# UNI GLIDING

adelaide university gliding club newslette



#### THIS ISSUE

It seems that the last issue was written years ago; not so much because of the length of time since the last issue but more because of the many occurrences that have happened since.

I think that the last month has seen a turning point in the club. Certainly it is a time for stock taking; of looking at our weaknesses, certainly-we have had some hope fully reminders of that, but also looking at our strengths; we have also seen examples of this.

It seems that the damage to both the club's aircraft recently has understandably caused extreme concern, not only because of the flying that we are not doing as a result, but perhaps more because, of the realisation that we are going to have to pull our socks up, in relation to our operations. in order to reverse the trend of incidents, and damage to aircraft.

I am confident, howver that the club will using the experiences in a positive way to ensure an increase in safety of club operations.

Last year our crisis was in relation to club equipment serviceability. As a result this year much more attention has been given to this resulting in a smoother operation and more blying.

Lets see this year as one in which to do the same in relation to our operations.

The overwhelming response to the organizing of repairs to the Bocian wing has given those involved (almost every member) a hint of the tremendous potential we have given the need.

## SCOOP! CANTAS LOSS: A.U.G.C. GAIN

THE RECENT STRIKE OF AIR TRAFFIC CONTROLLERS IN THE U.S. HAS BEEN TAKEN ADVANTAGE OF BY THE UNI. BOYS.

ALLIT TAKES IS A LITTLE IMAGINATION, AND AN EYE FOR THE FUTURE. PUT TWO AND TWO TOGETHER. THE ABOVE HEADLINES COULD HAVE BEEN TRUE HAD WE ACTED A LITTLE MORE QUCKLY.. WHAT ARE OUR NEEDS? YES AN EXTRA TWO SEATER. (ACTUALLY AT THE MOMENT, ONE WOULD BE NICE).

Now LETS APPLY SOME LATERAL THINKING TO THE PROBLEM!

STUDIES SHOW THAT THEIR IS A POTENTIAL FOR A 300% INCREASE
IN GLIDING ACTIVITIES IN THE NEXT DECADE.

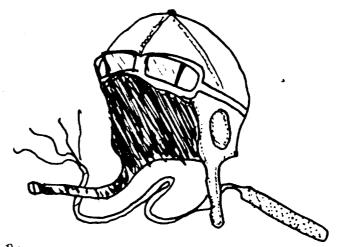
APART FROM THE STATS, IT IS OBVIOUS THAT WITH THE NEW HOUING INTEREST RATES, LOW JOB PROSPECTS THAT MORE PEOPLE WILL BE TURNING TO GLIDING TO RESTORE, OR PRESERVE SANITY. HOWEVER SPIRALING ENERGY COSTS ARE TAKING THEIR TOLL SO THAT GLIDING IS RAPIDLY BECOMING OUT OF THE RANGE OF THE AVERAGE PERSON, PARTICULARLY AT THE MORE EXPENSIVE CLUBS.

Now the airlines have been able to cope with this by turning to larger capacity aircraft for greater economy per seat. The solution is , of course that gliding go multi seat. I understand that the 747 has a glide ratio of 1:24 at best speed. All we need to do is install 340 duplicate sets of controls and we are away.

Imagine the saving! Imagine the results! whereas now when one person wants to bank left, the other rights, results in interesting compromises, with 340 factorial the permutations of results are endless.

I have taken the inititave of giving the winch an oil change in readiness.

FROM A WELL WIDHER, WITH A SPEECH DEFECT.



To Don,

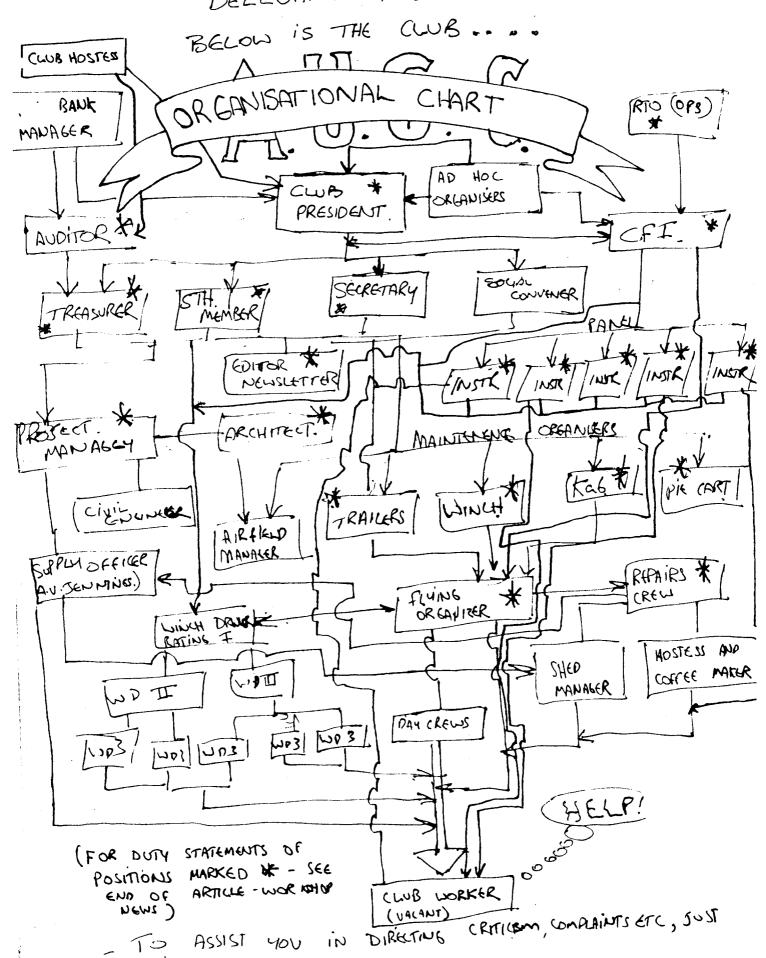
The absence of your cartoons in this issue will be missed; but not as much as your shining face Leaving Brylcream out of it), for a littlr while, we hope. I am sure we speak for the club when we say thanks to you, mate, and thanks to Toni for the sacrifices in the invasion of your home by left wing, sections of the club.

We sincerely hope that you ,your neice Julie and her baby, all make a speedy ,amd complete reconvery. Get well soon!

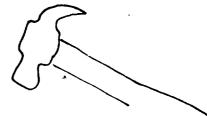
The Editors, Sandra and Andrew.

## AND NOW . . IN RESPONSE TO REQUESTS TO AID IN CLARIFYING CLUB

DELEGATION AND ORGANIZATION: -



#### WORKSHOP NEWS



Well , I guess We all know the bad news- the quickest way to demobilize the club is to have a prang where one glider runs into the other on a ground run.

But a we aware of the good news. It seems the quickest way to mobilize a club is to be involved in a project.

The need to restore flying to the club has reulted in a tremendous effort by the club in working at Ioni and Don's place, to repair the wing of the Bocian which was damaged. During the last three weeks, there was not one single evening, or day when there was not a club member working at this task.

More important than this , was the fact that that the input came at a time when exams were taking place and there was concern that we might not be able to get the continual assistence required.

Howver, a quick phone around the club saw every night and weekend day committed by membere for work on the Bocian. No cause for the martyr remarks "where are all the others". they were right there. Those who wern"t (a very few), all had study commitments.

There were two major benefits in this excellent input the first being that with Emilis' advice and assistence couple with such a broad input of labour from the club, the wing was repaired quickly.

The second, but by no means the least was that the club member we ere able to gain valuable skills and experience in aspects of the repairs, as well as keeping the club together, and in touch. On the first wednesday we could have had our club meeting!

Pity we didint have the materials to work with on that night-sort of alldressed up and nowhere to go.

We seem to have flashes of organisation- and then dis organisation, with apparently very little difference in effort required between the two. It just needs a very clear deligation of authority to act in a giv entask.

Anyway the results are that we have a repaired two seater ready to go with lots of workshop participators with a vested interest in lots of flying and a greater appreciation of the care needed with club equipment.

One can really get an understanding of why it is not a good idea to lean on aircraft , by looking inside a wing ,and spending the time in repairs.

Let's see if we can as a club, now apply this enthusi asm to other club projects-I gues the clubhouse comes to mind. From experience, a phone around with advance commitals, we know works well. People also know that they are not going to be left to it if they know a wide involvement is planned. also people do not feel left out; if they have been contacted personally

## DUTY STATEMENT

A.P.S.

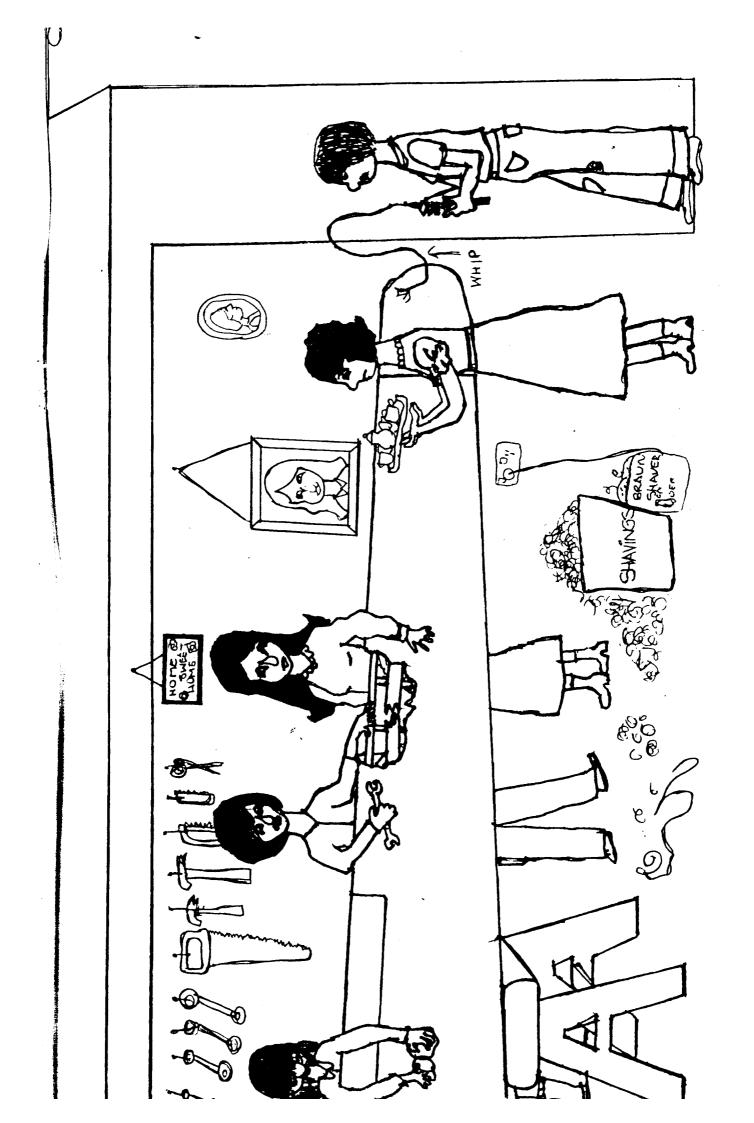
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As everybody knows, a has practically nothing to do that is nothing except decide what is to be done; tell somebody to do it; listen to reasons why it should not be done, why it should be done by somebody else, or why it should be done in a different way and prepare arguments in rebuttal that should be convincing and conclusive.

The must follow up to see if the thing has been done, and if it hasn't been done to enquire why not; then to listen to excuses from the person who should have done it.

Another job is to follow up a second time to see if the thing has been done, discover that it wasn't done right, and to conclude that it might as well be left as it is reflecting that the person at fault has seven children and that no other would put up with him for a second.

must ponder how much simpler and better the thing could have been done it he had done it himself; to reflect sadly that if he had done it himself he could have finished the task in twenty minutes, but as it was, he had to spend four days trying to find out why it had taken somebody



## MEMORIES: MEMORIES: A LOOK AT OUR FLYING

Just to remind us of what it is really like, I thought you might like to see a summary of flying for the first part of this year..

The chart ,opposite, has been taken from the flight sheets, so it is as accurate as those.

Note that I have just taken weekend flying for sample.

## SUMMARY

Number of days possible for flying (sample)	35
Number of days flying	24
Number of days cancelled due to weather	1
Number of days cancelled due to lack	
of instructor/crew	8
Number of days no flying -equipment	3
Number of days no flying -weather	0
Number of days on which soaring occurred.	19

Note: although there was great variation in number of frlights per day, it appears though there was a fair proportionality with the numbers on field. The late start times, are likely indicators of weather problems. Certainly, on some of the rougher days we got our best soaring, thought with a delay in starting. It is interesting to note the high proportion of soaring days (19/24). Cancelled days were highest due to lack of a crew. Although one suspects that the reason for lack of a crew on some days might have been due to weather. But note that when we have gone up, we have been flying-at least for part of the day.

It would seem that we would have had a good soaring year so far.

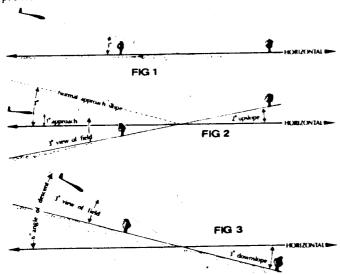
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Much has been written about field selection and field landings in the past — yet there are still accidents with overshoots and undershoots and heavy landings.

I was fortunate enough in my professional capacity to have access to an article written by Captain Barry Schiff of Trans World Airlines which dealt specifically with problems caused by optical illusions, and after reading it for the third time it became painfully obvious that some of the information and suggestions were readily adaptable for the needs of glider pilots. After all, a visual approach is the same — be it in a Boeing 747 or a Blanik!

The basic theory of field selection will not alter. The four S's rule (Size, Slope, Surface, Stock) is as good now as it ever has been. Size, Slope and Surface are the important factors and using Captain Schiff's theories, I would like to look at these in turn.

Note that for the ease of explanation when discussing field size. I have used a runway as the datum — as this is more readily acceptable as a mental picture than a field. I have also assumed for the sloping field point that a 3° glide approach is the norm. This is not in fact so, but again it serves to illustrate the problem.



Sloping fields. Fig 1 shows a glider in a normal visual descent towards a level field. The pilot can maintain this "visual slot" quite accurately because he is used to practising approaches that "feel" comfortable. He approaches his aiming point so that his visual glideslope "seems" neither too flat nor too steep.

A visual illusion develops when approaching a field with a pronounced upslope (Fig 2). If a pilot establishes in his normal glide slot relative to the horizontal while approaching a field with (say) a 2° upslope, he would feel that he is descending too steeply. This is because he would be aware of descending at a (say) 5° angle with respect to his chosen field. As a result the pilot will automatically compensate by dropping down until the field "looks right" — in other words he settles into the normal glide slot with respect to his chosen field. This results in a dangerously low flat approach.

The downsloping field (Fig 3) leads to overshoots. The field shown in the diagram is over-emphasised with a 3° downslope but serves to illustrate the illusion associated with shallower slopes.

June/July 1980

Surface. The terrain surrounding a field often may have a slope comparable to that of the field which makes it difficult to determine in advance whether the field is sloped, or level. The only clue available to the observant pilot is often the abnormal sink rate required to maintain what appears to be a normal visual slut.

Field dimensions (size). Field geometry can also be confusing. Without realising it a pilot usually assesses the landing area before him by comparing it with the area he is most accustomed to landing on.

Assume that a pilot is used to landing on a 6000 x 150ft runway (which has a length to width ratio of 40:1). From above and afar, a runway with the same proportions (10 000 x 250ft for instance) has an identical appearance. Because the runway is larger, the pilot is led to believe that he is closer and lower than he really is.

A more hazardous illusion occurs when approaching a shorter runway with those same familiar proportions (4800 x 120ft for example) — when established on finals the pilot thinks he is further from the runway and higher above the ground than he actually is.

Size and surface. Landing area geometry can also cause illusions. Whether he realises it or not, a pilot uses peripheral vision to help determine the proper height at which to flare for the landing. Hence a pilot conditioned to landing on narrow confined spaces (runways — mown strips etc) may have problems judging the correct flare height when landing in a wide open field.

This problem is aggravated in conditions of poor light and restricted vision — ie dusk, in rain or drizzle, landing into sun etc. Depth perception is of course even more difficult when there is a lack of contrast between the landing area and the surrounding area — ie snow covered ground, large sandy areas — (even landing on water!). All of these illusions are everyday facts — it is only with experience that they can be overcome.

Perhaps the most inherent problem with these illusions occur with a "straight in" approach, as concentration and vision are focused on the landing point not the area and it is only by observing the whole area around the landing field that a safe approach can be made. The answer is straightforward — current planning for a field landing is even more important than circuit planning at your home field. Happy landings.



## DATES FOR YOUR DIARY - STICK 'EM IN NOW!

### NEXT MEETING

Juny Potus Room. ADELATOS UNI! Wednesday Sept. 2nd.

Dont miss it.

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Apart from the exciting agenda with all our activities we will be discussing our FANTASTIC!,

DARING! THRILL A MINUTE! '-

A.U.G.C. REGATTA. WOT DEAN IS ORGANISING, and wot we will be മ∕all involved in.

Will there be a fantastic task set? Willthe airfield again be deserted while everyone is out picking up outlanded gliders? WIll there be another winch demolition derby?

Willthere be another repast and general nosh up at the shearers quarters?

Will there be another wine tasting in the pouring rain on the Sunday? FIND OUT BY COMING TO THIS UNFORGETABLE WEEKEND-

(WEEKEND BEFORE OCTOBER LONG WEEKEND), LOCHIEL MAME THIS AN UNFORGETABLE WEEKEND BY STAYING OVER. RING 2553646