

February '01

Uni Gliding



The Official Journal of the Adelaide University Gliding Club

WHATS INSIDE

- What is this gliding stuff all about? How does it stay up, how does it take off and how safe is it? Read page 2 to find out .
- Going gliding for the first time? Check page 3 to find out what to bring along.
- Your guide to meet the gliding instructor of your dreams. See page 4 for the in-depth bio's of the clubs instructors.
- A new national club class champion in the club? The story of the 200/2001 national championships is on page 6.
- Where is the shed at West Beach and why is it important? Page 8.
- What's been going on? Check out page 9 to see what you have been missing out on.
- Lots and lots of things will be happening this year. See page 10 for what's going to be happening soon with the club.

STOP PRESS

Membership Renewal: Previous members: Contact Dennis Medlow to renew your club membership for this year. If you do not contact Dennis, your membership will not be renewed for this year.

Another Bergfalke at Lochiel Soon: Anthony has bought the other Bergfalke 4, GZQ from the Gympie Soaring Club. It should be arriving at the West Beach Shed around Monday 12 March.

Orientation Week BBQ Monday 26 Feb: Come on down to the West Beach shed on Monday night at 7:00pm for free beers and a barbie and to meet all the other club members. There is a map on how to get there on page 8. Call Matt on 0412 870 963 to let us know that you are coming.

ANNUAL GENERAL MEETING

The club's annual general meeting will be held on the evening of Wednesday 4 April at 7:30 pm in the Little Cinema. Meet at 6:30 pm in the Equinox Bistro for dinner if you are interested. This is an important meeting for the club where the reports from last years Executive Committee are tabled and a new committee elected. The club development plan which will set the direction of the club for the next 10 years, will also be tabled for discussion and approval.

Every member of the club should come along (or present a note from their mum).

WHAT IS GLIDING?

Gliding is the art of flying an aircraft without using an engine. A glider is simply an aeroplane without an engine. It has all the same controls and instruments as a powered aircraft.

Contrary to popular belief, engines do not make aeroplanes fly: wings do! For wings to work they must be moving forward. Engines are used in powered aircraft to supply this forward speed in a steady convenient form. Gliders use gravity - they are always gliding downwards through the air, though their design means that they glide at a shallow angle, typically only 30 meters forward for every 1 meter down. A light aircraft such as a single-engine Cessna with its engine off will glide around 10 meters forward for every 1 meter down - still controllable, but nowhere near as efficient as a true glider.

How does a glider stay up? The air is rarely still. It moves laterally as wind and also vertically. The magic starts when the glider is in air that is rising faster than the glider is descending. The glider will be carried up by circling in the rising air, exactly the same way as eagles and other soaring birds. When the glider leaves the rising air it will resume its slow descent again. Using this rising air is called 'soaring'. Provided that there is enough rising air around, the glider can stay up indefinitely.

Of course air is invisible and it can't be directly seen when it is rising. Although, there is much theory and also some instruments to help the pilot to find rising air, it is here that gliding passes into the nether world between science and art. The challenge of using rising air to the best advantage is akin to a sailor using the winds and currents of the ocean and this challenge is what keeps most enthusiasts coming back.

Rising air (also called 'lift') can be found in the form of bubbles of hot air called 'thermals'. These bubble can go very high during the summer. Rising air can also be found where the wind blows over a ridge or range of hills. The air is forced up over the face of the hill which provides continuous, predictable rising air called 'ridge lift'. Unfortunately this lift is limited to near the hill and doesn't go very high unless the wind is strong and it is a big hill. One of the advantages that the Adelaide Uni Gliding Club has at its airfield near Lochiel is the Hummocks range which is ideal for ridge lift. All that is required is a reasonable Westerly wind. The club is fortunate that westerly winds are reasonably common in winter and the club can fly all year round. Most gliding clubs suffer in winter when the thermals are few and weak.

How does a glider take off? There are a number of ways to get a glider airborne. The most well known is to simply tow the glider behind a powered aeroplane (called a 'tug'). This process is called 'aerotowing' and has the advantage that the glider can be towed to any height or position in the sky. But the downside is the cost. The maintenance, fuel costs etc associated with the tugs makes aerotowing an expensive method of take-off, one that is most likely to be outside of the price affordable by most students.

The Adelaide Uni Gliding Club uses a cheaper method known as 'winch launching'. Many people would argue that this is a more fun way of taking off as well as being safer. Winch launching is where a large engine, mounted on the back of a stationary truck, is used to wind in a cable at high speed. The glider is attached to the other end of the cable and is pulled into the air like a kite. An average launch gets the glider to 1300 feet above the ground, although heights in excess of 2000 feet can be gained in the right conditions. At the top of the launch the cable is either released by the pilot or automatically dropped by the glider itself.

How safe is gliding? Gliding is a very safe sport. The most dangerous part of the day's flying is

probably the car trip to and from the airfield. Yes, there are risks just like in any other activity, but the risks are fully understood and catered for - procedures are put in place and religiously followed to make sure that the risks are minimised to the lowest extent humanly possible. Our self preservation instincts are just as strong as yours.

Before a glider is permitted to fly on any particular day, it must be carefully inspected by a qualified inspector. Furthermore the gliders are put through a thorough inspection every year where the gliders are disassembled and checked.

All of the clubs instructors are experienced pilots that have undergone rigorous training and testing that is supervised by the Gliding Federation of Australia. You can read about them on Page 4. You learn to fly at your own pace and the more advanced aspects are only introduced as you are ready for them. The club's aim is to produce a safety conscious, competent pilot. Someone who flies regularly (at least once per fortnight) can expect to go solo at around 10 to 12 hours of flying. There are no minimum time requirements - once your instructor is satisfied that you have reached the required ability, you are given the opportunity to go it alone!



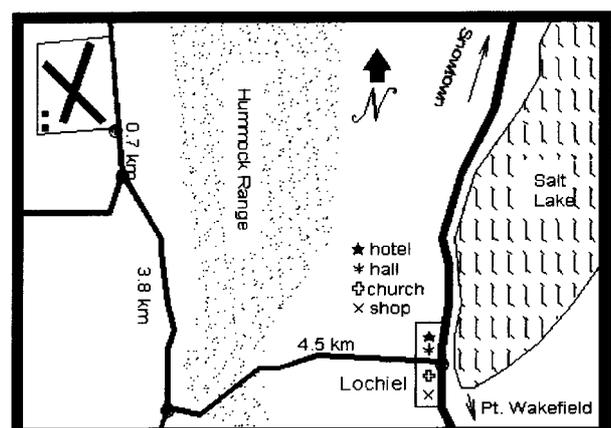
FLYING FOR THE FIRST TIME

The first step is to call the contact person, Matt on 0412 870 963 on the Thursday before between 8.00pm and 10:00 pm. He will be able to tell you what is going on and organise the instructors. He can arrange a lift for you (normally from the footbridge at uni or the Catex service station at Bolivar) or give you directions on where to find us. If you drive up to the airfield, there are signs to show you the way once you reach Lochiel, but please take care on the dirt roads. When you get there, remember that it is a farmers paddock and to close the gate after you go through it. This will save us trying to round up the escaped sheep at the end of the day.

The airfield is in a farmers paddock which is quite exposed to the elements. You should bring with you a hat, sunglasses, sunblock and a water bottle. Wear something cool and that you are prepared to get a little dirty. You can bring lunch, but there is a supply of pies and soft drinks etc in the clubhouse. You can bring a camera or video along if you wish. Lastly be sure to bring along your sense of fun and adventure.

Once at the airfield, experienced club members will be able to show you how to help out. Flying finishes whenever everyone has had enough or the sun sets, whichever comes first.

LOCHIEL AIRFIELD



YOUR INSTRUCTORS GUIDE

David Conway (Chief Flying Instructor): David started flying in 1984 and has been an instructor since 1986. He is widely known throughout the gliding community as “Catherine Conway’s husband”. He runs his own electronic systems company which, funnily enough, owns a Ventus glider. His hobbies include balancing light switches so that they can be turned on by an errant gust of wind, setting off fireworks and landing in other paddocks after cable breaks and whilst doing hangar runs. Gliding Hours: 1000 Instructing Hours: 331



Redmond Quinn: Redmond joined the club a very long time ago in 1980 and still hasn’t given up yet. He has been instructing since 1983 and was the club’s Chief Flying Instructor for the decade or so before David Conway. Redmond is an engineer who is occasionally accused of actually working whilst being paid by Santos. Redmond enjoys hitting things with hammers in the hope that it will fix them, trying to create Wilpena Pound sized craters with burning LPG cylinders and running over things in his 4WD. Flying Hours: 530 Instructing Hours: 300

Catherine Conway: Catherine was famous for her never ending appearances in *Australian Gliding* magazine. She started flying in 1986 and has been instructing since 1989. Cathy enjoys flying her Boomerang, QZ, whenever she can dump the kids with David, but enjoys flying their Ventus even more if she can lever David out of it. Cathy works for an internet communications company and tries to forget that she ever worked for Telecom on the Jindalee Project. Flying Hours: 778 Instructing Hours: 173



Dennis Medlow: Dennis became an instructor in 1984 after joining the club in 1982. Dennis is not allowed to tell anybody what he does, but it involves communications and the army, which are two mutually exclusive items. He enjoys flying powered aircraft, which he finds are easier to gain height in and doing tail slides in the Bergfalke. He really objects to being called Dippy. The silliest thing Dennis has ever done was send Peter Cassidy solo. Flying hours: 664 Instructing Hours: 311

Peter Temple: Peter Temple started flying in 1982 and has been an instructor since 1989. Peter is ‘another engineer’ who works at the DSTO, beyond that he won’t say anything more. He can regularly be found flying a long way from anywhere in the DG200 that he shares with Mandy Wilson. He is a prolific competition pilot and is the current National Champion in club class. Peter has done many silly things in the past, but he won’t tell us what they were. Peter and Mandy will be disappearing to the USA for a couple of years in the middle of this year. Flying Hours: 1713 Instructing Hours: 492



Anthony Smith: Anthony started gliding in 1987 as well. After escaping to Melbourne with the Air Force for a while, he was eventually caught and extradited back to Adelaide and forced to become an instructor in 1998. Anthony is an aeronautical engineer who has recently resigned from the Air Force to become a civilian and was promptly contracted back to the RAAF for more money. Anthony’s hobbies include being President of the gliding club for the term of his natural life, renovating Bergfalkes (he has recently bought one from Gympie) and outlanding as far away as possible when flying cross country. Gliding Hours: 713 Instructing Hours: 175

Stephen Were: Stephen has been flying since 1985 and an instructor since 1986. Steve is an organic chemist who now works at the Bolivar Sewerage works (he gets all the smelly jobs at home too). He owns half of a PIK-20B, which he doesn't fly very much (he got married). Steve's hobbies included driving very fast into big fence posts and kicking tyres around the airfield when he is frustrated. Flying Hours: 1580 Instructing Hours: 754



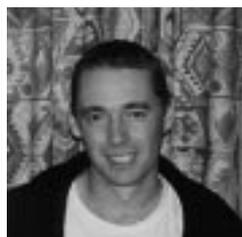
Bradley Gould: Bradley started flying in 1988 and has been an instructor since 1991. He unexpectedly became State Champion in 1991 as well, much to everyone's surprise and Bradley's extreme embarrassment. Brad works with Catherine Conway in the same internet communications company. Bradley is infamous for his 'Top Gun' antics (and that is not just with his flying either) and briefly became notorious for having a romance with an inflatable doll (which he later put out of its misery by tying it to a tree and shooting it several times). Gliding Hours: 420 Instructing Hours: 225



Michael Texler: Michael started gliding in 1987 and became an instructor in 1996. He is a doctor you cuts up dead people to see how they died. This is OK as his patients never complain about it afterwards. Michael also flies powered aircraft and is often found tugging (ie towing gliders) at Gawler. He occasionally instructs there as well. Michael collects jokes about bottoms, which he will tell you and then apologise for it afterwards. Michael is planning on getting married soon. Gliding Hours: 510 Instructing Hours: 126



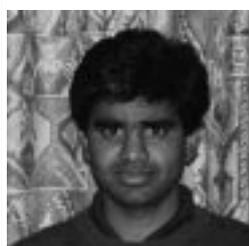
Greg Newbold: Greg also started gliding in 1987 (what a great year that was) and was coerced into being an instructor in 1996. He is a mechanical engineer who works for the CSIRO. Greg's bad habits include letting his student pilots make him air sick and using the airfield fence as an arrestor wire for the Bergfalke. Gliding Hours: 211 Instructing Hours: 43



Mandy Wilson: Mandy began gliding late in 1995 after deciding that gliding slowly down through the air was far better than plummeting out of the sky with a parachute (skydiving). She then became an instructor in 1998. She is famous for supplanting Cathy Conway in the *Australian Gliding* magazine by getting her photos of gliders, mostly of her DG200 which she shares with Peter Temple, published. Mandy enjoys making matching cushions for her glider and cooking dumplings for Peter. Gliding Hours: 501 Instructing Hours: 34



Raj Bholanath: Raj began flying in 1995 and became an instructor in 1999. Raj works as an engineer at Mitsubishi. Raj's claim to fame is his inability to find thermals (when they are going to 10,000 feet) but still being able to find anything that has been lost in the airfield, no matter how small. Raj also enjoys crash testing his Magna with kangaroos (so far the Magna is winning). Gliding Hours: 144 Instructing Hours: 28



2000/2001 NATIONAL CLUB CLASS CHAMPIONSHIPS

Report by Peter Temple



This year the Australian Club Class Nationals were held in Benalla, Victoria. The competition was held in November rather than the usual time of January to avoid a clash with the World Gliding Championship at Gawler and was also a selection event for the next World Club Class Championship team for Musbach, Germany, in 2002.

23 gliders entered the competition, which is less than normal, probably since the competition was held early in the season. However AUGC had a strong presence with two entries, Cathy Conway in QZ, and myself in WUZ. Emilis was also there, flying the old AUGC Super Arrow TJ. This year Sports Class was to be created for the lower performance gliders but unfortunately there were not enough entries.

Club Class competition allows older gliders to fly in a handicapped race. This means that you don't need the latest, and very expensive, gliders to compete at the top level of competition, and many of the competitors were flying club owned gliders. The gliders are also flown without water ballast to be fairer for the gliders that can't carry water. Traditionally Pilot Selected Tasks (PST) have been used where the pilots fly as far as possible in an allocated time. With some restrictions the pilots can fly to any of the turnpoints from a list and the fastest pilot around the task (after applying the glider's handicap) wins.

Overall the weather was complex with combinations of strong and weak thermals, wave from the mountains in the south, and strong cold southerly winds. Often the conditions changed dramatically during the day requiring a change from high speed cruising to very conservative flying. The combination of strong wind and weak thermals on some days made progress very difficult for Cathy and Emilis in their wooden gliders.

Practice Days

Mandy (crew extraordinaire) and I arrived 3 days before the competition to allow time for setting up and familiarisation with the site and local conditions. This paid off and I was the best prepared by the first competition day. Bruce Taylor (champion for the past 2 years and on the Australian team for many years before that) arrived 2 days late with no preparation. He didn't even have maps and was madly trying to load turnpoint coordinates into his GPS while we were already on task on the first competition day!

During the practice I resolved to stay out of the mountains and also away from the green country to the east after getting low near Moyhu.

Unfortunately the first two competition days were unflyable due to bad weather. Fortunately for Bruce Taylor this meant he was able to fly on the first competition day. We used the time to explore the local wineries and sights of the area.

Day 1

On the 3rd attempt we finally had good enough weather to fly a competition task. It was a good day for me achieving 104 km/hr over 450 km, to finish 1st for the day, narrowly ahead of Bruce.



Day 2 – *The dreaded wave*

A complex mix of wave and thermals dominated Day 2. I couldn't make sense of the lift and was very slow compared to most of the other pilots. Getting very low on task and spending 15 minutes drifting downwind waiting for a thermal to form did not help my speed. I found out after the competition that these conditions are common at Benalla. I have lots to learn about competing in wave conditions.

Day 3 – *How much character can you have?*

Conditions were forecast to be good and a long 5 hour task was set. As predicted, the thermals were initially strong with good climbs but later strong southerly winds destroyed the lift and made getting home very difficult. These cold winds (apparently unusual at this time of year) were the bane of the rest of the competition. I eventually managed 470 km, and was glad to be home for 2nd place. Emilis commented that this was a "*character building day*".

Day 4

This was the best weather so far with 10 knot thermals to 11500'. Bruce won the day with a distance of 596 km and the fastest speed of the competition (132 km/hr). Once again the strong southerly winds late in the day slowed an otherwise perfect day.

Day 5

A poor day was predicted with only a 2 hour task set. But in the event conditions were good and speeds of around 120 km/hr were achieved. I was happy with 117 km/hr for another 2nd place.

Day 6 - *I always wanted to land on a cricket pitch!*

A new type of task was tried with some controversy. An Assigned Area Task (AAT) is a combination of PST and a set task. 2 or more turnpoints are set and the pilots must fly around them in the set order. The unique feature is that a radius, for example 30km, is set on each turnpoint and the pilot only needs to fly within the radius, giving the possibility of turning short or extending the task beyond the turnpoint. This was the first opportunity that we had to fly on the same task with other competitors and observing their tactics was very useful. The thermals were also weak and low so the other competitors made great thermal markers. Bruce outlanded on this day and shortly before landing reported over the radio that "*I always wanted to land on a cricket pitch*". He made a safe landing on the Yarrawonga cricket oval! After trying the task there was unanimous approval of the task type.

Day 7 – *Don't go to Moyhu!*

Before the start there were beautiful cu's overhead but these rapidly dissipated before the start gate opened. Some of the pilots flew to the mountains and were reporting very strong conditions while the rest of us were low over the plains. As I was heading into Moyhu, (ah yes, I seem to recall resolving not to go there...) chasing cu's that were rapidly evaporating, Jonathon Shand reported over the radio the golden rule for the day: "*Don't go to Moyhu!*". Unfortunately I was committed and struggled past. Most of the pilots that went to the mountains didn't get home. I was frustrated by finishing 2nd for the third time in the competition.



Day 8 – The dreaded wave again

At briefing on the final day (the infamous) Simon Brown was offering disks of the overall “winners” flights for sale at \$5 (with Bruce’s permission). Bruce had already won 5 of the 7 days and was the hot favourite to take out the championship.

The final competition task did not start well for me. I could not get above 4000’ when others were reporting over 10000’ in wave. Starting anyway I had a good downwind run to the first turn (arriving at 1200’ AGL) and then found 10 kt climbs to 9000’ under cu’s before once again the cold southerly came in (the Benalla “sea-breeze”) - the last 70km taking 1.5 hours. The fastest speeds for the day were achieved by those brave enough to fly in the mountains. With some new names at the top of the daily score and many of the top pilots outlanding (including Tom Gilbert, Toby Geiger and Jonathon Shand) the final aggregate result was going to be interesting. Bruce got into trouble but eventually sneaked home an hour after everyone else.

Final Results

Before the presentation dinner I had done some back-of-envelope calculations and was confident of finishing 2nd overall – one place better than the Gawler nationals. It wasn’t until the final presentation at the dinner that it was announced that I was the new Australian club class champion. Consistent scores every day and no outlandings took me ahead of Bruce. Emilis was the highest placed sports class glider.

Final Aggregate Placings:

1. Peter Temple	918.7 pts
2. Bruce Taylor*	903.8 pts
3. Rolf Buelter	877.7 pts
4. Tom Gilbert*	868.1 pts
5. Toby Geiger	867.4 pts
6. Terry Cubley	866.9 pts
7. Ron Sanders*	865.0 pts
...	
14. Emilis Prelgauskas	718.7 pts
20. Cathy Conway	634.1 pts

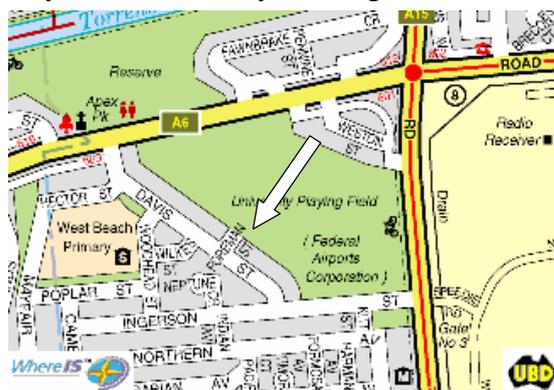
* Competed at the recent Gawler World Championship



SO YOU WANT TO HELP AT WEST BEACH?

West Beach is where we carry out the maintenance and repair on our gliders and equipment. There are usually volunteers working down there on Monday, Tuesday and Wednesday evenings. The entrance is at the end of Foreman St, West Beach. The **Puchatek** is being finished there at the moment. **Winch #3** has had the gearbox fitted to the front engine and now the transfer box needs to be located and fitted.

So you want to help fix the gliders at West Beach, but can’t get there? A lift can be available from the Adelaide University footbridge at 7.30pm by arrangement. Ring Anthony on (wk) 8393 3319, (hm) 8269 2687 or E-mail: Anthony.smith@adelaide.on.net.



WHAT'S BEEN GOING ON!

Well January was a busy month, especially if you were anywhere near the World Club Class Gliding Championships held at Gawler. These were held from 7 January through to 27 January and featured 46 pilots from 21 countries. There were also 7 entries in the Grand Prix event held simultaneously. The effort that had gone into organisation of the event by the Adelaide Soaring Club yielded quite reasonable results. Seven tugs launched all of the entrants in about one hour of fast activity on each of the flying days. The weather was interesting to say the least. A number of days were cancelled because the predicted soaring conditions were too poor (ie the thermals weren't going high enough) despite the high temperatures. Most of the European entrants had difficulty with the heat and had underestimated the amount of drinking water required to be taken in the aircraft with them when they flew. The first flyable competition day was in very average conditions and resulted in almost half of the gliders outlanding. However, the number of outlandings sharply decreased as pilots adapted to the conditions as the competition progressed.

The club hired the PIK-20D to Zeljko Roskar from Slovenia, a small country wedged in between Austria, Croatia and Hungary. He finished a respectable 21st overall despite being in his first international competition and the first time that he had flown a flapped 15 meter aircraft of any kind.

SA FM's Skyshow was (very conveniently) held after the closing ceremony and a large club contingent dragged Zeljko and his girlfriend Jana, the Swiss team and the Belgian pilot along to see the fireworks.

Apart from all that, there has been flying at Lochiel too! Congratulations this month go to **Derrek Spencer** and **Steve Grey** for gaining their C certificates. **Derrek** also finally got around to getting his A and B certificates as well. Congratulations also go to **David Hichens**, **Matt Fenn** and **Scott's Battersby** and **Lewis** for gaining their independent operators ratings (these guys can now go flying without having an instructor at the airfield).

In other news, **Matt Fenn** has refreshed and updated the club's web page: www.augc.aus-soaring.on.net. It is looking particularly good, but Matt is still looking for photos of club activities to stick on the photo page. If you have any worth displaying, please send him a copy.

The newsletters are now available in Adobe PDF format and you can download them from the appropriate page on the web site. Please e-mail anthony.smith@adelaide.on.net if you would like a copy of the newsletter sent directly to you each month. In the future a selection of past newsletters will also be converted to PDF to add to the historical archive of the club.

DO YOU STILL WANT TO BE A MEMBER OF THE CLUB?

It is that time of the year again! Please contact Dennis Medlow to renew your club membership for 2001.

If you do not contact Dennis, your membership will not be renewed.

You can contact Dennis by phone on (mob) 0407 833 565, (hm) 8337 3265 or E-mail: dmedlow@adelaide.on.net.

WHAT IS GOING TO HAPPEN SOON

X-country Weekend, Sat 17 to Sun 18 Feb.

Another dedicated weekend for people to select an aircraft and go cross country.

O'Week, Mon 19 Feb to Fri 23 Feb. Help recruit new, keen glider pilots from the masses of students at O'week. Help will be needed to rig in the morning and de-rig the Club Libelle in the afternoon. Club members will also be needed to talk to people and hand out pamphlets etc during the day. Call Scott L for details.

Barbeque, Mon 26 Feb. Come on down to West Beach shed to meet all the new people from O'week and enjoy a free barbeque. 7:00 pm onwards

General Meeting Wed 7 Mar: Welcome to new members. Come along and meet the people that joined during O'week. Beers, pizzas and gliding videos. What more could you want in a night? 7:30pm Canon Poole Room, Union Building.

25th Anniversary of AUGC. The 25th anniversary celebrations will include a huge dinner for past and present members as well as a flying weekend. Date to be decided. Call Cathy if you want to help.

Annual General Meeting, Wed 4 Apr: Little Cinema at 7:30 pm. Dinner at 6:30 pm in the Equinox Bistro if you are interested. The big meeting for the club where the reports from last years Executive Committee are tabled and a new committee elected. The club development plan which will set the direction of the club for the next 10 years, will also be tabled for discussion and approval.

13-22 April, Easter and mid week flying at Lochiel. Go flying for the week during uni holidays. The best way to advance your flying with several days back to back practice. This may be extended to ANZAC day, 25 April if there is sufficient demand and an available instructor.

19-21 May, Pt Pirie Camp. The club is trying to arrange a camp with the Whyalla Gliding Club near Pt Pirie for the long weekend. Hopefully there will be westerly winds that will allow us to fly the big ridge there.

9-11 June, Flinders Ranges. Visit the scenic Flinders Ranges for the Queen's Birthday long weekend. Flying, bush walking, gorge touring and camp fires galore. We are inviting the Waikerie Gliding Club and the Gliding Club of Victoria along this year and may extend the camp to 17 June if there is enough demand.

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If undelivered please return to
AUGC Inc.
c/o Sports Association
Adelaide University, SA 5005