



Sun set behind the Elder Ranges. (Photo N. Zimmerman)

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Thought For The Month

"Try to stay in the middle of the air. Do not go near the edges of it. The edges of the air can be recognized by the appearance of ground, buildings, sea, trees and interstellar space. It is much more difficult to fly there." NASA

In Next Month's Edition...

A Night- Day At The Museum - An account from a visit to the US Air & Space Smithsonian

Visit us at <http://www.augc.on.net>

Giant 4 Page Flinders
Report Inside!!



Howdy,

The Flinders Camp is over and since I had a good time I'm going to make sure that we have at least FOUR pages in the newsletter to tell everyone that didn't go how wonderful it was. Well the bits when it didn't rain were nice and the Blinman Cafe does a nice kangaroo and cheese plate but I digress.

Check out the Flinders Report for the full detail and photos. Fortunately (or is that unfortunately) there were no major LPG incidents to speak of so most of the geography of the central flinders remains in the same place it was in before we arrived. We did however have a detailed discussion on LPG gas explosions around the campfire!

Its events like this that help to bring the Club together. Whether its meeting people you may not have seen for a while, or trying to avoid the sparks from the fire when the next huge log is thrown on, or the simple pleasure of trying to cook a BBQ dinner when its raining. For me its just getting away from the routine for a few days for either (a) lots of 4WD on muddy roads or (b) some nice ridge/wave/thermals in a spectacularly scenic part of the world, or in this year's case - both.

Until next month...

Mr. Ed.



OH COME ON!!

This photo is CRYING OUT for a funny caption - do better than Mark's effort on Facebook
(Photo: Mark Newton).

Uni Gliding

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Copyright of articles and images published herein remain the property of their originators. No gliders were harmed in the production of this periodical, but a number of winches were spoken to sternly.

Advertising rates available from
editor@aucg.on.net.





From the Prez...

Redmond Quinn



The President's job has some downsides.

The Newsletter Editor has collared me, so here I am sitting in the Clubhouse at Stonefield writing this tome rather than standing around the fire outside with a beer in

my hand! *[And it worked!!... Ed]*

If you haven't hung around on a Saturday night to enjoy the fire you have missed out on one of the pleasures of life. Saturday 4th July – Independence Day is planned to be a big BBQ/Fire night at Stonefield. This will be your chance! You can either stay over to Sunday or travel home late as I tend to do.

The Club needs more active members to ensure our future. Active members start out with their first visit to the airfield and an Air Experience Flight. I ask everyone to help make new people welcome and show them what is needed to ensure

a pleasant and safe first day on field. Try to remember your own first day (I know for some of you that is a faded memory) and help newcomers come to grips with the strange environment.

Our hangar “big boys toys” weekend has been delayed a bit as a result of my absence from the scene a bit lately. This will however be rectified in late July. It is guaranteed to be a big weekend of hard work and fun.

On 15th August the South Australian Gliding Association (SAGA) will hold its AGM and annual dinner at Waikerie. While the AGM won't excite many people it would be good to get a big AUGC group to the dinner in the evening. We ought to make it a big flying day at Stonefield, then knock off a bit early and head up to Waikerie for the dinner. Keep the date in mind.

Fly safe
Redmond

Welcome!

Please welcome these recent new members to AUGC:

Cara Bourne
Michael Scutter
Matt Scutter

STOP PRESS!

Cathy Conway has agreed to be the Club Treasurer for this year. Thanks Cathy!



It Happened on Our Airfield....

27 June 2009

A pleasant day with almost 100% cloud cover and very light wind. The winch cables were inspected and all swages cut out and replaced. When operations began they were on Runway 11 near the hanger so it was easy to get the Pukatek and Pie cart ready for the day. Michael and Matt Scutter were up to try out their brand new memberships and get rerated on winch launching (they both have been flying at Gawler on aerotow). Although all the flights were circuits the

conditions were very smooth and pleasant to fly in. To the east the air looked quite unstable with a number of thunderstorm like clouds on the horizon.

At the end of the day David Conway, Anne Philcox and Redmond (the Prez) turned up from their exciting day out at the SA Gliding meeting at Balaklava. Derek duly fired up the BBQ for dinner and we all sat around the fire watching wind turbines explode (on You Tube).

Chief Flying Instructor's Comments

Dennis Medlow



Weather We Fly

For anyone (with the possible exception of Tom "The Sim" Wilksch) who hasn't realised it yet gliding is an outdoor activity - and as such is subject to the vaguaries of the weather. The weather can

be our friend, creating the convection or mechanical lift we use to soar and sustain our flight. It can also be our enemy - causing both catastrophic and insidious damage to our aircraft. Let me explain.

The two elements of weather I am discussing here are wind and moisture.

Wind can be very damaging to aircraft on the ground. The wind can cause the aircraft to weathercock into the wind direction, potentially damaging the tail skid/wheel, wing tips or fuselage and stressing wing root and drag fittings. At worst it can blow the aircraft over due to lift generated by the wind on the wings. Our gliders are designed to fly at quite low wind speeds. When no-one is in an aircraft the stall speed of the wing will be lower than its usual stalling airspeed. So instead of flying at say 36 knots, a glider wing may start to fly at 28 knots. Whilst we might not bring an aircraft out into a persistent 28 knot wind, it is quite possible for gusts to occur that are 5-10 knots higher than the average wind speed, thereby creating a hazard for the aircraft.

Wind is forecast by the Bureau of Met using terms from the 'Beaufort Scale'. This scale can be found at <http://www.bom.gov.au/lam/glossary/beaufort.shtml>. In this scale 'calm' and 'light' winds (up to 10 knots) would not represent much risk to aircraft, however 'moderate' and 'fresh' (the latter up to 21 knots) would require particular care. If gusts were also forecast/present then the risk is even higher. Naturally it is the actual, rather than forecast wind that will do damage, so assess this by reference to wind socks and by testing the wind speed and direction clear of any obstacles such as hangers or buildings (or vehicles) that may artificially reduce the speed. Be aware of forecast changes in wind speed, particularly where it is forecast to increase

or where a cold front is forecast (as these will often be associated with gusty high wind conditions). All Club members must consider the risk of damage to the aircraft and if there is any doubt as to whether operations can be conducted safely in the conditions then it would be wise to leave aircraft in hangers or trailers.

Moisture is more insidious. It can have multiple effects on aircraft. On aircraft with critical aerofoils (like the Pik) rain droplets can significantly degrade performance and increase stall speed (up to 20%). On other aircraft like the Pukatek it will not be as noticeable. Rain (or moisture from any source) entering the aircraft also has the effect of creating damage through corrosion, rot or dissolving glue (depending on the construction of the aircraft) and therefore should be avoided at all times.

So in conditions of wind, rain (or both) we should ensure that aircraft are handled appropriately to reduce the risk of damage from any source. Ensure that adequate ground crew are constantly looking after the aircraft and remove any moisture before flight and at the end of the day when packing up. In the event the instructor decides that conditions present too much risk to the aircraft please respect his/her decision.

Fly safe.

AUGC CFI



Not a good day for flying.



SAGA Coaching Sessions

Coaching activities for 2009/2010 have been announced. Each night will feature two topics from a variety of experienced speakers. All pilots are encouraged to attend these sessions.

Thursday 16 July RASP, Blipmap, NOAA / Southerly Airstreams & their influence on thermals

Tuesday 11 August Parachute Handling & Care / Wave Flying in South America

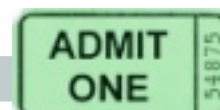
Wednesday 16 September Flight Analysis / Outlanding & outlanding techniques

Thursday 15 October Thermal Sources & Triggers / New Sporting code.

All sessions will be held in the Adelaide University Engineering North building, room N123 on the First Floor (Chemical Engineering) and start at 19:30 (7:30pm).



Special Lecture



Engineers Australia South Australia Division, South Australia Science Teachers Association (SASTA) and the Sir Ross and Sir Keith Smith Fund invite you to attend James Reilly's presentation at the National Wine Centre on 8th July 2009. James Reilly will speak about his involvement at NASA and the engineering challenges of designing the Mars mission. These challenges involved human factors, spacecraft issues, Mars base considerations and scientific preparations for the search for water and possible signs of life. He will reflect on the current state of preparations for the Mars mission, and issues that still need to be resolved before a mission can take place.

Date: Wednesday 8th July 2009, Time: 5.30pm for 6.00pm Start.

Venue: National Wine Centre, Corner of Botanic and Hackney Roads, Cost: FREE

RSVP: by 3rd July 2009 to Norma Cowan, Technical Program Officer, Email: ncowan@engineersaustralia.org.au

Phone: 8267 1783



News You Can Use

New Glider Training Scheme

GFA has announced that from Q4 2009 a new glider pilot qualification will be introduced called the Glider Pilot Certificate (GPC). For more information see page 30 of the May 2009 edition of Australian Soaring. More information on how this will be introduced into AUGC will be published in coming months.

Fleet Notes

Please note that TX has been taken off line.

WVA and MI are only insured for ground risks.

ZM has been sold to a Club syndicate.

Coming Events

The Social Convenor (Derek) is planning a bowling night.

The next Club BBQ and Bonfire night is planned

for the 4th of July. Celebrate the independence of the Yan-kees with a ritual of seared meat and see what Redmond and Derek will throw on the fire this time!

Check the on-line calendar on www.augc.on.net for more Club events.

SAGA AGM Dinner at Waikerie

Pack up a little early than usual on the 15th of August and head up to Waikerie for the SAGA AGM Dinner. Waikerie do excellent dinners!

Winter Solstice

The shortest day of the year was around June 20th, so this means the days are only getting longer from here on. According to Wikipedia the word *solstice* derives from Latin *sol* (sun) and *sistere* (to stand still).



Flinders Ranges Camp '09

Text & photos by D. Medlow, S. Hackett, R. Quinn, M. Newton, A. Smith, N. Zimmerman & R. Harrop

Every mid winter - just as you think it can't possibly get any colder, a band of intrepid glider pilots drag man and machine (and partners) 600 Km north to the rugged (and even colder) Flinders Ranges, thumbing their noses at nature and daring her to bring forth rain and wind in an attempt to spoil their adventures.

This is their story.



A rather damp day just north of the pound.

Friday

Friday started out with reasonable weather but it deteriorated in the late morning with scattered showers. FQW and the tug (WGC) started out early and made it to Rawnsley without significant issue. Peter Cassidy had a Cessna from Parafield but left at lunchtime and, after a stop mid flight to wait for weather, eventually made it to Hawker.



The mud had quite an adhesive quality.

Saturday

The day looked promising to start with. The overnight showers had cleared away and there was no low cloud on the Bluff or Chase Range, Wind was a steady 6-8 knots from the west with a slight southerly component. All the pilots assembled at the airstrip for a briefing at 0900. FQW was sent off with Redmond to do a site check for a new pilot. Around this time showers were observed to the west. These moved through the area at regular intervals and with a lowering cloudbase flying was halted for a while.

Later in the day the clouds lifted and a number of intrepid pilots launched to fly the Chase Range to the east. The wind has swung more the South so the southern part of the Chase worked the best. Nigel made an 'outlanding' at



Flying west into the late afternoon sun.

Arkapeena after venturing too far down the wrong end of the ridge. The owners of Rawnsley Park have bought the campground at Arkapeena and have closed it. So the gates were locked

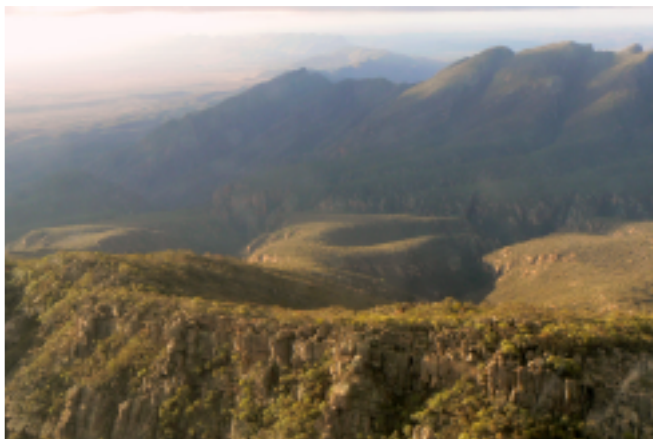


The Woolshed dinner on Sunday night was well attended.

forcing the retrieve crew in by foot to facilitate the aerotow retrieve. Then Simon in the Stemme (SIO) found some wave after an engine assisted climb above the clouds late in the afternoon.

Sunday

The day started with low cloud and showers so a 4WD drive expedition to Blinman via Brachina Gorge road was organised by Redmond. The road conditions were reasonable but degraded to a 4WD only, muddy and slippery mess in places. We ended up in Blinman for a late lunch on the same day their school's 150 anniversary was being celebrated (which explained the state of the road), During the drive back to Rawnsley the weather improved and we found flying in



The novel experience of soaring the western edge of the pound.

progress when we arrived back at the airfield. Rawnsley Bluff didn't work too well but those that were skilled, daring or both made it around to Pompeii Pillars at the western end of the Pound where conditions were fantastic!. Some wave-like lift was discovered there but due to fading light it



On tow with the Chase Range in the background.

wasn't explored further. The sunlight, haze and lowered cloudbase made flying into the sun a



The Pound is magnificent to fly over.

challenging prospect and the FLARM equipment fitted to most aircraft demonstrated its usefulness. All the AUGC crew retired to an excellent meal at the woolshed that evening followed by another fireplace wine tasting.



Dick Smith, his helicopter and some other guy...

Monday

The day started with low cloud and showers (are we detecting a pattern yet?). Around lunchtime the conditions improved and again the south face of the Pound was producing usable lift including the Bluff. Once again the aircraft headed out west. MI found itself cutoff from the field as a



The Stemme S10 at the Rawnsley Strip looking south to the Uloudra Range.

rain shower passed through, and spent a lonely 20 minutes to the west exploring wave-like lift to 5500' over the Uloudra Range.

Flying continued until late in the day. Whilst tying down aircraft we discovered how soft the strip was when we bogged the Motorfalke up to its fairing in mud just off the edge of the strip.



A halo on the clouds below

Tuesday

Tuesday had the worst weather with WSW winds which tried to clear late in the afternoon. A spirited attempt was made to aviate but the rain got in the way too much. Dick Smith flew in late in the afternoon in his helicopter.

Wednesday

Wednesday had higher cloud base but very light NE winds. Dick Smith departed at 0900 in the morning. Nigel and Anne worked Point Bonney and thermals for around an hour each late in the morning before everyone packed up.

Simon Hackett comments:

Great ridge flying. I got all the way around the corner and down to Ediwie George, and I think I wasn't the only one. Quite a nifty wind direction in that regard, which remained established



Flying the Stemme back above the clouds.

consistently for some days while we were there.

On one of the days, I also did manage a bit of wave lift, I'd motored up in what turned out to be a Foehn Gap to about 6000', shut down, and flew in consistent wave lift (circa 2-3 kt) to about 8500 before starting to run out of daylight.

Despite weather that was unuseable for most of



An Astir casts its shadow on the Pound Wall

most days, all but one of those days did present enough flying time to allow me to log around 2 hrs per day (except for the Tuesday, where we got in the air just in time to decide to land again as the weather closed back in).

I lucked in in terms of flying up and back - flew out just ahead of worsening weather on Friday (got out early, having seen the forecast), and really didn't look like I could have flown back home (to Meningie airfield) any earlier than the day that I did it (on the Wednesday).

Nigel Zimmerman comments:

FLINDERS. Ranges from patiently waiting for flyable conditions, to experiencing the most rewarding gliding in the STATE.

My '09 Flinders flying highlights from the seat of KYR are:

One: Being dumped while investigating a more northern portion of the Chace range requiring an Arkapena 'landout' and being able to learn from it!

Two: Ridge soaring the complete southern face of Wilpena Pound – all 18km of it and feeling like I'm flying off the end of the Earth at its western end.

Three: Experiencing the sensation that is WAVE for my first time, contacted south of the western end of Wilpena Pound enabling me to climb an

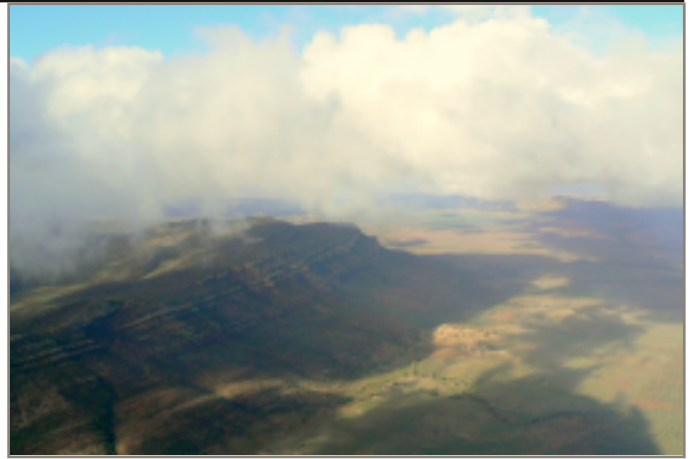
Uni Gliding - July 2009

extra 1200ft at around half a knot above the surrounding cloud base to 5500ft AMSL.

Four: Finishing off with a fifth day of consecutive ridge soaring, now on the Pounds north eastern side and being able to carve up its near vertical walls at high speed in this years first morning window of opportunity till the ridge lift ceased.

I love the FLINDERS!

[Ed's note: Don't we all.... :-)]



Rawnsley's Bluff on Monday



Whilst the cloud was a nuisance - it did make for some interesting contrasts.



It can get quite lonely that far away from the airfield....



Know Your Checks

Pre Take Off Check - CHAOTIC

Performed by Pilot in Command.

- C** Controls work in correct sense.
- H** Harness/es tight and secure.
- A** Airbrakes cycled, closed and locked.
Flaps set for take-off.
- O** Outside launch area clear.
Wind speed & direction.
Ground crew ready.
Options on launch failure
- T** Trim set for take-off.
Ballast secure.
Tail dolly removed.
- I** Instruments reading normally, no damage.
Altimeter set to QNH.
Radio set to correct frequency.
- C** Canopies closed and locked.
Undercarriage down and locked.
Controls have full and free movement.

Pre Hook-On Check - CARD

Performed by Launch Crew.

- C** Canopies closed and locked.
- A** Airbrakes closed and locked.
Flaps set for take-off.
- R** Radio on and set.
- D** Wing and tail dollies removed.

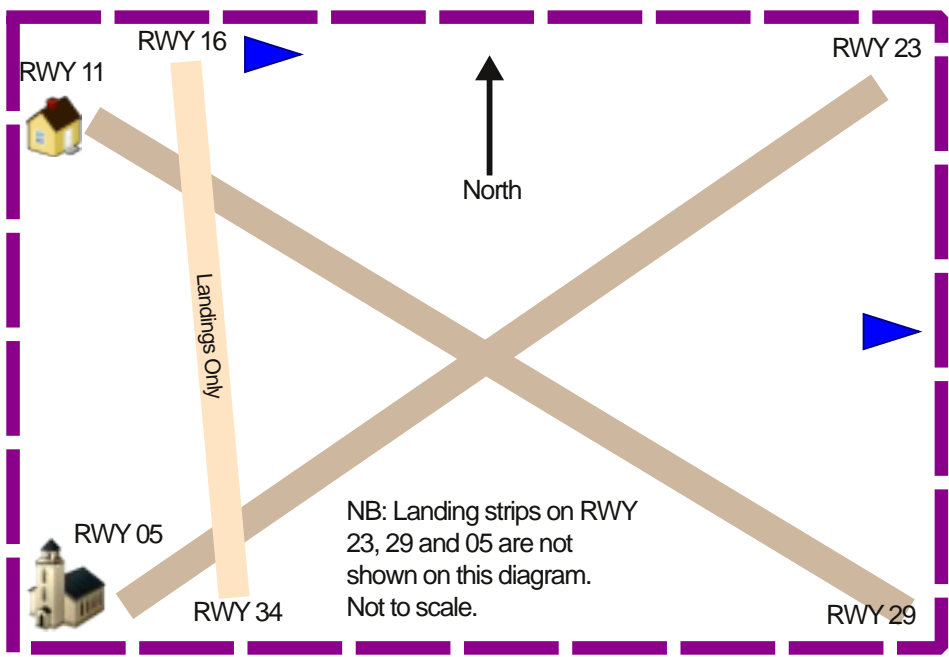
Refer to the back of the GFA Logbook for a list of GFA Standard Checks.



AVIATION AND DRUGS DO NOT MIX



Runway Quick Reference Guide



NB: Landing strips on RWY 23, 29 and 05 are not shown on this diagram. Not to scale.

Cut out and keep this diagram handy to prevent on-field embarrasments.



Aircraft Maintenance Program

Please lend a hand with the following tasks...

Pukatek (KRO)

Form 2 due 26th September 2009. The main wheel has a slow leak, PLEASE check tyre pressure each day before operating to avoid damaging the wheel and the aircraft,

The main wheel oleo may need recharging after the Flinders.

Club Libelle (GMI)

Form 2 inspection complete and ready for the Flinders Camp.

Arrow (GNF)

Repair work will continue at West Beach once

FQW's prop work is out of the way.

There are a number of woodwork repairs to complete - an excellent opportunity to gain skills in wood repair techniques.

MotorFalke (FQW)

Propellor to be removed and sent back for repair with Agent.

Form 2 due 6 Dec 2009.

Standard Libelle (GTX)

Currently off-line and not operational.



Airfield Maintenance Program



Runway / Taxiway Marking

We will be gradually marking the runway strips with the sidewalls of tyres. To make these stand out against the ground we paint them white (or whiteish). Using just the sidewalls for this purpose means we get 2 runway markers from each tyre and they do not protrude above the ground as much as a whole tyre - and therefore should not damage aircraft that run over them.

Assistance is needed in (1) cutting the side walls out and (2) painting the INSIDE of the tyre with white paint. We paint the inside because we place the sidewall on the ground with the outside part of the tyre facing downwards.



New Hangar Construction

The following immediate jobs need completion:

- * **Stripping of formwork (wood is not to be**

burnt but must return to Adelaide - see CFI)

*** Cleanup of the southwestern quarter of the floor area**

When these 2 activities are complete we will order in the quarry rubble for the floor. This will be dumped on the cleaned out area. Once we have the quarry rubble delivered we will organize a weekend when we will hire some big boys toys and carry out the following jobs:

- * Cut back the bank at the rear of the hangar and place the material at the front to improve the slope.
- * Clean out the other $\frac{3}{4}$ of the floor area and dump the material out the front
- * Compact the material on the front slope
- * Spread the quarry rubble over the hangar and front slope
- * Level and compact the quarry rubble

Once the floor is sorted we will be ready to build the hangar!

Winch

Both cables have been inspected and all swages cut out and reswaged with the appropriate 4mm or 5mm swages. A number of additional cable tie down loops have been made up and are in the Pie Cart.

A new set of Orange (660 Kg) weak links have been made and painted.



Flying Calendar

Visit <http://www.augc.on.net/Calendar.php> for the most up-to-date details on Club events.



*Sunlight makes a surprise guest appearance on the south face of Wilpena Pound.
(Photo: D. Medlow)*

July

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
		1	2	3	4 GO GLIDING	5 GO GLIDING
6 West Beach	7 West Beach	8	9	10	11 GO GLIDING	12 GO GLIDING
13 West Beach	14 West Beach	15	16 SAGA Coaching	17	18 GO GLIDING	19 GO GLIDING
20 West Beach	21 West Beach	22	23	24	25 GO GLIDING	26 GO GLIDING
27 Exec Mtg	28 West Beach	29	30	31		

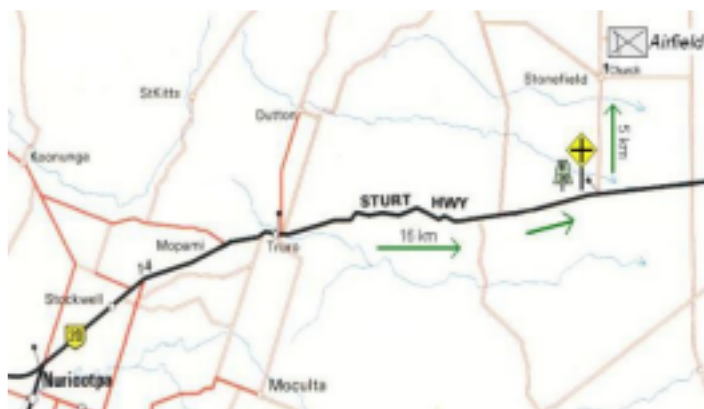
Stay In Touch

The Club has an email group address, augc-people@lists.internode.on.net, that is used to either discuss or arrange things within the club. If you want to stay in touch with the club, subscribe to the mailing list by filling out the online form at: <http://lists.internode.on.net/mailman/listinfo/augc-people>.

You can still send an email to the list even if you have not subscribed to it. There is also an 'augc-announce' list for official club announcements, courtesy of our friends at Internode. If you are an AUGC member and have provided your email address then you will already be on this list. If you want to join this list or want to change your subscription, go to: <http://lists.internode.on.net/mailman/listinfo/augc-announce>.

You can also get the latest newsletter and up to date news on what is going on at the Club's web page: <http://www.augc.on.net>. If your email address is on the membership database the Club's Assistant Treasurer can send you your account updates over the internet. Send an email to: accounts@augc.on.net.

Fly This Weekend!



Want to go flying on the weekend? You must ring the club contact person on the **Thursday before between 8.00pm and 10:00pm on 0412 870 963**, (or send an email: contact@augc.on.net) so that he can organise instructors and transport for those intending to fly. Members can book via the online booking system at: <http://booking.augc.on.net>.

You can either drive up yourself by following the map at left, or the contact person can arrange a lift to Stonefield either from the Adelaide University footbridge (meet at 7.15am to leave at 7:30am), or from the Caltex Service station on the corner of Montague Road and Main North Road (meet at 7.45am to leave at 8:00 am).

Help at West Beach!

West Beach is where we carry out the maintenance and repair on our gliders and equipment. There are usually people working down there on Monday and Tuesday evenings most weeks. The entrance is at the end of Foreman St, West Beach.

So you want to help fix the aircraft at West Beach, but can't get there? A lift can be arranged from the Adelaide University footbridge at 7.30pm via augc-people@lists.internode.on.net.



Club Contacts

President:	Redmond Quinn	08 8344 5331	president@augc.on.net
Treasurer:	Catherine Conway	TBA	treasurer@augc.on.net
Secretary:	Anne Philcox	0409 202 250	secretary@augc.on.net
Social Convener:	Derek Spencer	0429 028 065	social@augc.on.net
Exec Member:	Kolin Rajapaksha	TBA	fifth-member@augc.on.net
Chief Flying Instructor:	Dennis Medlow	0407 833 565	cfi@augc.on.net
Airworthiness Officer:	Redmond Quinn	08 8344 5331	airworthiness@augc.on.net
Contact Person:	Guy Harley	0412 870 963	contact@augc.on.net
Newsletter Editor:	Dennis Medlow	0407 833 565	editor@augc.on.net