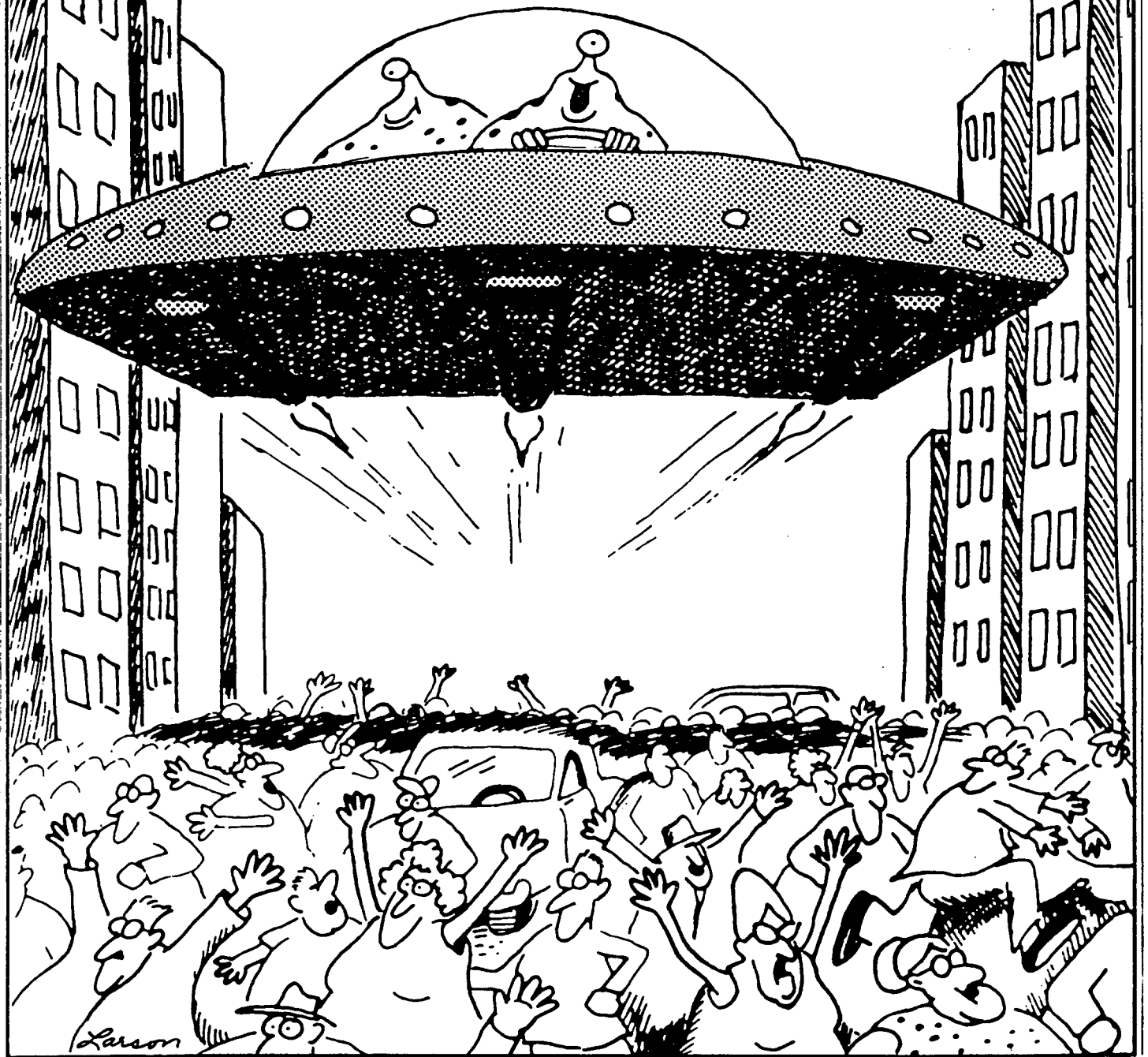


Uni Gliding

January, 1990

Vol. 15 No. 1



"Yeeeeeeeeeeeha!"

An official publication of the Adelaide University Gliding Club

Another Editorial

If you've been living down a mine shaft for the last six months it will be news to you that, over the new year break, AUGC hosted the 60th anniversary Vintage Regatta (hereinafter to be known as 'The Regatta', note the capitals). Thanks go to everyone who helped make it the success that it was. Now Catherine go back to being a normal human being again (if that is possible!).

The other big news is club's purchase of a new single seater to replace the Phœbus. It is a Standard Libelle VH-GCY, it has a full set of instruments to bewilder the technical types, and it has a very nice, if somewhat backward (you'll see what I mean), trailer. The Phœbus is being removed from service immediately, pending sale. Details on the Libelle will be forthcoming in future issues.

Congratulations to **Agata Jarbin** who became the first pilot to go solo in the 1990's! The rest of you had better hurry up or you'll be swamped by the influx of freshers in March. Also **David Hulse** has converted to the Arrow and **Steven Gould** has become probably the last person to convert to the Phœbus.

The Bergfalke is out of action for the next two weeks due to its annual (Form 2) inspection. We need people at West Beach in order to get it as back in the air be-

fore O-Week. Ring **Redmond Quinn** (344 5331) to be given a job.

Speaking of O-Week, we also need people to staff the O-Week desk on the Barr Smith Lawns so that we can get lots of new members and the club can grow. Ring **Agata Jarbin** (336 8131) to volunteer before she rings you!

The AUGC 1990 raffle is under way. The major prize is two dozen stubbies of beer. This should make tickets easy to sell. See **Agata** to pick up your book. The grand draw is at the AGM on 4th of April.

Does the drive up to Lochiel bore you? Well not any more! **Gary Hollands** has constructed an observation drive. Keep a lookout for items on the way to the field and you could win a prize. Details elsewhere in this issue.

Also in this issue: **David Conway**, our esteemed president, has some words for us, reflecting upon the 80's and looking forward to the 90's. There's more junk from **Andrew McGrath** (the front cover is dedicated to Andrew this month). This is absolutely the last article I'm publishing from him so you can write your own in future.

See you up where we belong,

Peter Cassidy.
Editor.

The 1980's are over, the 1990's are upon us! I have been in the club since 1983, and from my observations it seems that the club has consistently gained strength throughout that period, despite numerous setbacks and "ups and downs". When I first joined the club, the whole day was spent at the launch point (the clubhouse was uninhabitable), and evenings were spent at the shearers' quarters if you stayed over (which wasn't very often). The club had only one single seater, nowhere to work on aircraft, little airworthiness experience and one winch that looked like it was about to fall apart. Our reputation amongst the gliding fraternity was dubious and any regattas we held were generally poorly attended. Now, of course, the clubhouse is finished and provides accommodation and a 'Deli', and weekends when members don't stay over are the exception. We now have two single seaters, our own shed at West Beach for airworthiness work, a fair amount of airworthiness experience within the club, a new winch and a winch that looks like it is about to fall apart!

The decade culminated in the Vintage Regatta. This was an unqualified success. Details of the regatta will appear in a separate report. I will mention, however, that the club has achieved a higher profile in the gliding community, with visitors realising that our club runs itself in a very professional manner, strives to grow and provides high quality training and flying at minimum cost to its members.

The regatta required a tremendous input of time and effort, and I am very pleased that the club worked as a team both before and during the regatta to make it a success. Thanks to all who participated.

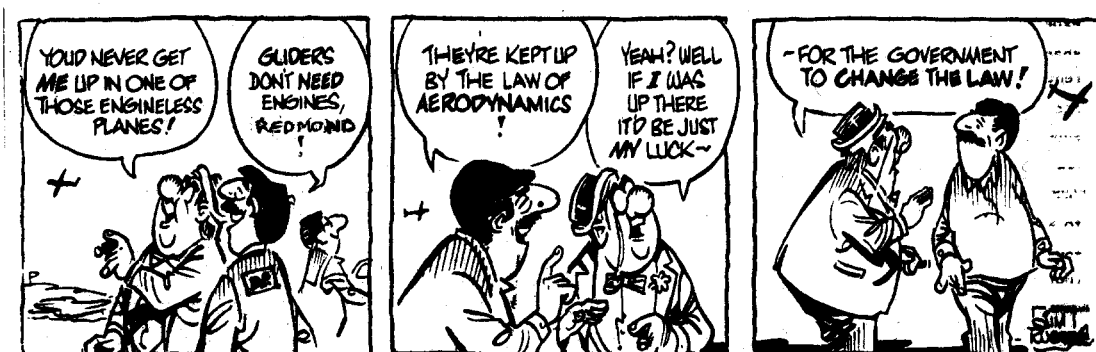
With the regatta behind us it is time to look to the future and establish our goals with regard to fleet structure, airworthiness/instructor training, new member incentives, airfield facilities and improved, more structured, flying training.

With everyone's help and enthusiasm the club will continue to grow and provide its members with enjoyable flying.

Happy Soaring!

David Conway

P.S. Congratulations to our first solo for 1990, Agata Jarbin!



Circuit Theory

Part 2

by an Electrical Engineer

Modified Circuits

The advantage of the square circuit as just described (in the previous issue - Ed.) is that it is a **standard** pattern. It achieves all the desired results, and pilots can become used to it. It is designed to reduce pilot workload to a minimum, especially when he can least afford to be distracted. A pilot feels comfortable and secure when flying a circuit, even in unusual situations, like outlandings, if he has flown hundreds just like it before. However, circumstances may dictate that a standard square circuit cannot be flown. For example, a launch failure may leave a pilot at 400 feet over the centre of the airfield. Or a pilot may have forgotten his circuit for a while, while chasing a weak thermal on a windy day, and suddenly realizes he can't reach the airfield at normal circuit height.

In situations like this, the pilot must make the best of the situation, and decide how he can best fulfil the conditions for safe landing.

A landing area and landing direction must immediately be selected. Speed, trim, undercart, flaps (i.e. FUST) should be set, and the final approach intersected. The landing area and direction should be chosen with reference to the glider's current position and altitude to maximise the chance of fulfilling all of the safe landing conditions.

In most cases this will mean some form or portion of a square circuit — a pilot at one end of the airfield at 500

feet may elect to do a square circuit pattern onto a landing area in the centre of the airfield. A pilot who has a winch cable break may decide to land straight ahead: he is already on final approach with no manoeuvring. Another pilot, returning low to the airfield, may elect to omit a downwind leg, but otherwise fly a normal circuit (rather than fly a low, cramped circuit with a downwind leg).

It can be seen that the exact pattern flown is entirely dependent on conditions, and that for a given set of conditions, different pilots may well choose quite different solutions. Any solution is acceptable as long as all of the conditions for a safe, accurate landing are met.

Factors Influencing Circuit Design

Choice of landing area:

1. The area can be reached high enough to land there safely.
2. The surface is suitable for landing: smooth, firm, horizontal, no obstacles, either on the ground or where the glider will be flown.
3. The area is long enough to land in the direction required.
4. There are overshoot/undershoot areas available.
5. Ease of retrieve.

Choice of landing direction:

1. Wind direction and speed (cross and tailwind landing are acceptable if the wind is not too strong).
2. Size of available landing areas.
3. Obstacles on approach.
4. Slope of landing area.
5. Ease of retrieve.

Choice of approach speed:

1. Stall speed of glider.
2. Wind speed and direction relative to final approach.
3. Turbulence.
4. Size of available landing area.
5. Airbrake effectiveness.

Choice of slope of approach:

1. Aircraft no brake performance.
2. Aircraft full brake performance.
3. Obstacles on approach.
4. Wind.
5. Alternative landing sites.

Choice of circuit direction (side):

1. Obstacles (e.g. mountains, air-space).
2. Known lift/sink distribution and turbulence.
3. Other traffic.
4. Wind direction (crosswinds on final mean some head or tail component on base — tail-

winds on base shorten the time available to the pilot and make it harder to judge the turn onto final).

5. Current glider position.
6. Standard circuit direction.

Choice of circuit joining area:

1. Proposed shape of the circuit.
2. Downwind long enough for the FUST check, for correcting errors in alignment of base, for finalising the design of final approach and base, for further inspection of the landing area.
3. Current glider position.
4. Other traffic.
5. View available of landing area.

Factors influencing undercart position for landing:

1. Size of pilot.
2. Repair qualifications of pilot.
3. Health insurance of pilot.
4. Insurance of glider.
5. Imagination of pilot (to come up with a plausible explanation).
6. Size of landing area and wheel-brake effectiveness.
7. Surface of landing area.

AUGC Observation Trial Notes

The task is Bolivar (Caltex Service Station) - AUGC at Lochiel. The task assumes you will travel on highway one all the way to Lochiel, with a minor deviation into Port Wakefield, **but**, the competent team may be able to take the dirt road, or indeed any other road, and still answer the questions. Let's not constrain your initiative.

The questions have been set such that you will **not need to stop, slow down or cause inconvenience to others** whilst answering them, but a driver alone may have trouble. I suggest a team in each car would be the best approach.

Most questions require you to observe a sign or object and interpret the message as I did, to arrive at the required answer. If you are approaching male menopause, and / or, have shared some of my life experiences, this will be easy, in any case, try to answer the questions.

Any question with words 'in single quotes, bold and underlined' refer to those words upon a visible sign, object or billboard.

The locations, Eg 'Caltex Service Station' will give you a reference for the sequence of the questions.

The number in [X] next to the question number gives the points available for that question. All comments will be thoughtfully considered, then scrunched up and tossed in a bin.

There is a map reading exercise (question 15) in which you are given a Herring Bone Map, instruction on reading same, and you will need to identify three nominated landmarks in Port Wakefield, by following the map.

This should only take **5 minutes** and you should remain within **Port Wakefield**. If you begin to recognise the environs of Sydney, Melbourne or Port Lincoln, consider putting off your request for an outlanding check and proceed to the Shell Service Station, Port Wakefield and carry on with the next question.

The questions and your answers can be handed to the instructor (they enjoy a good laugh) at the close of flying on the day that you start the trial.

Number of flights: 11
Total flight time: 2:47
Flight average: 13.2 minutes

Paul

ZICKY...

By Tom Welch

...UH OH !... IT'S GONNA BE ANOTHER ONE OF THOSE KINDA DAYS !



Information

President	David Conway	294 4828
Secretary	Peter Temple	281 4411
Treasurer	Terry Gould	381 2072
Social Convenor	Agata Jarbin	336 8131
Club contact	Matthew Nicholls	297 0078
Newsletter editor	Peter Cassidy	356 3382
Chief Flying Instructor	Redmond Quinn	344 5331
Lochiel airfield		(088) 26 2203

So you want to fly this weekend?

Then ring the club contact person between 8.00 pm and 10.00 pm on Thursday nights, so that he can organise car pools, instructors etc.

Meet at the Caltex service station on Port Wakefield Road, Bolivar (just past the WhiteHorse Inn and the caravan park, on the left) at 7:30 am. Or, if you can't get transport that far, get to the Uni footbridge at 7:00 am. Someone should arrive to pick you up before 7:15, if you have rung the contact person to tell him that you will be there.

Calendar

When	Where	What
Wed. 7th February	Jerry Portus rm 7:30 pm	General meeting
Wed 21st February	Somewhere, 7:30 pm	Executive meeting
Fri. 23rd February	Stephen Were's place 148 Sherriff Court Underdale, 7:30 pm	Cocktail party Bring mixers, food, videos Ring Agata for details
26th Feb – 2nd Mar	Barr Smith Lawns	O-Week
Wed. 7th March	Jerry Portus rm 7:30 pm	General meeting
Wed. 4th April	Dining Room 7:30	Annual General Meeting election of officers, raffle draw

For any details not given, ring our social convenor.