

VOLUME 6 NO. 1

ADELAIDE UNIVERSITY
GLIDING CLUB

REGISTERED FOR POSTING
AS A PERIODICAL - CAT. B.

EARLY
1981
NEWSLETTER
ERSATZ

IN THE EDITOR'S ABSENCE.

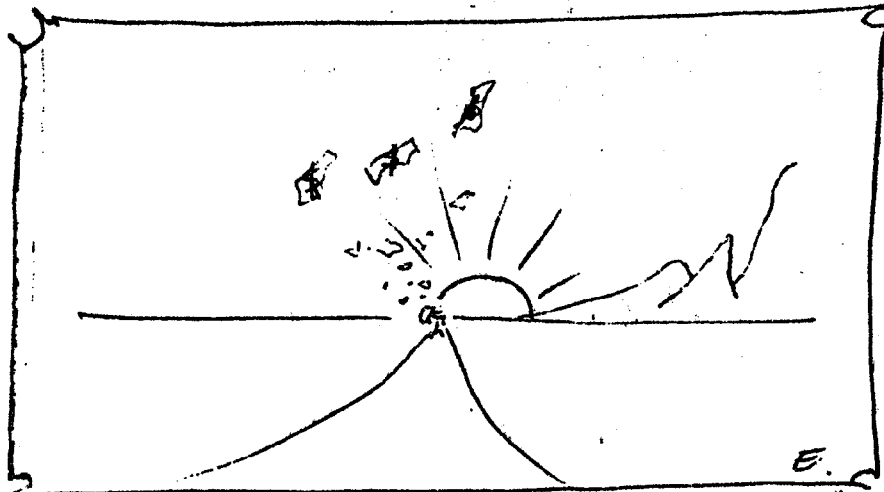
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AN 'ERSATZ' NEWSLETTER

The last newsletter appeared in December 1980, prior to our real live editor leaving for O/S to persue his vacation elective study committments. Thus his portfolio was left vacant until March '81.

However, in the intervening period, lots of things are happening, and lots are about to. Presto, we have a substitute newsletter, albeit not of the quality we have come to expect from Larwood productions. Or is it just a guest editorial run rampant?

P.S. We note with interest that hardly had the boss exited the country, than our resident cartoonist (and treasurer) also departed.



"I HEAR THE TREASURER'S GONE O/S."

WELCOME TO 1981

1980 ended on a high note with the Mildura trip and Xmas/New Year flying reported later in the newsletter.

1981 promises to be a fruitful year, with a clubroom to erect, for the comfort of us all, equipment operational for the use of all, and some tempting thoughts about new whatsits for our brain exercises.

THE MILDURA TRIP

The S.A. Sports class championships were held in Mildura between 6th and 13th December 1980. The uni club was well represented by Guy in his Ka6, Graham (call me grub) Parker in his Sagitta and Graeme Newcombe in a borrowed Boomerang. The club also loaned out its Bocian with its half finished trailer to Emilis. In the end we realised that the Arrow should also have gone.

The weather was good, so good that we'll let the others tell their own stories elsewhere in the newsletter. With the Bocian went Don, Mark, Redmond, Roman and Sandra with 2 bods from the Adelaide Hills club.

The Bocian began well with a trip 20km out of Gawler into a paddock while the Sagitta and Super Goose completed the 320km trip.

However, at the contest site, things picked up. Don flew around the 186km task scoring a sore behind from lack of cushions. The next task was 264km which Mark completed in excellent time considering the close look at the ground we had half way round. The weather continued to improve, and Redmond completed the following day's 308km task across the border into S.A.

The Tuesday task was set 515km across Victoria, and in the end was the only day the Bocian didn't get home. We made it 450km only to miss our next thermal and had to put down at the edge of a 15mile belt of trees (referred to as scrub, or more accurately the 'bl...y scrub'). To the credit of Sports class, this was the only outlanding of all 12 aircraft on this day.

Needless to say by now we had secured last place with the Bocian, although not through the lack of anything in the aircraft. Except perhaps some ability to stretch legs in the back seat; Emilis spent part of the 500 with his legs draped over the front pilot's shoulders. The other annoyances were the cessation of radio reception once we got outside the boundary of the airfield, and that damn trailer, yuch.

The following day Mark and Don roared around a 230km task in which they reached 12000 feet.

The end of the week was marred by inclement weather during which we local soared. Thankfully the local winch was revived in time and costly morning aerotowing was survived.

Sandra flew the Bocian solo, Mark and Don flew the Boomerang, and Roman took the Boomerang around the last task.

By the end of the week everyone was tired but happy. From what I could judge, if its feasible, everyone had goured themselves.

Oh, by the way, Graham (stop calling me grub) Parker is now S.A. Sports class champion.

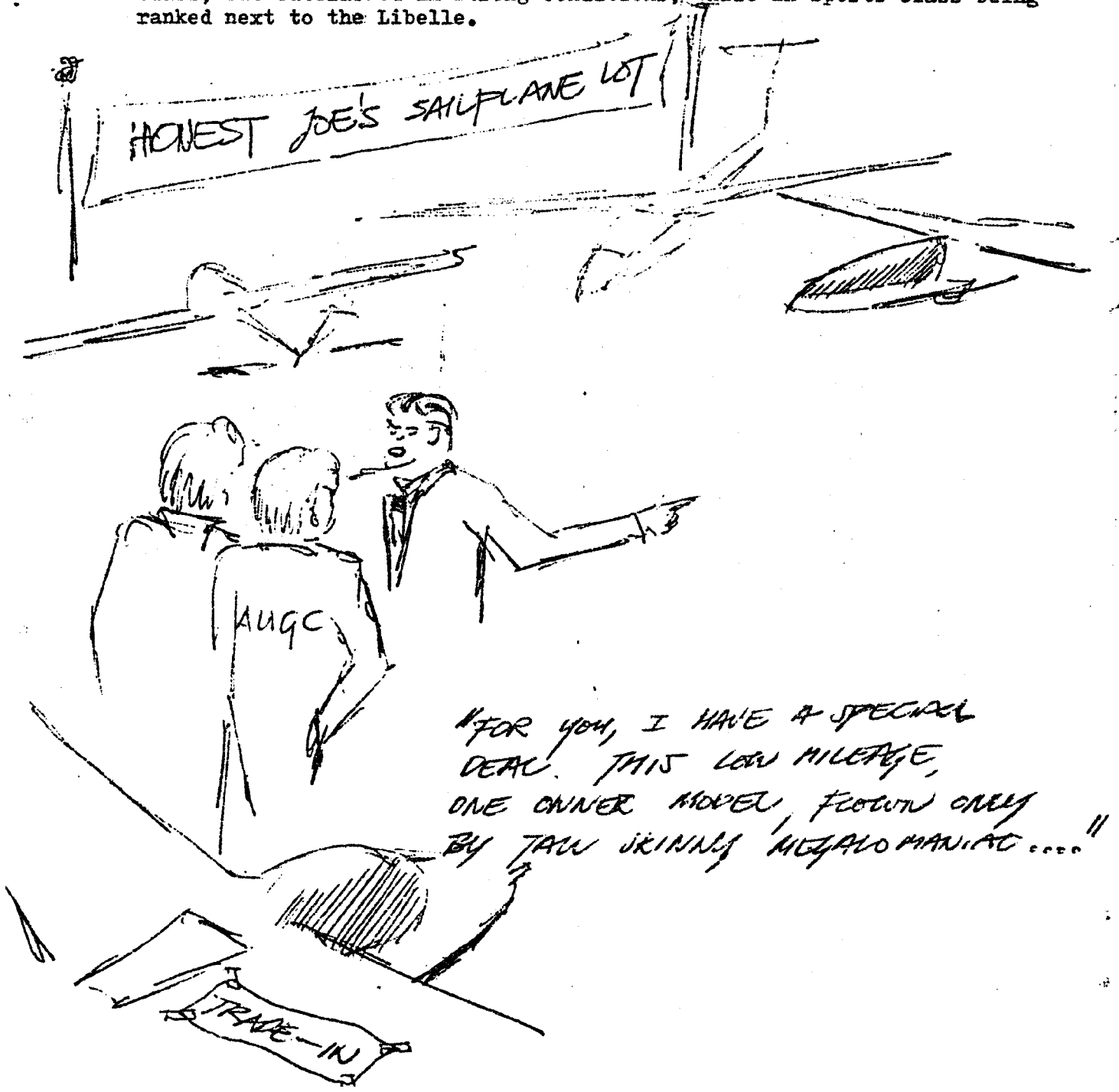
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ANOTHER SAILPLANE

Every now and then thinking leans to another sailplane for Lochiel. The immediate reaction is one of no. We have plenty to do just keeping our present two flying, and don't have the numbers to justify a third. It is unlikely that the Arrow could be sold on the open market at a price to contribute to the purchase of a new ship. Lastly, the suitable types are in short supply, with the shift in recent years to high performance plastic sailplanes.

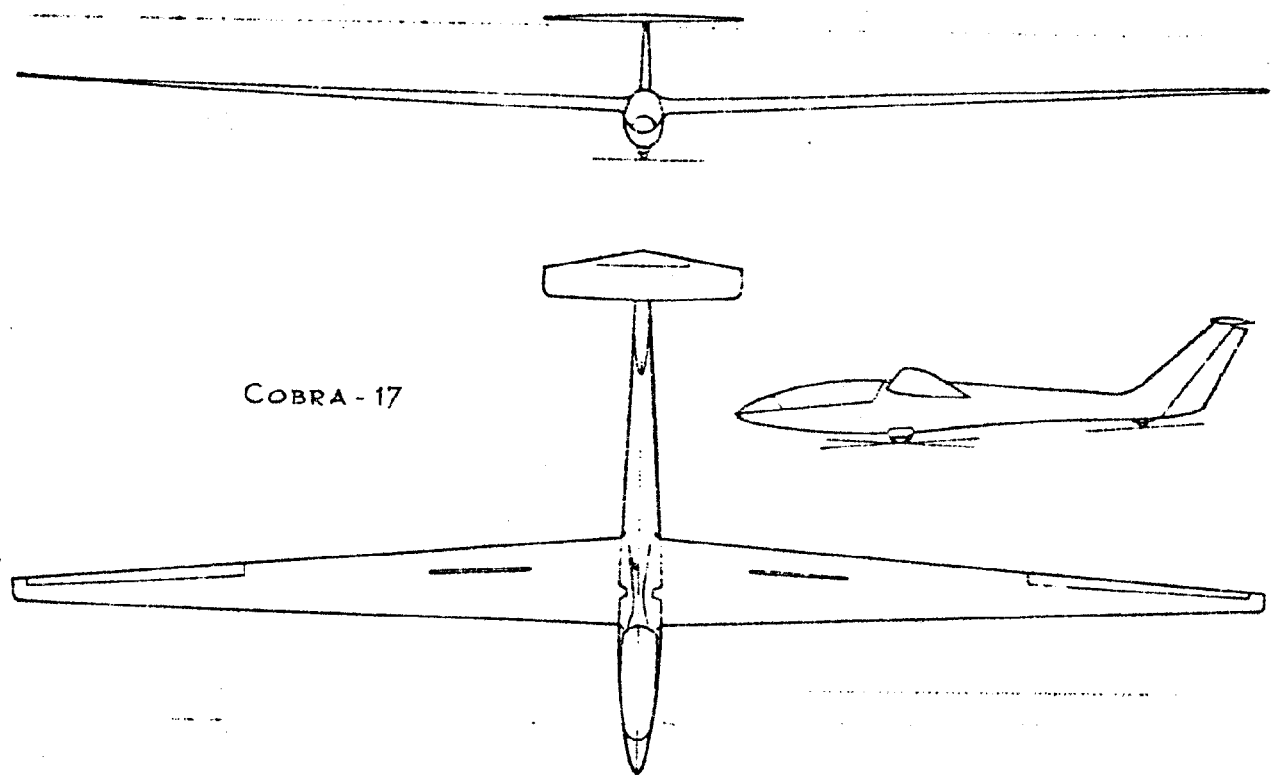
For the thinking purposes, January A.G. advertised a Cobra 15 (brand new) with all doo-dads for under 11,000 \$A.

This sailplane is a Standard class type made obsolete by water ballast being permitted in the class. In other words it would be flown in Standard class, but outclassed in strong conditions; while in Sports class being ranked next to the Libelle.



FOR YOU, I HAVE A SPECIAL DEAL. THIS LOW MILEAGE, ONE OWNER MODEL, FLOWN ONLY BY TAIL SKINNY MEGALO MANIAC....!!

Below, we reprint details of Cobra first published in A.G. in February 1971.



Australian Gliding

The silhouette of Cobra only slightly resembles its predecessors from the Foka family. Looking closely at this sailplane one can immediately see the difference. There is no more the slightly swept-forward wing with a leading edge perpendicular to the fuselage axis which was so characteristic for Foka, or the fuselage resting on its front skid.

You can also feel the difference in the first seconds of flight. The glider takes off after a very short ground run even on a slimy or snow covered ground as was the case during tests of both prototypes. Maintenance of lateral stability is easy though a higher moment of inertia is noticeable in the 17-m version, particularly at take-off with full 60 kg. water ballast. In both versions, the pilot has to pay attention to stay in the longitudinal axis of the tow plane at take-off because of lack of yawing moment resulting from the pull of the tow rope fastened close to the glider C.G.

Handling on aerotow even in very strong rotor turbulence is easy, the airbrakes are also easily operated in full range of permissible towing speeds 115 km/h, of importance in case of excessive slacking of the tow rope.

Analyses and tests conducted on generally known "unpleasant" dynamic

properties of all-moving tailplanes, have been crowned with full success in Cobra. Observations made on similar tailplanes used on Zefir-3, Zefir-4 or Foka-5 as well as tests of several experimental all-moving tailplanes in T-tail configuration have ensured that the Cobra is free of buffeting or pilot induced oscillations. If we add to the above a positive static longitudinal stability with stick fixed and stick free (stick force versus speed increment is ca. 0.5 km/10 km/h), phugoid oscillation damped out in about 20 sec. both stick fixed and stick free, the possibility of trimming with a spring over full range of operating flying speeds at extreme CG positions and the longitudinal controllability determined by an increase of stick force/g by about 2 kg/g we can say without any doubts that the sailplane's longitudinal controllability is almost ideal. The lateral controllability of the Cobra-15 is very good and despite reduced aileron surfaces does not differ from the controllability of Fokas. The transition time from 45° left bank to 45° right bank at 100 km/h is 3.2 seconds. For Cobra-17 due to its larger wing span the time is longer and is about 4 seconds without water ballast and 4.2 seconds with 60 kg water ballast. The flying qualities at low speed are correct. The sailplane gives a distinct stall warning both in straight and

circling flight maintaining its lateral controllability until the moment of stall.

The sailplane will only spin with ailerons displaced according to the direction of turn, with ailerons displaced vice versa it stops the spin after making half to one turn of the spin. An acceleration of up to + 6 g has been obtained during recovery tests at maximum permissible weight of the sailplane.

Five tests of prototype sailplane in both versions were made by gradually increasing the maximum speeds in a number of flights and recording on an oscillograph tape vibrations of the structure at selected points and displacements of control surfaces (during tests of Cobra-17, 8 parameters at the same time were recorded). The tests included maximum flying speeds aimed at checking whether the sailplane is free of flutter. Thus the demonstrated speeds were 165 km/h EAS for Cobra-15 and 268 km/h EAS for Cobra-17 respectively.

Both sailplanes have also been put through aerobatic tests. Many times they made such manoeuvres as spin, loop, wingover, snap half roll and dive out, slow roll, spiral or inverted flight. Both sailplanes made the manoeuvres correctly though as performance sailplanes they were not intended for aerobatics.

6.

The tests were to check the sailplane controllability in extreme loading and strength conditions with rough handling of controls. It's obvious that the degree of difficulty to make manoeuvres connected with rotation around the longitudinal and vertical axes is greater for Cobra-17 due to a larger wing span.

Functionality of systems and equipment used on Cobras is excellent. This applies also to the undercarriage retraction control which has passed the tests with satisfactory results in very difficult conditions at the airport covered with snow and mud. The time of emptying ballast tanks in flight on Cobra-17 does not exceed 55 seconds. Exceptionally effective airbrakes facilitate handling of the sailplane at landing approach, the touchdown is effected at lower speeds and seems to be more correct than in Foka. At present, the sailplane in both versions has obtained a type certificate.

Judging by the quality of surface finish and, particularly, by the finish of wings covered with glass-polyester laminate, the glider performance should not be worse than that calculated. In addition, the surface finish enabled a very smooth surface and a true shape of the profile.

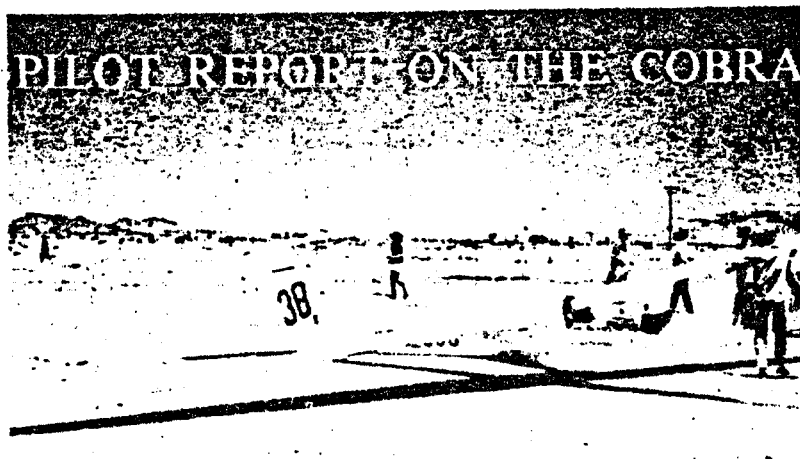
In my opinion our pilots who will compete on Cobra-15 sailplanes in the standard class at the coming World Championships need not feel inferior technically to their foreign colleagues. Cobra-17, though not a super orchid in the open class, is a sailplane one would like to own due to its good performance obtained by quite simple means, the possibility to be used in weak thermals, simple and functional construction and pleasant handling properties.

TECHNICAL ASPECTS

by R. Zatzworniki

One of the tasks of the Experimental Gliding Establishment at Bielsko Biala in 1968 was to develop a new version of the Foka sailplane to send to the next World Championships as the Foka 6. Though the development of the new version could only slightly improve the methods of construction already in use in gliders, the engineering staff wanted to build an entirely new sailplane from the aerodynamic point of view, of much better performance than that to which our pilots were accustomed. To offer competitive equipment to our pilots both in the Standard and the Open Class the new type was to be built in two variants, Cobra 15 and Cobra 17. In view of the short time available for preparation and production, and to conduct the laborious and time-consuming flight tests, it was decided to make use of the old design formulae and to employ the tools and equipment of sailplanes currently in production. The situation was not easy for the chief designer, Wladyslaw Okarmus. Special programmes were prepared for digital computer to select the optimum parameters for both types of sailplane. Most of the attention was concentrated on the wings, which are of vital importance in the analysis. However, of no less importance from the point of view of production was the working out of a design that would be quick to build.

COBRA seems very similar in appearance to the Foka 5 at first sight owing



Cobra 15 at World Championships 1970

(Reproduced by courtesy of the Polish Aeronautical magazine BHL)

jigs taken from the Foka production line. The basic difference is the undercarriage, which is retractable, and has been moved slightly forward while the rear part of the fuselage is undercut. The new OSTIV regulations for the Standard Class now permit retractable landing gear and the reduction of fuselage cross-sections in the rear portion is advantageous aerodynamically and lifts the fuselage clear of the ground, reducing the possibility of damage in rough terrain.

The remaining units, apart from some basic design changes not apparent to the eye, were adopted from the Foka 5, the undercarriage being an ingenious design patented in our Patent Office. The wheel when closed lies flat on the fuselage bottom and the single undercarriage door, when the wheel is extended, is withdrawn inside the fuselage far enough to avoid any possibility of damage on landing. The sailplane has a spacious baggage compartment which provides facilities for mounting radio, oxygen and battery supply equipment and a converter for instruments as well as space for pilot's personal luggage. This is an innovation introduced on nearly all Polish production gliders and is very much appreciated by Polish and foreign users. The fuselage front, covered inside and out with glass-fibre laminate guarantees a high degree of safety to the pilot. It is interesting to know that the fuselage front area is shaped so that no part protrudes over or enters under the covering. The tow hook is mounted just ahead of the wheel and the access to it is covered with a smooth cowl. The front skid was eliminated and in case of landing with closed undercarriage the loads are taken by the reinforced belly.

The vacuum-formed, forward-opening canopy provides exceptional all-round visibility; it has a side window, an adjustable vent and can easily be jettisoned in emergency. The canopy can be locked with a key in the closed position which is very convenient in flight and when the glider is parked in an unfamiliar hangar.

The glider has a spring trim, which is better aerodynamically than the conventional balancing tab system.

The instrument panel contains such usual instruments as A.S.I., altimeter, two variometers, electrical turn and slip indicators, artificial horizon and com-

pass. The SAT - 3 oxygen equipment is mounted under the instrument panel. The glider is also provided with radio.

The sailplane has an all-moving T-tail well known for its aerodynamic and handling qualities. The 'slab' tailplane with its axis of rotation ahead of the aerodynamic centre is mass balanced with a weight on the outrigger which serves also as an assembly wrench.

The new wing was very carefully designed. As compared with the Foka the aspect ratio was increased to 19.4 on the Cobra 15, but the chord could not be narrowed too much because the same basic wing with aspect ratio of 23.56 was to be used on the Cobra 17, and the Reynolds number must not be too low. The wing is a monospar construction covered with plywood with an outer lamination of epoxy glass fibre. The wing thus has high resistance to weather and maintains a true profile. Tubes for electrical and pneumatic lines for special instruments mounted at the wing tips are built into the wing near the leading edge. On the port side of the cockpit there is a hidden conduit through which the cables can be pulled to the instrument panel.

The slot-less ailerons are hinged at the upper surface and filled with styrofoam for better support of the thin skin. The mass balancing is evenly distributed along the full length. The aileron is actuated by a long push-tube passing through openings in the ribs.

The double-plate air brakes are placed in isolated boxes eliminating the possibility of pressure leakage through the wing. To ensure good sealing in the closed position the brakes are capped with spring-loaded slats which remain pressed to the wing skin even when the wing flexes under load. The airbrakes are actuated by means of a push-tube system which automatically locks the brakes when in closed position.

The wings of the Cobra 15 and 17 were built on the same moulds, the fifteen metre wing being left short. This enabled considerable workshop space economies, and only by doing this was it possible to build the sailplanes in time for the World Championships.

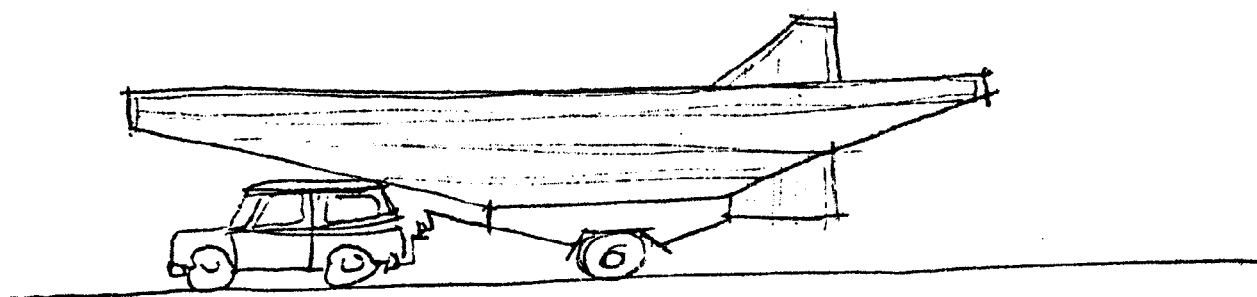
The wings of the Cobra 17 differs from the 15 in that it has water tanks of 50 litres capacity in the nose section.

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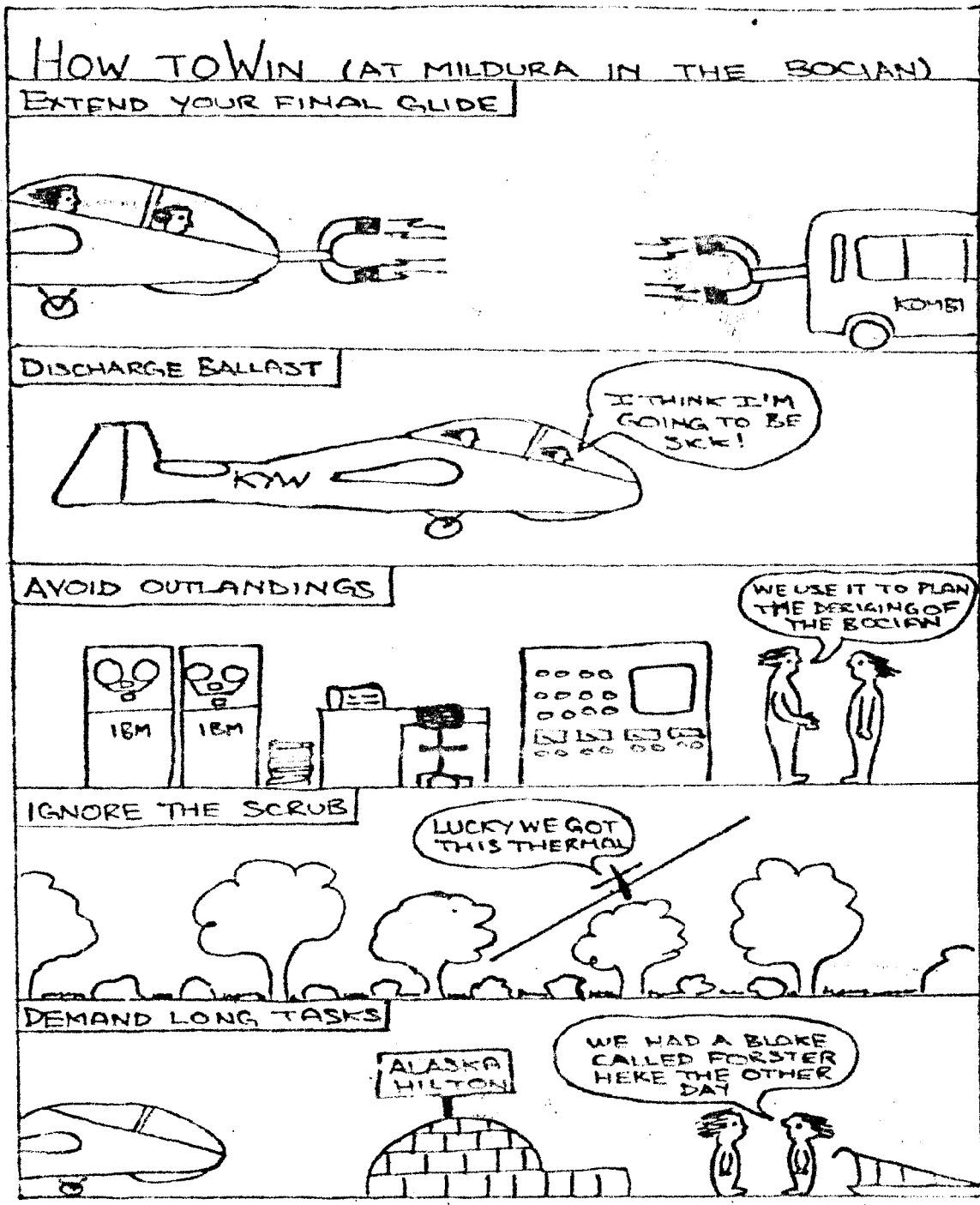
TIT-BITS

Do you realize that since Mildura, the club has 3 Diamond Distance holders.

And Emilis still hasn't. He spent between Xmas and New Year at Gawler but couldn't manage more than one cross country; a miserable 300 to Jamestown and return.



"AFTER PRACTICING ON THE PE-CART,
ANDREW DECIDED TO ENCLOSE THE
ARROW TRAINER!"



ACCOUNTS

Members are reminded that the club constitution requires that all flying accounts be operated "in the black". Some members are not doing this and are running up large deficits. If members continue to do this they will have their right to operate flying accounts withdrawn.

SOUTH AUSTRALIAN GLIDING ASSOCIATION INC.

President: John H. Brougham.

Airfields & Airspace Officer, Alan A. Bradley, 10 Greenglade Drive,
Paradise, S.A. 5075
Secretary: Fred J. Foord. 24th Dec. 1980.

The Chief Flying Instructor,

Dear Sir,

As a result of negotiations with the Dept. of Transport (SA & NT Region) changes in the release of Edinburgh RAAF areas for gliding, when not required by the RAAF, have been agreed. As a result commuter aircraft operations are expected to improve.

The gliding operations most affected are those from Gawler & Balaklava and both clubs accept the arrangement on the understanding that powered aircraft operations will improve as a result.

CHANGES TO CLEARANCE ARRANGEMENTS ARE AS DESCRIBED BELOW AND WILL OPERATE ON AND FROM 31st JANUARY 1981. It is imperative that all glider pilots are aware of their obligations and operate accordingly.

1. The Edinburgh Military CTR is currently divided into the following sections:
 - (1) Edinburgh Circuit.
 - (2) Mallala Training Area.
 - (3) Gawler Circuit Area.
 - (4) Gawler North.
 - (5) Gawler East.
 - (6) Gawler South.

The boundaries are as described in correspondence in 1976.

2. Mallala Training Area is to be divided into two areas known as Mallala West and Mallala East. The boundary will be the powerline which passes to the West of "Gawler River", "Owen" and "Halbury".

When RAAF activities have ceased and control has been handed to D.O.T., the following principles for the release of airspace for gliding will apply upon request from the Adelaide Soaring Club:

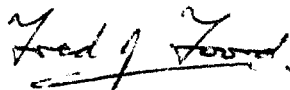
- (a) Edinburgh Circuit will not be available for gliding under any circumstances.
- (b) Gawler South will be available to a minimum altitude of 2500' QNH* for normal gliding operations and the club will only request a greater altitude of Release if special atmospheric conditions exist or gliding operational requirements are such that it is desirable to operate above that altitude. The intention being that generally airspace above 2500 feet QNH will be available for "controlled" operations.

* All airspace allocations in the Gawler area are in terms of QNH, i.e. Altimeter readings when the subscale is set for "Area QNH". Note that the Reference Point at Gawler is 160' AMSL, so that when Area QNH is equal to the actual sea level barometric pressure an altimeter reading of 2500' over Gawler will indicate a height of 2340' above ground (2340' QFE)

- (c) Gawler Circuit, Gawler North, Gawler East & Mallala East will always be available for gliding upon request, to an altitude nominated by Adelaide Soaring Club. The altitude nominated will be that to which the Adelaide Soaring Club expects gliding activity for the period requested. The Club could nominate two altitudes and periods, e.g. 3000ft to 11.00 hours and 10,000ft to last light. Upon it becoming evident that the previously nominated altitude is not needed the Club will advise D.O.T. of its new lesser requirements. Upon it becoming evident that a greater altitude is required the Club will advise D.O.T. The revised clearance to be authorised from an agreed time which is subject only to any commitment which has been made to a powered aircraft intending to transit the area.
- (d) R.264 B & C will be released to 10,000ft. (except as noted below) upon request from any gliding club. Records show that requests for release have been almost solely from Adelaide Soaring Club.
N.B. The portion of R.264 B West of the previously mentioned power line; Gawler River-Owen-Halbury; will have an upper limit of 5,000ft., i.e. the same as Mallala West
- (e) Gliders from other clubs intending to enter the Gawler and Mallala areas are to obtain details of airspace release by contacting the Adelaide Soaring Club by radio before entering the Areas. The aircraft call sign will be registered so that "recall" information can be relayed and acknowledged. (Note that at present A.S.C. base is operating on 122.7 but that in the near future (subject to licensing) it will use 122.5., if in doubt try both frequencies).

Yours faithfully

for Alan A. Bradley.
Airfields & Airspace Officer.



Fred J. Foord. Hon. Secretary.

Enclosure: Chart (from VTC) showing Areas.

STONEFIELD REGATTA

Everybody arrived safely at stonefield on the Saturday morning of the Australia day long weekend fo the annual Barrossa Valley Gliding Club regatta. Guy had driven up to Lochiel on Friday night in order to pick up the Bocian which had been derigged the previous weekend. Dave Ellis towed the Arrow up behind his trusty Celica.

The tasksetters set a 182km out and return to Burra task for Sports Class. The met man said that thermals were expected to start at about 12 O'Clock and go to 7,000' and be about 4 knots. All Sports Class aircraft set out early. Guy and Sandra in the Bocian and Dave in the Arrow kept in touch with th CB's and tried to keep up with the Ka6 but it slowly pulled away. Conditions were much as the met man had forecast but he forgot to warn everyone about the hole at Burra. Burra is situated amongst a jumble of hills and after much thought Guy and Sandra decided to head straight for the turnpoint over the hills. Needless to say they immediately encountered strong sink and landed in the omly flat paddock for miles around. As soon as they had landed the local farmer pulled up in his ute and gave them a lift into the pub in Burra. One hour later Dave walked into the pub. Apparently he had decided to swing to the east over the plains and then head due west into the turnpoint in order to minimise the distance he would have to travel over hilly terain. This ploy worked but he then made the mistake of trying to head due south out of the turnpoint over the same terain that the Bocian had been trying to cover. He outlanded in the same paddock as the Bocian but had to walk into town as the friendly farmer had dissappeared and there were no farmhouses nearby. Eventually everyone was retrieved safely although Mark Forster did manage to get the Bocian crew lost both on the way there and the way back. He claims that he was told to go that way but he's either going to improve his map reading or his understanding of the English language.

On the second day the met man forecast the possibility of thermals up to 11,000'. He also forecast some Cu over the ranges latter in the day. However, the poor temp trace indicated that the thermals were not likely to be very strong The tasksetters set a 222km triangle, Stonefield - Maggea - Robertstown - Stonefield, for Sports task. As the aircraft lined up for take-off Cu were already popping over the ranges. However, after take-off the aircraft found broken 2-4 knot thermals to 5,000'-6,000'. Accordingly most aircraft proceeded cautiously along the first leg after passing through the start gate. The first thermal along track gave 1,000 fpm achieved to 9,000' and the pilots realised that the day was going to be a speed day. Guy Harley in the Ka6 encountered mild vibrations a third of the way down the first leg and was convinced that the tailplane was about to fall off until he noticed the remains of the port aeliron tape fluttering in the slipstream. It didn't come off completely until after the first turnpoint and obviously it didn't help his performance. As the aircraft entered the first turnpoint Cu were starting to form all over the place. Sports class pilots listened with interest to open class pilots complaining on the radio of overdevelopment over the ranges and it started to look like the same problem was starting over the plains. Luckily conditions held long enough for the aircraft to get back to Stonefield and avoid the rainshowers over the ranges.

Guy reported that conditions, for him had deteriorated on the second leg and he had been forced to take 8 knot thermals. In addition there was heavy sink which at one stage threatened to bring him down half way along the second leg. Other pilots reported that conditions improved on the second leg. Nobody found the clouds to be of much use in finding thermals.

Guy finished first at 89.4 kph. However, the spruce goose, piloted by Merv Gill arrived less than half an hour later and beat Guy on handicap by 65 seconds. The only Sports Class aircraft not to make it home was, you guessed it, the Bocian. Piloted by Mark Forster it landed 5 miles from the airfield. Mark gave directions for the retrieve by his own special method which resulted in the retrieve crew getting thoroughly lost. Mark will really have to take map reading lessons unless he improves.

The third day promised not to be as good as the first day since the air was starting to become stable. A task was set and the aircraft lined up on the starting grid when a squall came through and threatened to blow the aircraft over. The squall was so violent that the Blanik had 5 people holding it down and they needed to put people inside the Bocian trailer to stop it from being blown around. Needless to say the task was cancelled.

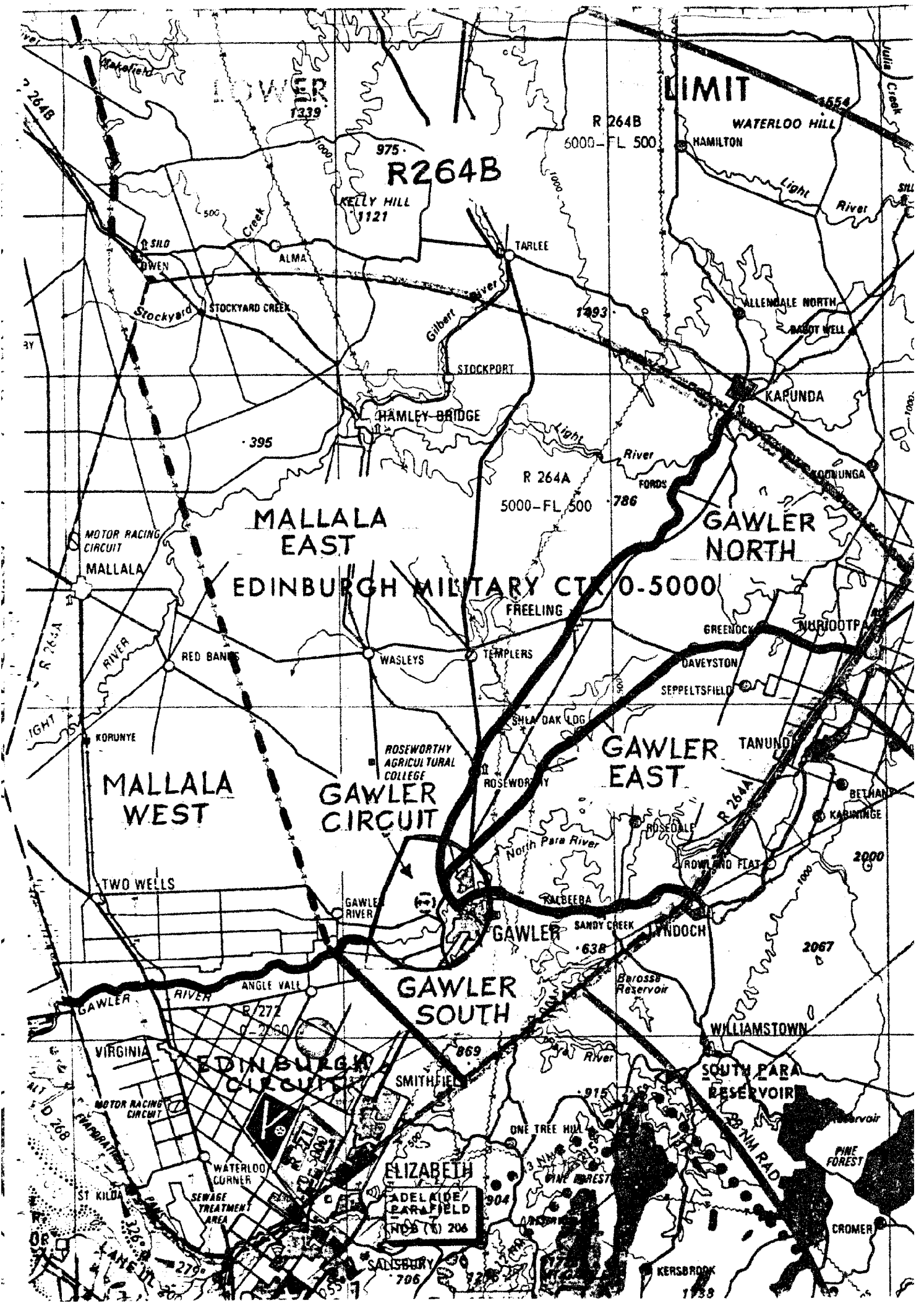
HAVE BANKBOOKS WILL TRAVEL

Our treasurers are an itinerant lot. A perusal of our National Bank loan repayments book showed the repayments had been made at 16 different branches of 5 different banks. They were at Adelaide, Enfield, Rundle Mall, North Adelaide, Unley, Wingfield, Torrensfield, Lockleys, Tea Tree Gully, North Tce, Pirie St, University of Adelaide, Queen Elizabeth Hospital and West lakes. The banks were the National Bank, Bank of Adelaide, Savings Bank of South Australia, ANZ and Bank of NSW. Indeed only two repayments were made at the bank which gave us the loan! How's that for totally useless information.

ATTITUDES

There is a growing "I'm all right Jack" attitude within the club. It is exhibiting itself as a failure by members to commit themselves to the running of the Club and its flying program whilst expecting everyone else to do so for their benefit. A typical example is someone refusing to say whether he will be going flying on a particular day (even though he may be the rostered winch driver on that particular day) but he nonetheless expects the instructor and sufficient crew to be there should he decide to go after all. This is introducing uncertainties in the Club's flying program with the result that fewer people are going flying and everyone is losing out in consequence.

Another example is people not thinking about the effect that their actions may have upon operations eg parking their car too close to the operating area so that it obstructs the movement of aircraft. This by itself is bad enough but when they are asked to move the car they usually take their time because whatever they are doing at the time is more important to them but totally unimportant to everybody else.



R264B

LIMIT

MALLALA EAST

GAWLER NORTH

EDINBURGH MILITARY CTR 0-5000

GAWLER EAST

MALLALA WEST

GAWLER CIRCUIT

GAWLER SOUTH

EDINBURGH

ELIZABETH

ADELAIDE PARAFIELD

SOUTH PARA RESERVOIR

CROMER

1739

FINANCIAL STATEMENT

The following figures are intended as a guide only and are not necessarily accurate.

CAPITAL STATEMENT AS AT 31/12/80

CURRENT ASSETS

Cash on Hand	192.40
Bank Account	341.75
Reserve Account	1500.00
Sundry Debtors	<u>380.73</u>
	<u>\$2414.88</u>

FIXED ASSETS

Bocian VH-KYW	12500.00
Log Cabin Kit	8000.00
Winch REW-218	3500.00
Hangar	3500.00
Arrow VH-GNF and Trailer	3000.00
Bocian Trailer	1800.00
Parachute	300.00
Radios	250.00
Barograph	200.00
Utility	200.00
Piecart	<u>150.00</u>
	<u>\$33400.00</u>

TOTAL ASSETS \$35804.88

LIABILITIES

Sports Assoc. (loan)	3600.00
National Bank (loan)	2053.50
Sundry Creditors	<u>315.12</u>
	<u>\$5968.62</u>

EQUITY \$29836.26

INCOME/EXPENDITURE 1/7/80 - 31/12/80

INCOME

Sports Assoc.	392.00
Insurance Payments	2525.31
Flying Accounts	<u>1713.08</u>
	<u>\$4530.39</u>

EXPENDITURE

National Bank (loan)	660.00
Sport Assoc Fees	360.00
Petrol	307.51
Winch Maintenance etc	284.15
GFA Fees	252.00
Minor Equipment	240.80
Transport	203.17
Adelaide Soaring Club Inc.	185.20
Aircraft Maintenance	140.08
Publications	77.02

EXPENDITURE (CONT.)

Charter Licence	45.00
Radio Licence	40.00
Piecart	10.00
Sundries	70.69
	<u>\$2931.51</u>

STATISTICS

During the period 1/7/80 - 31/12/80 the Bocian did 529 launches, 143 Hrs 6 Min and 1511 Km cross-country. Its average flight lasted 16.23 minutes and its average cross-country task was 216 Km. The Arrow did 157 launches, 76 Hrs 31 Min and 183 Km. Its average flight lasted 29.24 minutes and its average cross-country task was 46 Km. In addition private aircraft and aircraft from other clubs did 78 launches and 49 Hrs 45 Min at the University Airfield. It is also interesting to note that University based private aircraft did 5,003 Km cross-country with an average distance of 278 Km.

BUYING ANOTHER AIRCRAFT

As most members are aware, the current controversy in the Club is whether the Club should sell the arrow and buy another aircraft and, if so, what.

It is argued that the Arrow should be sold because it is unsuitable for our operations and because the 20 yearly inspection is due in three years. The Arrow is unsuitable because it cannot be trailered by most members cars and because the complexity of the trailer requires too large a crew and creates too much damage to the aircraft. The 20 yearly inspection will involve expense (\$1,000), expertise (which we dont have) and will involve the aircraft being withdrawn from service for a long period. It is suggested that now is the time to sell it otherwise it will be too close to its 20 yearly inspection and nobody will want to buy it.

Opponents of this argue that we could afford to buy another aircraft to tide us over while the Arrow is undergoing its 20 yearly inspection. We could then take our time in carrying out the 20 yearly inspection, using it to gain the necessary experience. This would mean that we would end up with an aircraft worth considerably more than we could sell it for at the moment.

The answer, of course, depends on what we can afford and what we can sell the Arrow for. In other words it depends on how much we can borrow. This is governed by our ability to repay a loan. We currently repay \$2,500 pa on loans with the Sports Assoc and the National Bank. It is unlikely that we would be able to increase this significantly even if we raised flying fees or increased the number of aircraft in our fleet. Repayments of \$2,500 pa could service a bank loan of \$10,000 over 5 years or an interest free loan from the Adelaide University Union for \$12,500.

However, first we would have to pay off the present loans. This would take \$4,400. So we would have \$5,600 to spend on anew aircraft if we got bank finance and \$8,100 if we got Union finance. This would be augmented by what ever we could get for the Arrow, which would only be about \$3,00, together with about \$600 out of our reserve account. In other words we have a possible range of up to \$11,700.

This raises the possibility of buying a second two-seater. Personally I am against this. The Club only has the need for a second two-seater during parts of the first term when we get the usual influx of freshers. However, we do not have the necessary number of ynstructors to operate it in atraining mode. It is suggested that it could be used by solo pilots when not needed as a two-seater. However, surely a single-seater would be better in these circumstances being less expensive for the equivalent performance and needing a smaller crew to operate cross-country. The only justification for it is that it can be used for passenger flying thereby freeing the Bocian for training. However, this would only be necessary on very few occasions and, in my opinion is not worth the expense.

G.H.