score of locals, who hand us a Coke, and are generally very pleasant. After about an hour the storm abates and we say goodbye.

Just as we leave the coast my motor has its period of 'automatic rough' which persists for about 15 minutes then clears up. A solitary ship brings some assurance, then the weather improves and the run into Kupang is soon over.

The Customs inspector at Kupang really went over us. Although it was dark by the time we finished fuelling, I had to unlock both Bill Riley's aircraft and mine, provided my own flashlight and pull out all gear. Bill in the meantime had gone about his usual task of organizing general declarations, flight plans, weather and briefing. When it came to my Romanian glucose emergency rations the inspector asks 'Cocaine?' 'No', I reply, 'have one, it's not too good.' He politely refuses but insists on breaking off a corner, and rapidly spits it out again. At least we have the same reaction.

We take a ride in a quaintly decorated bus to a real crummy hotel and a meagre meal. Next morning we discuss our route. With headwinds, it is decided to head up the Timor coast for two hours, then turn for our run into Darwin. It is Friday 27 June and we leave on our final leg out across the hills and then following the coast. Even at this distance, Darwin NDB comes in loud and clear. The wind at the coast is not strong and we make good time, then at Ponta Metibat near the 126 degree East longitude line, we turn for home. Our drift angle shown by the ADF remains steady at 25 degrees so we watch it intently, but it does not move. Bill Riley is leading with Bill Bartlett and myself spaced out about 200 yards on either side. Again, no real worries about 'point-of-no-return' as we feel any help needed must come from Australia. The engines do not know they are flying over water. This attitude gives one great piece of mind. In good stable weather we drove on past occasional cloud banks, but no rain.

The sea is calm, now a change of colour indicates a surface wind change, but it does not affect us. Our needles have not moved. Then Bill Riley calls. His VOR has locked on and we are within one degree after nearly 5 hours over the water. He is justifiably proud of his navigation and soon the smudge on the horizon solidifies. It is Bathurst island. A friendly TAA aircraft relays to Darwin for me, then as we approach the yellow beach of Cape Fawcett, we are in direct contact. Cleared direct we soon make out the oil tanks of the port and the familiar city and then the airport. Gear down for a landing on '36'.

We are instructed to taxi to the old runway

and tie down. Customs are there with a group of the Top End Gliding Club who we have not seen for two years. Our canopies have been open one notch for the entire trip but our Customs man with his pressure pack does not appreciate this. 'No use spraying now', he says, but not to be outdone he asks for our water. Sensing what he is about to do I grab my canteen back and have a last drink before he spills it onto the hot ground. Bill Smart is there with his car and we are soon having our beers in the Aero Club, then to our motel and a good meal.

Next day we visit the gliding operations at Batchelor, driving out past our old fighter strips beside the road — the runways being used for drag racing but the dispersal areas covered with scrub. It was 35 years ago; I must be getting old!

An easy trip to Tenant Creek down familiar territory past the repeater stations with their numbers clearly painted on each roof.

Alice Springs next day and it is here for the first and only time in our entire trip, we are held outside the zone for about 10 minutes. Reason: traffic, two other aircraft! It is time our DoT went to Singapore to learn a thing or two.

Broken Hill, our goal for the following day, but unfavourable winds and storm weather force us to stay at Leigh Creek. Thursday 3 July. It has rained all night and the muddy roads stick to the tires; as we drive out to the airport there is low stratus and fog. We wash the accumulated dust off our wings and wait. We taxi out once, but miss the hole that appears, and back again. Then a clear spot to the west, and out we go to climb above and set course. We hear a twin-engined plane call but it is not till the next day we know he crashed on his way to Adelaide. Past Broken Hill the weather deteriorates again, and we find a hole and with gear and airbrakes extended manage a steep descent to about 500 feet, into heavy rain showers. No one has a map of this area but I fish out my pocket book with 2 QN Deniliquin on it, and we soon have a needle. Scraping around various showers we get around the back of the front and then home at last. Tocumwal! A photographic aircraft comes alongside for the TV cameras then I break off and buzz the hangar and the waiting crowd. I feel I am entitled to do this, a quick wave and I join circuit, land, taxi and switch off. More cameras and TV, then I see my father with my wife and mother. He has been sick but with a broad smile and a lively step he walks over to greet me and we shake hands. Little did I know then that within 48 hours he was to suffer a stroke and pass away. However, he died happy and I feel that the Gods were kind to permit us this happy reunion.

Next day to Essendon to complete the journey. At Yan Yean we are met by helicopters and escorted into our final landing in 35 knot winds. We taxi in, amid more photographers, to meet friends and well-wishers. We climb out and I fill in the last leg on our now much fingered fuselage maps. We have done it! Romania to Australia — the first flight by three motor gliders, flying on 25 days we averaged 77 knots for the 11,292 mile trip to spend 146 hours and 5 minutes in the air.

Would we do it again? — ask me tomorrow!
□

Canada's 1st Diamond Badge

A SAC historical Flashback

by *Tony Burton*

The first Canadian Diamond Badge was awarded to Julien Audette, still of the Regina Gliding and Soaring Club, in May 1962. In accomplishing this first, he also broke the existing records in all three categories. Julien was issued Diamond Badge #1 (World #240) for the following adventures:

The Goal Flight

On 10 July 1958, Julien flew 200 miles from Wenatchee, Washington to his goal of Davenport, Washington, surpassing the existing Canadian Straight Distance to Goal record. His glider was a 1-26, CF-ZDF, which had been built from a kit by Julien and two others, and first test flown on 20 May of the same year.

The ALTITUDE flight

On 1 April 1961 at Pincher Creek, Alberta, Julien climbed to an indicated altitude of 31,200 feet for a gain of 24,400 feet. After instrument calibration, the true heights were revised to 30,630 feet and 23,320 feet respectively, to claim the altitude badge and the Canadian Absolute Altitude and Altitude Gain records previously held by Ralph White. He flew a 1-23G, CF-ZDO. It took two attempts that day to earn the leg. On the first flight, Julien went higher but the barograph failed. On the second try, two Official Observers were used, the altimeter was sealed, and all altitudes of record (takeoff, release, low and high points) were photographed during the flight. Afterwards, the altimeter was recalibrated to determine the true altitudes reached under standard conditions. Subsequent to this flight, the FAI rules changed, and this method of recording altitude was no longer recognized.

The DISTANCE flight

The last leg of Julien's Diamond was flown on 22 April 1962, again in CF-ZDO. Starting at Pincher Creek, the flight ended 10 miles east of Moose Jaw, Saskatchewan, 395 miles away. As the release altitude was a high 9500 feet, a distance penalty reduced the recognized distance of 374.5 miles. However, this was more than enough to earn him the Canadian Free Distance record previously held by Charlie Yeates at 332 miles. The first part of this flight was a wave climb over Cowley to 19,000 feet. A move over to a second wave system provided an additional gain to 27,800 feet. From this point, ZDO was turned eastwards and Julien headed out for the prairies. The straight-out glide extended to the Alberta-Saskatchewan border before contacting thermals to continue the distance flight by more prosaic means to earn a most coveted Badge in most non-prosaic fashion.

Congratulations again, Julien.

Information gleaned from newspaper articles held by Chem Lecheminant and a phone conversation with Julien. □

FAI BADGES *by Dave Belchamber*

The following FAI Badges and Badge legs were recorded in the FAI Register of the Soaring Association of Canada on or before the end of January 1981.

DIAMOND BADGE

36 Stephen Burany SOSA (awaiting world number)

GOLD BADGE

172 Lee Coates Cu Nim
173 Charles Thomas Edmonton
174 James Cumming Winnipeg
175 Donald Rowe Cu Nim
176 Hans König Cu Nim
177 Hanspeter Roth Montreal
178 Walter Weir COSA

SILVER BADGE

575 Lee Coates Cu-Nim
576 Hugh McColeman Edmonton
577 Norman Beug Regina

DIAMOND GOAL/GOLD DISTANCE 300 km (186.4 mi) O&R or Triangle

Lee Coates Cu Nim 310km Pik20 Claresholm, Alta.
Charles Thomas Edmonton 312km Jantar Innisfail, Alta.
James Cumming Winnipeg 311km Phoebus Pigeon Lake, Man.
Donald Rowe Cu Nim 312km Cirrus Innisfail, Alta.

DIAMOND ALTITUDE 5000 m Gain (16,404ft)

Jack Dodds Bluenose 5580m Austria North Conway, N.H.
Stephen Burany SOSA 6748m Kestrel North Conway, N.H.
Walter Weir COSA 5940m Libelle North Conway, N.H.
Peter O'Donnell SOSA 5195m Libelle North Conway, N.H.
Hanspeter Roth Montreal 5750m Ka6E North Conway, N.H.
David Collard Regina 5820m Cherokee Cowley, Alta.

GOLD ALTITUDE 3000 m Gain (9842 ft)

C. Silliphant RVSS 3840m Skylark 4 Sugarbush, Vt.
James Cumming Winnipeg 3200m Phoebus Pigeon Lake, Man.
Stuart Young SOSA 3930m Libelle North Conway, N.H.
Hans König Cu Nim 3183m 1-26 Cowley, Alta.
Jan Van Der Heiden SOSA 3916m Libelle North Conway, N.H.

SILVER DURATION 5 Hours

Gerald Pellerin Montreal 5:39 Hawkesbury, Ont.
Ian Divall RVSS 5:07 1-26 Kars, Ont.
Stephen Cherlet Independent 6:20 1-35 Elmira, N.Y.
Kenneth Evans Montreal 6:15 Blanik Hawkesbury, Ont.
James Dippel SOSA 5:11 1-26 Rockton, Ont.
Eric Meikle Toronto 5:07 Ka6-CR Conn, Ont.
Ulric Soucy Independent 5:26 Astir Sisteron, France
Kris Johanneson Winnipeg 5:01 2-33 Pigeon Lake, Man.
George Brueckert Vancouver 5:15 1-26 Hope, B.C.
Norman Beug Regina 5:20 1-23 Indian Head, Sask.
Rene Bolt Regina 5:36 1-26 Indian Head, Sask.

SILVER ALTITUDE 1000 m Gain (3281 ft)

Ian Divall RVSS 1180m 1-26 Kars, Ont.
Kenneth Evans Montreal 2010m Blanik Hawkesbury, Ont.
Mike Maskell Winnipeg 1340m 1-26 Pigeon Lake, Man.
Ian Coristine Montreal 1700m 1-26 Hawkesbury, Ont.
Maria Sillanpaa Montreal 1370m 1-26 Hawkesbury, Ont.
David Sawatzky Winnipeg 1645m 2-33 Pigeon Lake, Man.

SILVER DISTANCE 50 km (31.1 mi)

Maria Sillanpaa Montreal 62km 1-26 Hawkesbury, Ont.

C BADGE 60 min. flight

1683 Ian Divall RVSS
1684 Kenneth Evans Montreal
1685 Cristina Yule Erin
1686 Norman Stacey Bluenose
1687 R. Scott Morrice Bulkley Valley
1688 D. Houghton York
1689 James Dippel SOSA
1690 David Bluhm York
1691 James Hu SOSA
1692 Geoffrey Johnson RVSS
1693 Carol Lynn Walker Base Borden
1694 Gerald Dempsey York
1695 Kelvin Cole York
1696 Ulric Soucy Independent
1697 Robert Steidl London
1698 Ian Coristine Montreal
1699 Kris Johanneson Winnipeg
1700 Leonard Douglas Base Borden
1701 George Brueckert Vancouver
1702 John Paulin Lahr, West Germany
1703 Rene Bolt Regina

Hot Ships I Have Seen

by Al Schreiter

During a trip to Europe last September I had the opportunity to visit some of the German sailplane factories and have a close look at a few new productions.

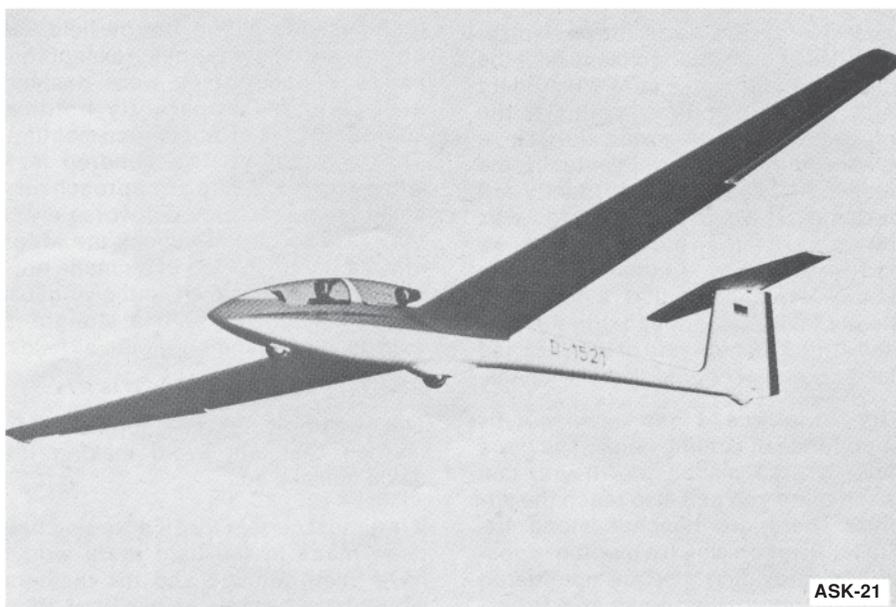
The big news at Schempp-Hirth at Kirchheim is, of course the new Ventus. Klaus Holighaus has gone to carbon fibre and the result is a new thinner wing which could only be built with the new material. As usual, the workmanship is absolutely first class, the cockpit layout similar to the tried and true predecessors, and the performance is said to be 44:1. In addition to gentle stall characteristics, excellent slow flight handling and wing loading from 6.1 to 9.2 lbs/ft² the new wing is said to be less sensitive to bug splattering. Aspect ratio is a high 23.7. The sailplane comes in two cockpit sizes, so that pilots can select the size most suitable for themselves. Of course, when you see the price tag your eyes might water, but it might be only the emotion when you see this beauty.

Not far from Kirchheim in the hills nearby is Schlattstall, the home of Glasflügel. They are very proud of their new 304, and justly so. Successor to the Mosquito, this 15m Racing Class sailplane also has a new wing with a thinner profile developed at the Braunschweig University. It retains the proven trailing edge dive brakes. Workmanship is as one expects from Glasflügel. The cockpit design has an interesting new feature. The instrument panel is attached to the canopy, which opens forward. Not only very handy for getting in, but perhaps a life saver if one has to depart suddenly. Because this sailplane is still mainly fibreglass, its price tag is less breathtaking.

(ed. note: There is also a 17 m version of the 304 available using 1 m "plug-in" wing tips).

Further north, at the foot of the Wasserkuppe is the Schleicher factory. They are still busily producing 20s and 19s, but I had a chance to see the prototype wing for the new 22 m ship. One can only marvel at the design and technology, I can't wait to see it fly. Of particular interest to clubs will be the new two-seater ASK-21, a fibreglass trainer designed for club use, and yet at 34:1 a respectable cross-country ship as well. It's fully acrobatic, too. Both seats in the roomy cockpit are very comfortable, visibility is excellent and handling characteristics very docile. The price is reasonable, too.

So, if there are any dollars, devalued as they are, itching in someones pockets, there are lots of new ways to get value for your money. □



SAFETY COLUMN

by Eric Newsome



Everyone who leaves the ground — even by ladder — is taking a risk of some sort. We all know that accidents can happen, do happen and will probably continue to happen, and yet most of them are caused by people who not only should know better but actually do know better.

Seldom is an accident caused by a sudden catastrophic structural failure which gives the pilot no chance; more often it is caused by some small error of judge-

ment of a brief lapse of attention which in itself is apparently trivial but which starts a chain of events which leads to trouble. The suggestion of pilot error as a cause of accidents is about the only cause unacceptable to the pilot concerned, and yet, truthfully, this is indeed the cause of most glider accidents. Accidents are reported officially, but incidents (potential accidents from which the pilot escapes by the grace of God) seldom are. A great pity, for the only way any-

thing positive can come from either experience is by making the causes known so that we can all learn without having to duplicate the error. Perhaps I can lead off by confessing my own sins!

Never a year passes but I do something stupid in the air. Last year's beauty was an error of classic simplicity which could have bloodied my nose, metaphorically or in reality. My tale, one of two, appears below.

As Chairman of the Safety committee, I hope to have a column in each edition of the magazine. However, I cannot claim to have a corner on the pilot error market and my resources in that area are limited. Why not send me details of incidents and accidents you have been involved in, written in such a way that others can avoid the same trap. It goes without saying that names will not be used unless the 'perpetrator' wishes it. Frankly, a 'lecture' on safety once every two months will only scratch the surface of the problem and if enough material is sent in I hope to persuade SAC to sponsor the publication of a booklet on safety, which would contain all the contributions. Such a booklet could then be made available to all members. Get out your pencils and let me have your contribution.

Send to:

Eric Newsome
Chairman Safety Committee
131-13710 67th Avenue
Surrey, BC V3W 6X6

1. We KNOW so much better than we DO

Over the Fraser River not far from Hope Airport I sat in the back seat of a Blanik holding the nose up just below the point of stall. As I did so I pointed out the lack of airflow noise, the position of the nose and the ineffectiveness of the ailerons and to make sure the student in the front had time to digest the information. All this was done in a relaxed, unhurried way. Eventually, the nose, which had been prudently left pointing toward the airfield, was lowered. Only then did I realize that we had a problem. So intense had I been on my explanation that I had completely failed to notice that in the prestall attitude a high rate of descent had developed — we couldn't make it back.

The Hope area is not known for its abundance of landing fields. The good fields are so placed that if you can reach them you can also reach the airport. There are beaches along the Fraser River on which a landing is possible — providing they are not littered with stranded tree trunks

and fishermen. On that day the fishermen swarmed and the only reachable beach was ruled out.

Halfway back to the airport there stands a small island which, as well as having the usual stands of tall trees, has a handful of small and scrubby looking fields. A long, narrow field was clearly the best possibility, except that half a dozen horses were dashing around madly apparently holding some kind of impromptu race meeting. That was out. At five hundred feet, when about to set up an approach on a small field which looked worse every minute, a soft tremor shook the wings and a mild up-welling of air made possible a painfully slow climb giving just enough height to make a straight-in approach and landing on the airfield.

All's well that ends well. Or is it?

Only, I suggest, if a lesson has been learned that will avoid making the same mistake again.

It is almost certain that if a landing had been made in the field there would have been damage and the incident would

have become an accident. Who would I have blamed? Would it have been the fishermen on the beach, the horses occupying the only good field, or the lousy little field that was my last resort? Clearly, it would have been caused by pilot error. It was not caused by lack of experience or flying skill, but a brief lack of concentration on flying safety which resulted in a position from which only chance could provide the key to salvation. A simple, elementary and quite inexcusable error — but not one I am likely to make again. How about you?

I wonder what the student learned?

2. Fatigue ...

At about 1000 feet the towpilot suddenly found himself standing almost upright on the rudder pedals as he gazed straight down at the trees. No time for procrastination, just dump the bloody idiots hanging on the rope now stretched out up above the tail and get the hell out of here. Done, and in less time than it took to say 'B----H----'. It's amazing what a sudden jolt of adrenalin can achieve.

Back on the ground, (safely), the tow-pilot and the two glider pilots were able to compare notes. Sure enough, an out-of-position glider had caused the tow-plane to react in such a way. The glider's canopy had swung open on tow and both pilots had let go the stick to grab it. On tow this glider needed fairly heavy forward pressure on the stick so, with the stick free, it quite naturally pitched up and headed for the clouds. This, in turn, pulled the towplane's tail up and headed the plane towards the ground.

The incident had ended safely enough with no damage done but it could have been a disaster. What was more alarming, however, was that it was the third case of a canopy opening in flight in less than two months! All three had involved the same glider, all had occurred in mid-afternoon, and all on training flights. Something was drastically wrong. This third incident had resulted in the most serious situation with the tow-plane being pulled out of control. If things didn't change what would happen in number 4.

It's easy to look for the simple troubles and blame things like the canopy lock or the glider's need for forward stick on tow, but there was actually nothing wrong with the canopy lock and the forward pres-

sure on tow was nothing new. The glider had been operating trouble free for years. So what was really wrong?

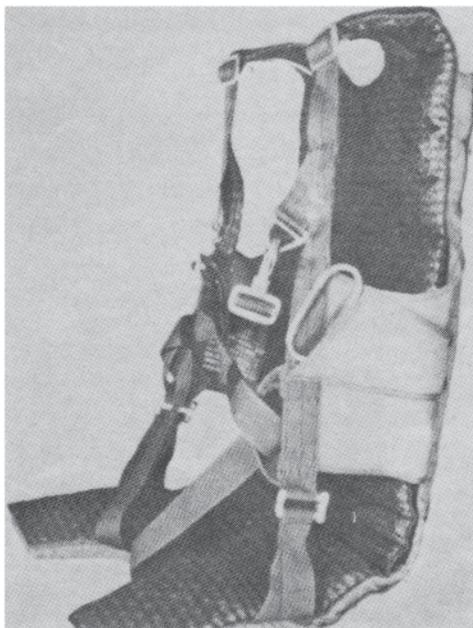
Firstly, the cause of the incident was an improperly latched canopy popping open in flight. Why did it not get properly latched? because the pre-takeoff check was not done properly! Okay ... it was a training flight, the student was careless but why didn't the instructor pick it up? Now we are getting somewhere! In all three incidents, the instructors had been sloppy. They were experienced instructors with several years of incident-free instructing behind them. What caused them to slip like this? The picture gets clearer. All three incidents occurred in mid-afternoon, after a heavy training session starting in early morning. The instructor slipped because they were fatigued. Now knowing this, a further examination of the troubles can be made.

The club involved had never had a series of incidents like this before, but in previous years the training program was fairly small. This year, however, a very successful membership drive had brought a large influx of trainees. This brought in lots of money, which brought smiles to the directors' faces. As more would-be members came along, they were signed up and pushed into the

training program, in spite of protests from some of the instructors that they were getting overloaded. Finally, breaking point had been reached but it was not recognized. Tired instructors who decided that they had had enough for the day were made to feel like heels by tactics like, "Hey, you can't quit yet there's all these guys who haven't flown and they've been here since dawn" etc. Reluctantly, the instructors would respond but in doing so were getting dangerous. Incident number three drove the point home with a vengeance. Something had to give.

The following week the president had to face an onslaught from the CFI and some senior instructors. He had a choice, either get the student numbers under control or lose most of the instructors. This was not much of a choice. The desired controls went into effect, a limit was placed on the number of students to be handled in a day, students were rostered and the instructor who decided he had had enough was no longer hassled. And all of this worked. No more incidents.

It's so easy to find the superficial reasons for an incident, but only digging deeper will find the root causes. This club had a problem which was building up to breaking point. Does yours?



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Security's famous "150" has been the standard of excellence since 1964. Design thickness of 2" is achieved by locking the pilot chute from the inside of the main container. The canopy is a 26-ft conical design with a "T" modification to provide steerability. Rate of descent with a 200 suspended weight is 18.4 F.P.S. Repacking cycle is 120 days. Colours are: red, blue or black. Shipping Weight: 18 lbs.



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CLUB NEWS

CU NIM Gliding Club

"I Have Good News and Bad News"

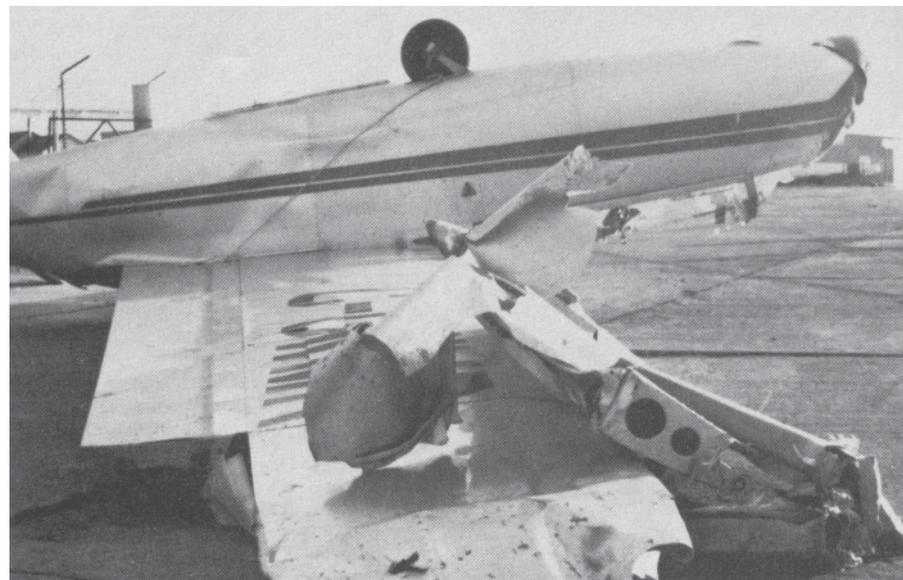
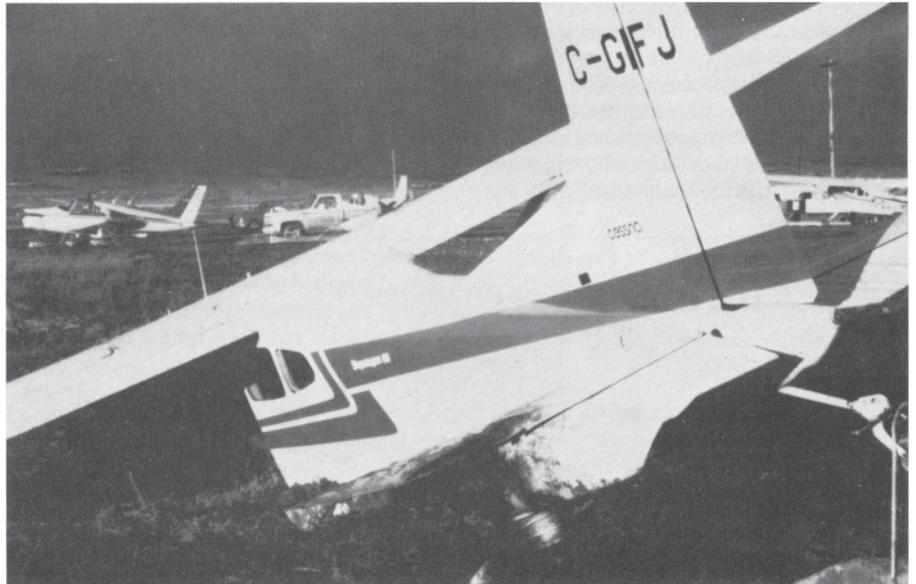
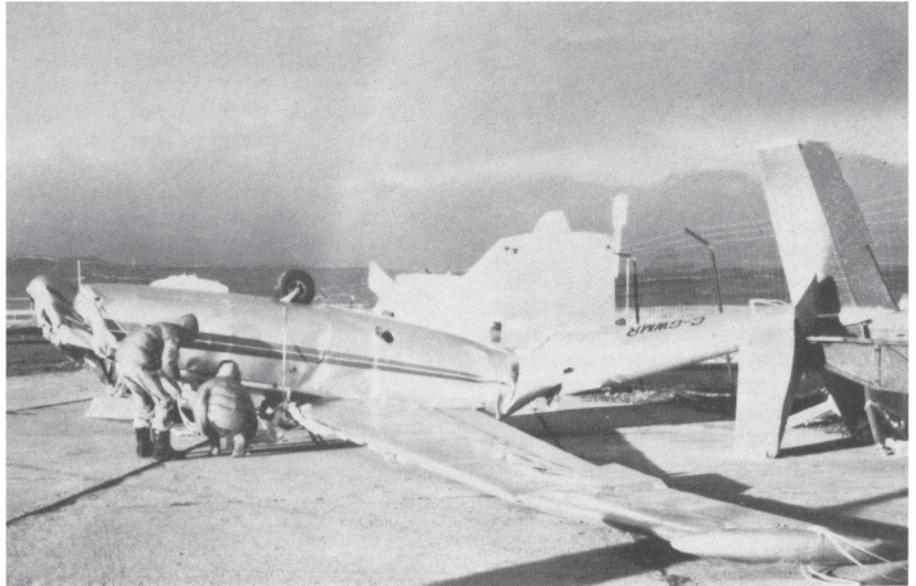
Cu Nim Gliding Club stationed its Blanik at the Claresholm Airport to allow winter flying for its members. The light snowfall and frequent chinooks keep the runways clear most of the time, and a commercial operator has a Cessna 180 available for tows.

Up until Christmas, several flights were made to explore the wave. On many days, magnificent chinook arches spread from horizon to horizon, but though tantalizing, were too far upwind for practical towing. On some days, the Porcupine Hills, just to the west, interacted with the Rocky Mountain wave system to produce waves right over the airport. Naturally, no one was ready to fly at the time.

Disaster struck around 10 pm, Dec 26. Chinook winds of 60 mph with gusts over 90 blew across the airport until the early hours of the morning. As winds rose dramatically, in the evening, Tony Burton drove out to the airport to check, and discovered the Blanik and three powered aircraft broken and two others damaged. Quick phone calls brought help to prevent other aircraft from breaking from their mooring in the wild gusts.

The Blanik was totally destroyed, as it evidently tore loose from its cement tiedowns and looped, landing inverted on its nose 150 feet away, and then blew a further 100 feet along the concrete until stopped by a fence. The only untouched part of the glider was one flap — a wing was torn in two and the fuselage twisted apart behind the cockpit.

It was an awe-inspiring sight to see so much concentrated destruction, and aircraft straining, wheels off the ground, against tiedown cables ... □



*Top Photo —
Note the crushed nose of the Blanik which was the first point of impact.*

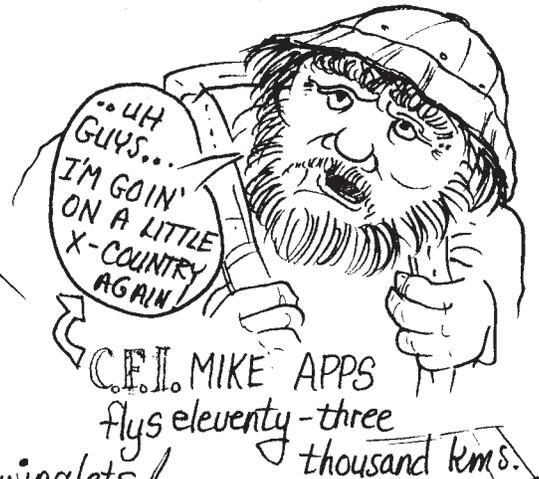
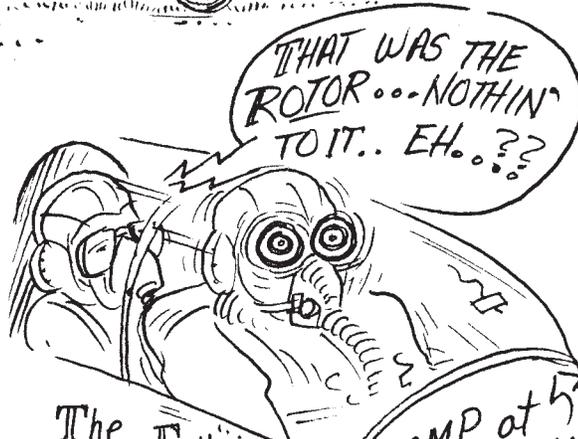
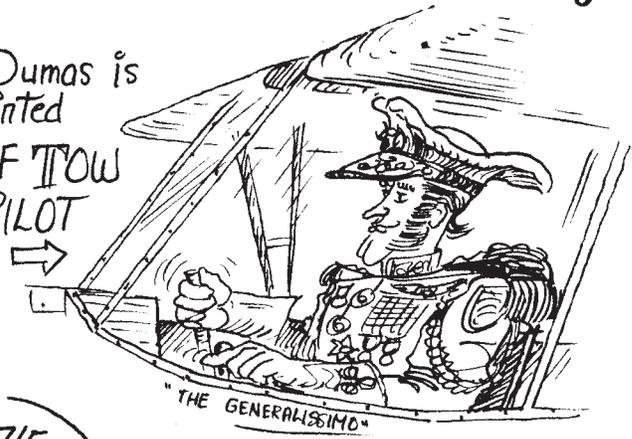
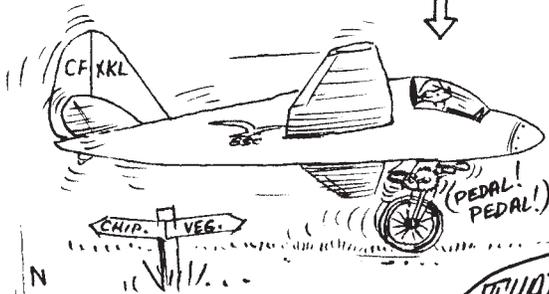
*Middle Photo —
One of the three aircraft severely damaged along this tiedown line. All were facing cross-wind and tied to a heavy mooring cable which was pulled loose. This Cessna pivoted around and backwards 20 feet into this 4 foot deep ditch, dragging a 200 pound concrete tie-down pad.*

*Bottom Photo —
The left wing is shown torn apart on the Blanik. Only one flap survived unscathed after the last landing of C-GWMMR.*

EDMONTON Soaring Club – 1980 in Review – by Tenrag

The 1-23 pilots do whatever works to go X-country!

Ed Dumas is appointed CHIEF TOW PILOT



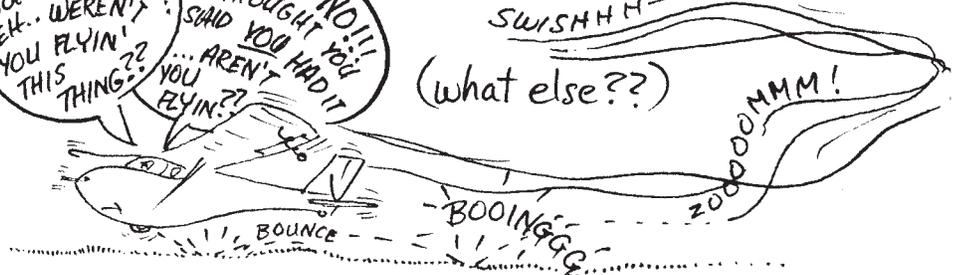
PETER MASAK shows off his winglets!



JOE GEGENBAUER tests NEW flour-bombing techniques...



The WESTERN Instructors School
SWISHH
(what else??)





“COMMENTS on FLYING a BLANIK”

by Hans-Werner Grosse

from an interview in the BLANIK NEWS Oct 80

Bill E. Stansbeary and John Callos interview with Hans-Werner Grosse
“COMMENTS ON FLYING A BLANIK” by Hans-Werner Grosse

“Having flown many top performance gliders for most of my life, I was not really prepared to be overjoyed when given the opportunity to fly a Blanik in Australia for the first time in my life, I must admit. However, having it, I found it to be a straightforward and easy to fly glider.

I enjoyed being in circling flights with other people who were flying in heavier wing loaded gliders and easily outclimbing them with the Blanik in a thermal. Of course, when you get to top of thermal you must forget about climbing for awhile and then must fly at 100 to 130 km/h for cruise. While flying the Blanik at that speed, you can make use of lift orientation (lift streets) on your way to your next good thermal because of the excellent feedback you get with your ailerons. With a heavy wing loaded glider there is not the excellent feel-response system. Perhaps such could be related to the pilot factor, but I had no difficulty in meagre conditions to run away from later development sailplanes (two-seater) from the eastern bloc countries. Some people think that the Lark IS-28 is better just because it is a newer design, but I doubt this. Another nice feature of the Blanik was the excellent wheel and brake.

It struck me as quite silly the attitude of some people who could not make the grade in cross-country soaring and decided to do aerobatics instead. It definitely is a fallacy to assume that a metal glider is fundamentally safer to do this sort of thing than a wooden glider. Some people evidently thought that a metal sailplane licensed in aerobatic category must be strong enough to take anything and tried to fly silly maneuvers. Even if they get away with this without a structural breakup in mid-air, they jeopardize the lives of other people who later fly this overstressed sailplane. If the truth were known about the damage done to gliders just carelessly flown by inexperienced daredevils, there would be more caution taken by most pilots who practice safe flight operations.”

Some added thoughts ... by Bill E. Stansbeary

Hans-Werner Grosse has cut right to the heart of a problem that is becoming more evident... some pilots are trying unreasonable aerobatics to show off new-found skills. The Blanik is designed for plus 6 and minus 3 G wing loading, but this does not mean it can be flown like a Pitts Special. *Only* those maneuvers shown in the operating manual should be considered, *only* with proper training by an FAA certified flight instructor, *only* during the proper weather conditions, and *only* after an agreement is reached as to who is going to pay for the damages if

something goes wrong. Soaring flight in the Blanik is just too good of an experience to allow a tragedy to mar our lives. If aerobatic flight is what turns you on, there is a proper way in suitable aircraft to execute certain maneuvers. Don't gamble your life and the lives of others in a high risk situation that may end in a revolting development.

ed. note: the Vice-President of the Blanik Association is Monty Williams, 2019 Dunrobin Crescent, N. Vancouver, BC V7H 1N3

CLUB NEWS (cont.)

Montreal Soaring Council

by Bob Gairns

Good soaring days were not frequent in 1980 at Hawkesbury, and no Gold C distance flights were recorded. MSC has two experienced women pilots, Kate Estebany and Brenda Histed. Both have Silver C's and both fly the LS-1, our most sophisticated club machine. (There is a private ASW-17 at the field, belonging to Canadair, and qualified MSC pilots can fly it). Brenda made the best flight in a club aircraft, a 300 km out and return attempt to Portage-du-Fort in an Astir CS, but landed at Gatineau on the way back for about 242 km.

For several years the club has been taking a towplane and a few gliders to Lake Placid NY for wave soaring in the fall, but, although the journey only takes a couple of hours to drive, the numbers who fly there has been decreasing, until it is becoming uneconomic to take the towplane.

During the year there were no accidents to club gliders, though we had a gentle nose-over in a towplane.

Private owners did not fare so well. A privately owned Kestrel 17m had the fuselage badly damaged and a Std Cirrus was written off while attending a meet at the Quebec Soaring Club in June, and in the fall a private owner was unfortunate to fly out of a turbulent thermal into a down-wash over Whiteface Mountain near Lake Placid and spun into a highly wooded area. This aircraft, an HP-14, was damaged beyond repair, but the pilot suffered only bruises.

A few private owners attended the annual wave camp at North Conway, New Hampshire, run by Allan MacNicol of Boston, in October. One day 39 pilots made gains of over 20,000 ft, and Hampa Roth (Ka6E), Hans Baeggli (Nimbus 2C) and Jean Pierre Mathieu (Pik-20E) made Diamond climbs. Rate of climb on one day was over 2000 feet per minute.

At Hawkesbury there was a near-miss between a Pik-20 and a DC3 on a scheduled run from Mirabel to Ottawa, and some float planes came close to a couple of gliders over the Ottawa River. All in all, we have been fortunate in 1980.

For 1981, there is a proposal to complete the paving of our short tarmac strip and do take-offs from there to save damage to the field from propeller erosion; and the DC 3 has been replaced with an HS 748, which will fly over the field at 8000 ft instead of the 4000 used by the DC 3. □

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Glider Daily Inspection Book — New

During 1980 the Vancouver Soaring Association used the British Gliding Association's "Daily Inspection Book" for record keeping. Based upon this experience we have now published our own book.

The book contains a page of instructions for the Daily Inspection of the particular aircraft type (Blanik, 1-26, Pilatus) together with printed pages for the logging of deficiencies and minor maintenance. This system has proven to be of great value to the maintenance director in staying on top of the wear and tear.

We are now offering copies of this book for sale to other clubs for their benefit, and to defray our publishing costs. This book is a 5" x 8" plastic bound 3-ring binder so that it can be kept in the aircraft. It contains log pages sufficient for 100 flying days.

As a part of a conscientious preventative maintenance program, this book has helped our club reduce the down time for unscheduled repairs and improved the condition and safety of our aircraft.

The book is offered for sale for \$7.50

Refills are available at \$4.00

To purchase copies of this book write to:

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BLANIK — Unscheduled Release of Cable

A.D. NOTE

Have you seen TRANSPORT CANADA N-AME-AO No. 26/80 Oct 30/80?

This memo points out that the toe straps on the Blanik rudder pedals are a safety feature. Without them it is possible for a foot to slip and trip the release mechanism. See that the straps are fitted and are used.

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COMING EVENTS

- May 16-18, 1981: Innisfail, Alberta May Meet. Contact Garnet Thomas, 16623-93A Ave. Edmonton, Alberta T5R 5K1
- May 16-22, 1981: Eastern Basic Instructor Course hosted by York Soaring, Arthur, Ontario (details in issue 1/81)
- May 24-June 7, 1981: 17th World Gliding Championships Paderborn-Haxterberg, West Germany, Contact Al Schreiber, 3298 Lone Feather Crescent, Mississauga, Ontario, L4Y 3G5
- June 8-12: Rideau Valley Soaring School Flying Week. Contact Larry Rowan at address shown on Club listing
- June 27-Jul 6, 1981: Eastern Regional Championships hosted by Gatineau Gliding Club, Pendleton, Ontario, contact Phil White, 3 Elenor Dr. Ottawa, Ontario K2G 6A3
- Jul 1, 1981: Contest Black Diamond, Alberta hosted by Cu Nim Gliding Club, Contact Lee Coates, (403) 242-3056 H
- Jul 5-11, 1981: Western Basic Instructor Courses, hosted by Vancouver Soaring Association, Hope, BC, contact Garnet Thomas, 16623-93A Ave. Edmonton, Alberta T5R 5K1 (Hope is a tourist area and attractive for family vacation) more next issue.
- Jul 13-24, 1981: Western Regional Championships, hosted by Manitoba Soaring Council, Carman, Manitoba. Contact Jeff Tinkler or Russ Flint (details in issue 1/81)
- Jul 25, 1981: Cowley Summer Camp, Cowley, Alberta, hosted by Alberta Soaring Council. Contact Ken Palmer, 23 Baker Cr., Calgary, Alberta T2L 1R3 (403) 284-1396 H
- Aug 3-7: Rideau Valley Soaring School Flying Week. Contact Larry Rowan at address shown on Club listing.
- Oct 3-4, 1981: SAC Directors Meeting
- Oct 10-12, 1981: Cowley Wave Camp, Cowley, Alberta, hosted by Alberta Soaring Council. Contact Garnet Thomas 16623-93A Ave, Edmonton, Alberta T5R 5K1

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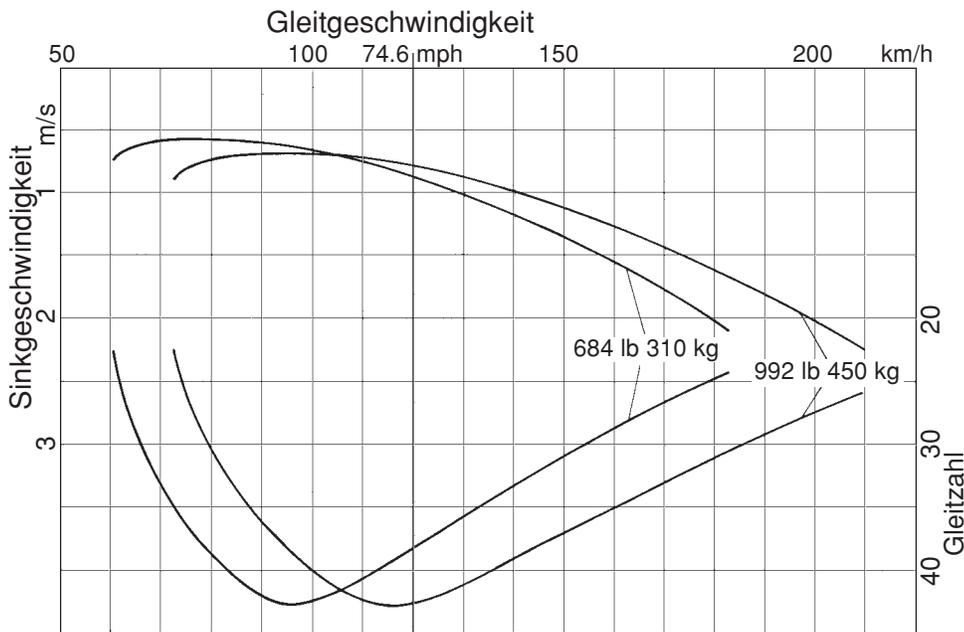
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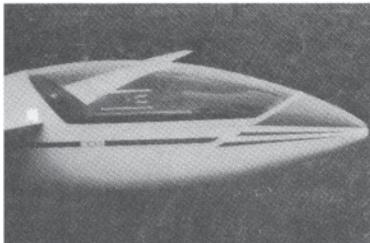
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