



Adelaide University Gliding Club
% Sports Assoc. U. of A.
North Ter. Adelaide S.A. 5000

Volume 2, No. 6.

NEWSLETTER

December, 1977.

The problem of the purchase of a two-seat trainer, outlined in the last newsletter, proved to be easier to solve than originally thought.

Finance was solved when the Sports Association gave the Club a \$6,000 interest free loan. At the same time they reaffirmed their intention to pay the amount outstanding on the loan for the Arrow. This meant that the Club could raise another loan with the National Bank of up to \$6,000 for the rest of the purchase price. More importantly it meant that the profits on the operation of the Arrow could be applied to paying off the loans on the two-seater instead of having to pay off its own loan.

On investigation the Committee found that the following were the aircraft available:-

Twin Astir	-	\$ 20,000
Ask-13	-	\$ 15,500
IS-28-B2	-	\$ 15,000
Blanik L-13	-	\$ 12,500
Bocian 1-E	-	\$ 10,800
Ka-7 (s/h)	-	\$ 9,200

However, because of limitations on the amount of loans we could afford to pay off, only the last three were seriously considered. Of these the Blanik and Ka-7 had maintenance problems: the Ka-7 was due for a major twenty yearly inspection in three years time and the Blanik had a finite life span due to metal fatigue. Further the Club has no capacity for carrying out repairs to metal. The Bocian on the other hand was wooden and new. This meant that it could easily be maintained by the Club.

Handling characteristics were also considered. Emilis, Tony Kiek and Guy Harley went to Bacchus Marsh on the weekend of 22nd and 23rd October to test fly the Bocian. It compared favourably with the Ka-7 and Blanik and in some areas, such as vision from the back canopy, it was better.

Another advantage of the Bocian was that almost immediate delivery was assured.

So, on November 3rd the decision was made to buy the Bocian 1-E. As the first Club two-seater, and more importantly, as the Club's first brand new aircraft, it should give the Club many years of good service.

The Bocian will be handed over to the Club on 2nd December at Bacchus Marsh and will go into immediate service.

THE BOCIAN 1-E

The SZD-9bis Bocian 1-E is a two-seat training sailplane. The sailplane is equipped for night and high altitude flights and is suitable for training basic acrobatics. It is an improved version of the Bocian 1-D; flying that sailplane Polish pilots set many national and world records. Up till now the gain of height world record of 38,300 feet established in 1966 by Stanislaw Jozefczak and Josef Tarczon and the women's gain of height world record of 27,600 feet set in 1967 by Adela

Airbrakes - plate-type, provided with strips pressed down to the wing surface. Operation by push rods and steel cables.

Fuselage - plywood covered semi-monocoque structure of oval cross section. Towing hooks are located in the fuselage nose and near the centre of gravity just in front of the main wheel.

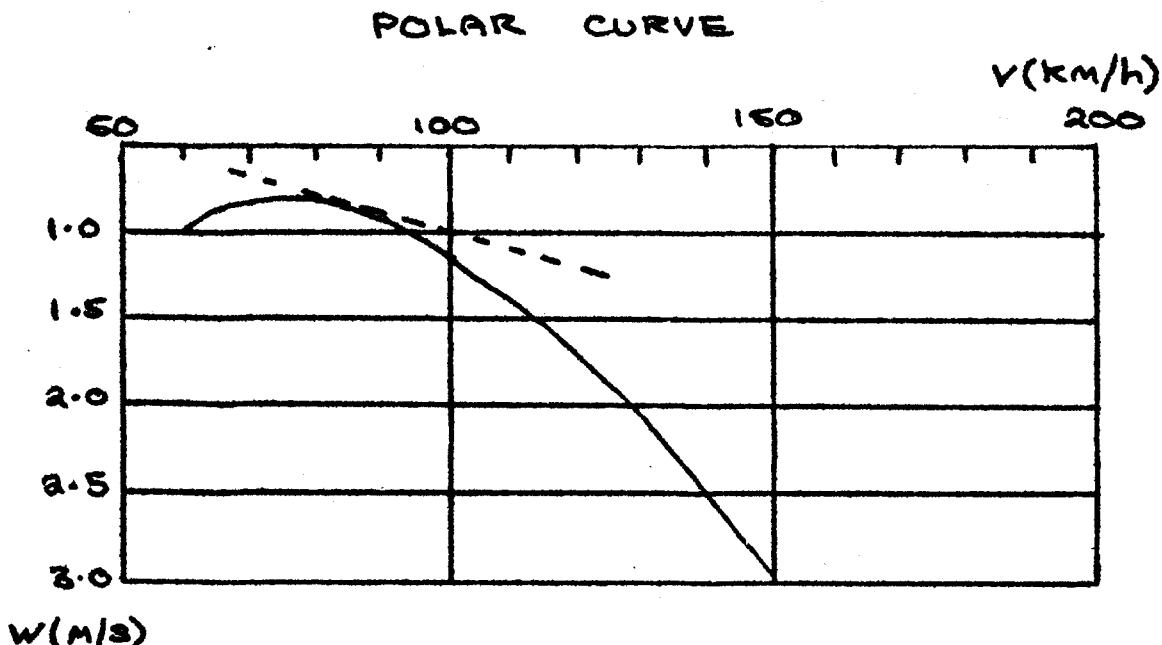
Cockpit - tandem seating arrangement; the canopy in two parts: sideways opening forward part, backwards sliding rear part. Rudder pedals in the front cabin are adjustable on the ground. During flight it is possible to reach the spacious baggage compartments, situated in the nose part of the wing, from the rear seat. There is space there for oxygen equipment in case of high altitude flights.

Instruments - there is only one instrument panel, situated in the front cabin, but it is visible from the rear seat. The panel consists of an airspeed indicator, altimeter, total energy variometer of ± 5 m/s range, variometer of ± 30 m/s range, electric turn indicator and compass. The static and total pressure sources are located in the fuselage front part. The sailplane is fitted with navigation lights for night flying.

Undercarriage - a main wheel with front and rear skids. The main wheel is fitted with a shock absorber and a shoe brake which is operated by the full deflection of the airbrake lever.

Tail Unit - Wooden structure with control surfaces fabric covered. The elevator is provided with a trimming tab.

SPECIFICATIONS AND PERFORMANCE.



Wing Span	17.8m
Length	8.2m
Height	1.2m ₂
Wing Area	20.0m ²
Wing Aspect Ratio	16.2
Max. Permissible Speed	200 km/h (124 mph)
Best L/D at 80 km/h (50 mph)	26
Min. Sink at 71 km/h (44 mph)	0.82m/s (2.69 fps)
Empty Weight	342 kg (754 lb)
All-up Weight	540 kg (1,190 lb)

you to adjust the harness whilst seated. There is plenty of room to wear slimpak or backpack parachutes although 6'2" pilots in the back cockpit just fit in.

The back canopy must be closed first, and pilots using the front canopy must remember to close and open it using the white knobs on the left hand side, not the red knobs on the right hand side which is the emergency canopy release. The front canopy can be closed by the pilot in the back seat. There is a sliding vent window in the front canopy whilst ventilation in the back is provided by partially opening the back canopy.

Instruments are of a standard type except for the ASI which can indicate 5 or 50 knots depending on how many revolutions the needle has done from the back seat, the ASI can be seen past the left side of the front pilot's head and the altimeter past his right side. If you want to see the vario the front pilot must lean to the right but this means you can't see the altimeter. Eventually, it may be necessary to put some instruments in the rear cockpit.

The airbrakes are operated by an 18" lever next to the pilot's left leg. The final travel of this lever operates the wheel-brake but there is a definite difference in pressure on the lever between full airbrake and operation of the wheel-brake, so you shouldn't land with full airbrake and wheel-brake. There is a very positive over-centre lock which requires effort to overcome, particularly for the rear pilot since the lever, in this position, is at full arms length. Therefore, care will have to be taken, during launching, that the all-out signal is not given before the pilot has had time to release the wheel-brake and close the airbrakes.

Although the Bocian is a taildragger there is a pronounced nose down attitude. The usual reaction during groundrun is to use full back stick to "get the nose up" whereas slight forward pressure is needed. This attitude could produce problems with cablebreaks on winch launches where pilots will have to put the nose well below the horizon and check their speed before carrying out any manoeuvre. In flight the pilot soon becomes accustomed to the attitude.

During groundrun the aerilons quickly become effective so there should be no problems with dropping wings. The elevator is steady and not twitchy as with some types.

After release the aircraft can be easily trimmed throughout the speed range. Once trimmed the aircraft exhibits exceptional stability and will stay at whatever speed or position you put her. Whilst the aerilons are very effective and give good rates of roll, they are not balanced with the rudder. When doing a turn full rudder must be applied as soon as possible and usually has to be left on for a while after the stick is returned to centre. The rudder is effective for all other purposes.

The stall is docile being precluded by minor vibrations which can be felt in the front but not back seats. At the stall she will drop her nose quickly and recover but she will also drop a wing. This can easily be picked up with rudder. The spin, and recovery, are perfectly normal.

During landing both the airbrakes and sideslipping are very effective. At an airspeed of 55 kts and a groundspeed of 40 kts the Bocian doesn't float after round-out but quickly settles down on its well sprung undercarriage and can be stopped quickly by the wheelbrake which is vicious enough to dig the front skid into the ground.

Groundhandling is effected by a fixed carrying rod through the fuselage forward of the tail plane. However, even if two people lifting the tail you can easily get back injuries unless someone sits in the front cockpit. Because there is only a rear skid and not a rear wheel the tail must be held up during all groundhandling.

- 4th - 11th December - Fly Bocian to Mildura, compete in Sunraysia regatta, fly on to Lochiel.
17th December - Regular weekend flying recommences.
26th December - 1st January - Week long gliding camp, cross-country and basic training.
28th, 29th, 30th January - All aircraft go to Stonefield regatta.
11th - 19th February - All aircraft go to Horsham regatta.

WEEKDAY FLYING

Some of us have no exams this term. Some others aren't too worried about their's - apparently. Thus gliding has continued unabated in the last part of October and early November. Hopefully we can continue until exams are finished, and things are back to normal, thus keeping money flowing in for the Arrow and the Winch.

We have entered the big time with mid-week flying - thanks to Emilis and his ultra-flexi time. Several of us were at Lochiel on October 19th and November 2nd. Both were excellent days with Graham Parker especially getting up some good flights in the Arrow.

Some things that came out of these mid-week days:

- 1) Big thanks to the C.F.I. for his time. Both days we got high enough to see the Barossa Valley (almost). Soon he may be going to Victor Harbour via Lochiel. Those of you who appreciate these comments will appreciate the C.F.I.'s. being there.
- 2) Another thank-you to Emilis in allowing the trainees who haven't yet made it and those solo pilots not yet in the Arrow, to fly Lima Zulu free of charge.
- 3) People could perhaps take note of the ease with which these days were arranged and hopefully we can see some more in the future. Lochiel is proving itself such a beaut place that it seems a pity to waste good week-days. So, wherever you've got a day off or a day where you don't quite feel like going to Uni. get the O.K. from Emilis and give some of us a ring a couple of days in advance. I can't speak for others but Graham Parker, Antony Veale, Chris Brown and I are always interested. Our phone numbers are on the handouts that most people have. (also in the phone book) Chris can be contacted at the R.A.H.
- 4) The complaints that they don't know about these days. Fair enough for those off campus - in retrospect we should have contacted them. But for those others the Sports Association Office is only a few minutes away. Both days were advertised. Also some people had notices put in their letter-boxes. They were still there a couple of days ago. It cannot be stressed enough that a wander over to the Sports Association Office every couple of days can be very rewarding. Also with this in mind anyone with something arranged should tell the rest of us via the Sports Association Office notice board.
- 5) Two new members: (a) John Crozier, another 3rd year Med. student who learnt to fly at Gawler and has a few hours up in a Super Arrow. He is now getting used to winch flying.
(b) Ian, a friend of Antony Veale's, who may be familiar to those at the September camp. I think he has some power flying experience. His mechanical knowledge and "ultra-flexi time" job ensure that he is another valuable member of the club.

THE STUDENT PILOT'S GUIDE TO INSTRUCTORS

(Reprinted from Australian Gliding)

1. Size Up Your Man.

Watch the instructor carefully as he climbs into the glider beside you, and try to size up your man. Does he fumble nervously with the harness, or is his manner calm and collected? At this point he will possibly ask you why you are not doing your cockpit check. Do it.

2. Beware of the Hungry Instructor.

Feed the instructor.

Find out which chocolate he prefers. Get a pie for him at lunchtime. An empty instructor is a short-tempered instructor.

3. The Night-Before Instructor.

The night before you wish to fly, check the duty list for the next day. Quite frequently some instructors forget to do this. If your man is the life and soul of the party that evening, don't fly with him tomorrow. He will probably only last out until noon anyway.

4. Beware of the Affable Instructor.

Lady pilots should take careful note of those instructors who put a comforting arm across the back of their seat. This type of instructor would expect the male student to buy him a beer at six o'clock, and the female student to look after him later.

5. The Foot Loose Instructor.

For students who are training in tandem seated gliders take careful note of the instructor who puts his feet up on the back of your seat. Quite frequently those boots will act as blinkers, and the small is shocking.

6. The Musically Inclined Instructor.

Be very cautious about flying with instructors who take up their trannies with them. You might disagree with his choice of programme and this could lead to serious repercussions.

7. How to Get on With Your Instructor.

It is most important that you do not pander to the instructor. It also helps if you do try to follow his lesson points. This means that you must not obviously try to bribe the instructor, but hereunder follows a list of more subtle approaches.

- a) When enthusiastically shooting film make certain you photograph the instructor from his best angle on about fifty per cent of the reel.
- b) Make sure he sees this film.
- c) If he hates his wife, agree, she is a bitch.
- d) If he has bad breath, don't tell him.
- e) When he is sick after forty minutes of your attempts to thermal in the summer noon heat, accept it as a matter of course. Offer him your own paper bag.
- f) When flying in foreign lands or with a foreign instructor try to ensure that you both have the same word for the following minimum vocabulary:-

LEFT RIGHT UP DOWN
FAST SLOW LOOK-OUT

- d) Finally, and very importantly, always agree with your instructor. He knows

BITS AND PIECES

Club History.

" The airline which was to become TAA was formed in March, 1946. One of the original executives to join the firm was John Watkins, who had begun his interest in flying with the Adelaide University Gliding Club when it built its 'Zogling' glider in 1929 and flew it at the Tapley's Hill gliding camp in 1930. "

from Greg Copley,
"Australians in the Air",
p. 213.

Private Owners.

The private sailplane owners section of the Club has produced some interesting results recently.

1. Emilis still cannot sell his Kookaburra but has announced that if he can he will probably buy a sports class sailplane. He is currently looking at a salto.
2. David Stobie has bought a quarter share in an ESKa-6, registration UH-GHA. The aircraft was originally owned by the Barossa Valley Gliding Club and is in mint condition.
3. Guy Harley may be buying a quarter share in the same ESKa-6. He won't know for certain until 18th November.
4. Tony Kiek has temporarily given up his plans to buy an Open Libelle because he has paid his bulk flying fees at Gawler and he wants to get as much flying there for his money as possible.

The result is that next year will see at least one private aircraft hangared at Lochiel with another one flitting in and out.

Funding.

During 1978 the Club will receive the following amounts from the Adelaide University Sports Association:-

\$ 3,500 Grant to purchase the Arrow.
\$ 2,800 Administration Grant.
\$ 1,250 Airfield And Aircraft Insurance.
\$ 300 Airfield Lease.

Hangar.

Colin Pickering, who is Secretary of the Adelaide University Sports Association has offered the services of the University's groundsmen to help with the construction of our Hangar. Apparently, the groundsmen don't have all that much to do during winter; football fields require less attention than cricket pitches and there's less watering to do. So, they will be available to manufacture the components needed for a hangar if we provide the materials.

Once again, we are indebted to Colin Pickering and his excellent staff.

Main expenses are:-

Bocian	- \$ 10,800
Loan Repayments	- \$ 5,750
Hangar	- \$ 2,000
Winch Running Costs	- \$ 1,700

The Balance Sheet for 31st October, 1977 shows an accumulated nett profit of \$ 2,951.40 and total assets of \$ 6,188.60 after depreciation.

Typist.

In the past the newsletter has been typed by Mary, the Sports Association girl Friday (how else would you describe a secretary cum typist cum receptionist cum everything?). She has spent many hours attempting to decipher Emilis' and my handwriting, usually with success.

This edition, however, is typed by Denise, the new junior typist in the Union Office. Our thanks to her for her efforts and to Mary for her past efforts.

Contributions.

It was with delight that I received a totally unsolicited contribution from Graeme Newcombe for this newsletter. It makes a change from only receiving contributions from Emilis and having to write the rest myself.

In order to stimulate contributions from members the following articles from "Cloudbase", official journal of the Adelaide Soaring Club Inc., are included. The Editor, after reading them, took three hours and half a bottle of rum to recover. He, therefore, offers a free bottle of wine to the person who writes an article for the newsletter pointing out the greatest number of illogicalities in the following articles.

Radio - Author Unknown

Some people might suggest that we make more use of radio to make our intentions known to other pilots. This superficially attractive idea keeps recurring and, in fact, some people already do so.

But a closer examination shows that the idea is quite unworkable and would generate more problems than it solves.

Consider first how long we have been operating without radio, for operational control and you can see that, if we have been operating satisfactorily, we must have evolved procedures, that do not rely on radio. And, of course, we have evolved these procedures, which depend on the MKI eyeball and set patterns of conduct.

but when we start to base our operating system on the use of radio we are at the mercy of electronics. Failure of a radio will take the aircraft out of service.

In a completely undisciplined operating environment such as ours it is just not practical to rely on people receiving and acting upon radio messages which can be blotted out by any of the button pressing yobos who pollute our frequency.

The tendency to regard the Pie-cart radio as 'Gawler Tower' is ever present and must be resisted to the utmost. To seek operational information from the Pie-

We have the very great privilege of unlicensed operation on a frequency band where everyone else must be licensed. If we seek to make this channel serve the same purpose as other aeronautical frequencies, then it is inevitable that control of the frequency will pass to others. Let's all try to reduce the verbal diarrhoea apparent on 122.7 and retain it as a useful facility, but one we are not dependant on for our day to day operation, except for airspace awareness.

Club Aircraft At Regionals - by Tom Nemeth.

I would like to ask the relevant people in the club to devote some thought towards rationalising the role of this club with regard to regional competitions and regattas, in the light of present circumstances. At the moment there appears to be an underlying assumption in the club that we must send aircraft to regattas, so that:

- a) Members may experience better (different) gliding conditions
- b) (competition) pilots may gain experience (practice)
- c) we may improve the "club image" by being there
- d) there is not enough competition at Gawler

I would like to point out that all of these reasons are merely historical, and in view of present circumstances, we should reconsider the situation. You will probably agree that:

- a) Conditions at Gawler are now, with our tugs and present fleet, as good as anywhere, particularly during summer. The club organises expeditions (Black Springs, Aldinga, Balaklava) from time to time, and members may fly with most other clubs at reciprocal rates.
- b) The days of going to a regatta to "gain experience" are over. Due to the increasing numbers of competing aircraft, organisers are insisting on a higher minimum standard (next year, the Nationals will require 500 km and previous experience to be eligible). For competition oriented pilots there is ample opportunity these days to practice at Gawler.
- c) This club is already one of the biggest in Australia, and is well enough established to discount this as a valid reason. Besides, we have many private-owner members who will provide adequate representation at most competitions.
- d) With the advent of
 - decentralised state competition
 - cross-country challenge ladder
 - private owner fleet at Gawler
 - Easter regatta, Balaklava regatta, etc.

nobody can argue that there is not enough competitive flying right here at Gawler. It is evident that to be truly competitive these days, one must be a private owner. Anyone who feels that his own competitive urge is too strong to be satisfied by the above, should really consider joining a syndicate.

Finally, consider the following. Each member of this club is an equal partner, and as such, has a right to expect that the aircraft, of which he is part owner, be available to him for a reasonable part of the flying season. There is nothing laid down regarding priority for regattas away from Gawler, and members interesting in active competitive flying in club aircraft are a very small minority. Usually, it is the same few people who continually want to take aircraft away.

The point is, that members who want an aircraft to stay at Gawler during a particular period, should be allowed to express their views also. Therefore, consider the following:

4. Revise the ballot system, to prevent any one person taking a glider away on a cross-country flight day after day, if other people want to fly it (NOT necessarily cross-country).
5. Informs SAGA that flights made from Gawler during the Easter regatta (or another regatta) will not be eligible for the S.A. Decentralised Competition. This should encourage competitive flying at times other than during regattas and restore the "fun" aspect that once existed.
6. Advise other clubs to do the same.

I hope you will give some serious consideration to these proposals.

TOM NEMETH.

DIARY OF EVENTS

December 2nd	-- 7.30 p.m. End of term binge meeting. Emilis' Place. Phone 339-2381 for directions.
December 3rd-11th	-- Sunraysia Regatta, Mildura.
December 26th-January 2nd	-- Gliding Camp.
January 28th-30th	-- Stonefield Regatta.
February 11th-19th	-- Horsham Regatta.
February 18th & 19th	-- Kimba Regatta.

GUY HARLEY,
Editor.
