

Uni Gliding: Reloaded

The Official Journal of the Adelaide University Gliding Club Inc.



December 2008



BVGC's Blanik at Stonefield, Nature's Cu at Altitude (Photo D. Medlow)



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Thought For The Month

“Arguing with a pilot is like wrestling with a pig in the mud, after a while you begin to think the pig likes it.”

Seen on a General Dynamics notice board.



Howdy,

Another month, another newsletter. This month hopefully sees the return of the MotorFalke propellor and with it (and the completion of the Form 2 work) the return to flight of VH-FQW. It will also be good to see that BVGC have a flying day planned on December 7 - come along and meet some new (and not so new) faces!

Since this is the last Newsletter for 2008 I wish a Merry Christmas to all - I hope Santa leaves a brand spanking new high performance glider at the bottom of your Christmas Tree! (So far to date he's

failed to deliver said present to this recipient so I have marked his KPI scores down accordingly).

And on a final note can I please ask that you all make a News Year's Resolution to write something for the Newsletter next year. The Treasurer keeps adding more and more statistics and this month there's (sob) colored graphs...

Until next year...

Mr. Ed.



News You Can Use

Common Communication Frequency for SAGA Gliders - 122.7 MHz

After discussion with SAGA Clubs, the common communication frequency for SAGA gliders has been established as 122.7 Mhz.

This is NOT intended to be a chat channel but one for timely and critical exchange of information between aircraft.

It will be of use when cross-country pilot's encounter unfamiliar gliders or a frequency outlanded pilots can use to communicate with airborne gliders / power aircraft.

New Contact Person Wanted

Unfortunately Gabriel is unable to continue with the role of Club Contact person. This role is important as it is often the first contact that potential members and AEFs have with the Club, and it can significantly contribute to the smooth running of flying days by ensuring that we have an appropriate number of experienced and non-experienced people on field.

If you are able to help out by taking on this role please contact the AUGC President or Secretary as soon as possible.

Thus Club thanks Gabriel for his time and

enthusiasm in the role to date.

BVGC Flying Day

BVGC will be holding a general meeting at Stonefield at 11am on Sunday 7th of Dec, followed by a flying day - we expect around 8 pilots, most of whom will need currency checks, or to fly as passenger friends with approved pilots.

New Operational Safety Bulletin

GFA have released a new Operational Safety Bulletin (No. 01/08) that deals with the subject of sideslipping. All pilots are strongly encouraged to download and read this bulletin as soon as possible. The bulletin is available from the GFA's website at http://www.gfa.org.au/Docs/ops/OSB_1_08.pdf.

Fleet Insurance Update

As advised in a previous Treasurer's report the Pik (WVA) and Libelle (GMI) are only insured for ground risk and 3rd party injury/damage. They are NOT currently insured for flight risks.



Water Water Everywhere and Not A Drop To Drink

Apparently the human body is something like 60-70% water, so perhaps we should consider a pilot as something like the equivalent of a life support system for a flying Camelbak.

Seriously though the dependance of the body on water cannot be understated. Numerous articles have been published in Australian Soaring, Flight Safety Australia and other media about the importance of adequate water consumption and the dire effects that often occur in its absence.

Dehydration has been cited as a factor in a number of aviation accidents.



What this means is that ALL of us on field - pilots, trainees, winch drivers, pie cart folks and visitors need to ensure that we maintain both an adequate intake of fluids and that we are drinking the right fluids.

Correct and adequate hydration relies on us taking proactive steps to maintain a correct intake of fluids. It would not be unusual for the body to lose

fluids at a rate of 1 litre/hour. Unfortunately we can't rely on the Mk I human thirst system to assist us here by signalling when it is time to replace fluids. For some reason you don't start to feel thirsty until we are ALREADY dehydrated.

We also need to be careful about what we drink. Water or water with some diluted electrolytes is good, whilst soft drinks, juice and caffeine are not recommended.

In the last few years I've seen an increasing number of folks on field sporting small backpacks with drinking tubes. This is a good idea as it not only means you carry liquid with you at all times, it also makes it easy to get to so the problem of having to go to the pie cart/car/clubhouse in order to get to your water bottle is removed.

Another way of preparing for the flying day is to ensure correct hydration levels before getting to the field by limiting diuretics (caffeine, alcohol etc.) the day before and pre-hydrating with a suitable fluid in the morning.

Watch Those Doors!

A timely reminder to be aware of the potential injury from hanger doors. There is potential for serious injury, particularly in high winds.

Unfortunately a fatal accident happened at Bunyan airfield when a man was crushed behind a hanger door.



Welcome to summer (practically if not literally).

Receipts

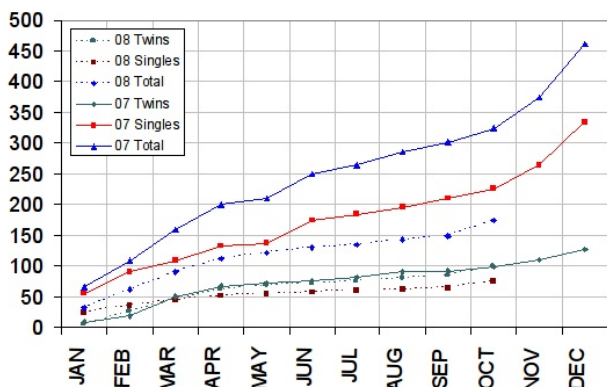
The implications of this are the end of another year and time to prepare the account for a Annual Financial Report. In support of this can people please pass receipts promptly to myself, personally or via the airfield cash tin. Please find any outstanding receipts now, rather than waiting for some time early next year, or, worse, later next year.

Fleet Utilisation

Last month I wrote about the increased costs of AUGC aircraft insurance and the subsequent action that has been taken. This month I am presenting data about fleet utilisation and some trends, to support decision making and also to illuminate AUGCs club profile.

Total Fleet Hours

Total cumulative fleet hours for 2007-08 are



shown. This chart includes only AUGC operated aircraft, excludes the MotorFalke and includes Anthony Smiths donation of his Bergfalke (ZQ) for occasional AUGC training and coaching. This data was shown in a previous newsletter, and again aircraft use is about half 2007 levels and twin-seater utilisation is equal to 2008 levels.

In order to look at a larger set of data, I have chosen to compare fleet use across the last few years, but have limited it to those years AUGC has been based at Stonefield (i.e. since 2005).

Twin-seater Flying Minutes

	ZM		ZQ		KRO		FQW	
	Launches	Time	Launches	Time	Launches	Time	Launches	Time
2008	0	0	22	1143	464	4783	84	2970
2007	0	0	33	913	735	6704	175	5999
2006	214	3734	29	705	634	6361	0	0
2005	431	5953	25	788	361	3598	157	6095

Single-seater Flying Minutes

	NF		MI		TX		WVA	
	Launches	Time	Launches	Time	Launches	Time	Launches	Time
2008	0	0	79	3312	23	1219	2	18
2007	0	0	170	6747	113	6724	97	6629
2006	0	0	229	6952	71	3445	56	4419
2005	65	2337	101	4758	100	5719	131	10214

Summary of Fleet Flying Minutes

	Twin		Single		Motor Glider		Total	
	Launches	Time	Launches	Time	Launches	Time	Launches	Time
2008	486	5926	104	4549	84	2970	674	13445
2007	768	7617	380	20100	175	5999	1323	33716
2006	877	10800	356	14816	0	0	1233	25616
2005	817	10339	397	23028	157	6095	1371	39462

During this time either of the Puchatek (KRO) or the Bergfalke (ZM) have been unairworthy. The apparent trend is that total twin use has remained about constant for 2005-06 and (given current trends) for the 2007-08 period, although at 75% of the 2005-06 level. This decrease might be explained by the availability of the Motor Falke (FQW) and the fundamental change in its use for training purposes since 2007, so that some decrease in twin-seater glider use might be expected. In addition, the majority of days are enabled by one instructor, so both the MotorFalke and the twin-seater are not often operated together. Total use for the MotorFalke is significant in determining flying rates (owing to a policy determined when the aircraft was purchased). As has been mentioned in a previous newsletter, the chance that FQW will achieve 100 hours, where it will meet its operating cost is not unlikely.

Individual single-seater use is very erratic. During this time each aircraft has been un-airworthy for several months at least once. The higher performance single-seaters have the highest average flight time, which is due to the increased experience of pilots flying them and the lower likelihood that they will be flown on bad soaring days. Total single-seater use varies about the same as twin-seater use does in 2005-2007, but drops-off in 2008. The total number of flights and total flight time for the year-to-date are currently about 25% of previous years. The decrease might be explained by the timing of JoeyGlide and Performance week in 2007, and no flights at the Flinders Ranges camp.

In looking further into single-seater use I have looked at data for one of our single-seaters (GMI). It was unairworthy early in 2005, but has been on-line since then.



Treasurer's Report (Cont'd)

Greg Newbold

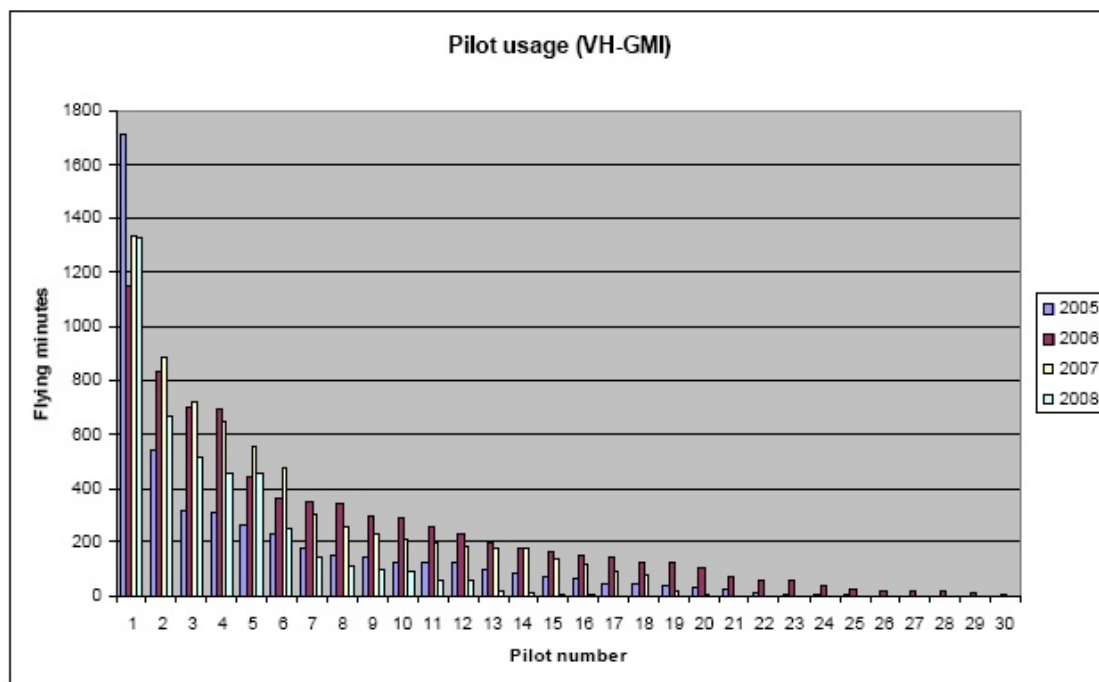
GMI Pilot Flying Minutes

Here, total flying time has been calculated for individual pilots in a given year. These are ordered from the pilot with the most time flown to the least for each of the years. Each years data are then charted together. This chart is then NOT for the same pilot in all years. My apologies that the chart is cluttered and might not be clear.

The data show that in 2005-07 ten pilots account

for 75-80% of aircraft use, while in 2008 only five pilots account for 80% of aircraft use. Given the relatively constant number of solo pilot members, the drop-off is possibly due to a lack of flying by our wider set of solo pilots, who have been quite active at comps and camps. Data for other aircraft have not been charted yet.

This data is not earth shattering, but hopefully it provides some insight into the clubs flying trends.



Reporting Accidents and Incidents (from the RTO/Ops)

Reporting aircraft accidents and incidents is not an activity sailplane pilots enjoy, however the information gathered from these reports is very useful to the gliding movement. There is a reporting obligation under the Transport Safety Investigation Act 2003.

Accidents:

Aircraft related events which cause injury or death and/or significant damage to the glider(s) involved. If the police attend the accident, GFA members can offer to assist the police with their investigation. If the police do not attend, the Australian Transport Safety Bureau (ATSB) still needs to be advised, since they may wish to examine the accident site. ATSB must give approval for the aircraft wreck to be removed (ATSB 1800 011 034). Club CFI's (or delegate) need to contact the RTO/Ops within 24 hours of the event and a GFA accident report should be submitted to the RTO/Ops within a week or so. In the unfortunate event of serious injury or a fatality, the RTO/Ops should be contacted as soon as possible.

Incidents:

Aircraft related events which cause no injury and none or only minor damage to the glider(s) involved.

For incidents, there is no need to contact the GFA Regional Technical Officer for Operations (RTO/Ops) immediately, however Club CFI's still need to forward the GFA Accident/Incident Report to the RTO/Ops within a few weeks.



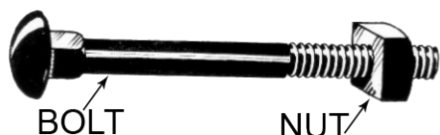
With apologies to Michael O'Brien

Mr. Tool Man Goes A-Fastening

Q: When we open up our aircraft we find a whole variety of long thin threaded things and short circular threaded things that hold bits to other bits and so on. What's it all about and why can't I just choose any old long thing and circular thing to join other things up?

A: That's a very good question and leads us in to the important if not confusing world of fasteners. Fasteners are, as their name suggests, used to fasten things to things and in many cases have ingenious mechanisms that ensure that once fastened, they do not unfasten, due to the highly undesirable effects that generally occur when that happens.

In this answer I'll restrain myself to one particular type we find in aircraft a lot - namely the humble bolt and nut. A bolt is a threaded fastener (as opposed to a rivet or nail that isn't) and this thread mates with a similar thread in a nut or tapped hole.



Bolts and nuts come in a variety of types but they will all have a similar set of characteristics. A bolt will have a head, a shaft and a thread. Nuts will have a thread and potentially some mechanism to prevent it from working loose. The bolt will be manufactured from a material that has a certain tensile (stretching) strength.

The size of the bolt is given by the diameter of the shaft - so a 6mm bolt has a 6 mm diameter shaft. As the head of the bolt is always larger than the shaft this explains the confusion when newbies try to use a 6mm spanner to tighten a 6mm bolt.

The screw thread is the helical structure that allows the nut to be threaded onto the bolt (ie it converts rotational motion into linear motion). The thread itself can be left-handed or right-handed and has characteristics of pitch and depth of which there are a number of different thread types to choose

from. Obviously the thread of a nut and bolt must be identical in order for the nut to be able to thread onto the bolt. Note however it is sometimes possible to thread a nut onto a bolt with an incompatible thread by using excessive force - the end result being a cross-threaded bolt with potential damage to the bolt and dubious fastening capability.

The main standards for threads are:

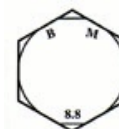
ISO - International Standards Organisation (aka 'Metric' threads).

UTS - Unified Thread Standard which includes the Unified Coarse (UNC), Unified Fine (UNF) threads. 'Coarse' and 'Fine' here refer to the pitch of the thread. In general a fine thread is stronger than a coarse threaded bolt in both tension and shear loads.

BSW - British Standard Whitworth thread.

Of these ISO (Metric) and UNF threads are common in aircraft, but don't be surprised to see the others from time to time.

The bolt itself may be made from different material depending on the application it is intended for. High tensile bolts have (as their name suggests) a higher tensile (stretching) strength than garden variety bolts. Such bolts will have a property class number (8.8, 10.9 or 12.9) on the head of the bolt, the higher number indicating higher tensile strength. If in doubt about what type to use please consult with an airworthiness person.



Next Month: Securing Fasteners - Or how to stop your nuts from falling off.

Mr. Tool Man refuses to divulge his qualifications (if any) and insists that you confer with a qualified airworthiness person prior to performing maintenance on any aircraft. The information provided herein is for general interest only and may not apply to specific engineering problems.



Flying Calendar



Pik At Khancoban

Photo: Justine Thompson

December

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1 HELP AT WEST BEACH	2 HELP AT WEST BEACH	3	4	5	6 GO FLYING!	7 GO FLYING! BVGK Flying Day
8 HELP AT WEST BEACH	9 HELP AT WEST BEACH	10	11	12	13 GO FLYING!	14 GO FLYING!
15 HELP AT WEST BEACH	16 HELP AT WEST BEACH	17	18	19	20 GO FLYING!	21 GO FLYING!
22 HELP AT WEST BEACH	23 HELP AT WEST BEACH	24	25 XMAS DAY	26 GO FLYING!	27 GO FLYING!	28 GO FLYING!
29 HELP AT WEST BEACH	30 HELP AT WEST BEACH	31	1 GO FLYING!			



Upcoming Events

Coaching Week and Comps @ Waikerie

Waikerie will have full time operations from 26th December through to 11 January. This also incorporates the Coaching week (28 Dec-3 Jan) and the State Comps (3-10 Jan).

A winch will be available from Balaklava.
Aerotow conversions may be available.



From the AUGC Vault



Can anyone identify (a) the airfield (1 point), (b) the aircraft (10 points), (c) the pilot (50 points) and bystander?

Help Wanted!



The Club is still looking for someone willing to offer their services as Winch Officer and Newsletter Editor.
Please contact the Secretary if you are interested.

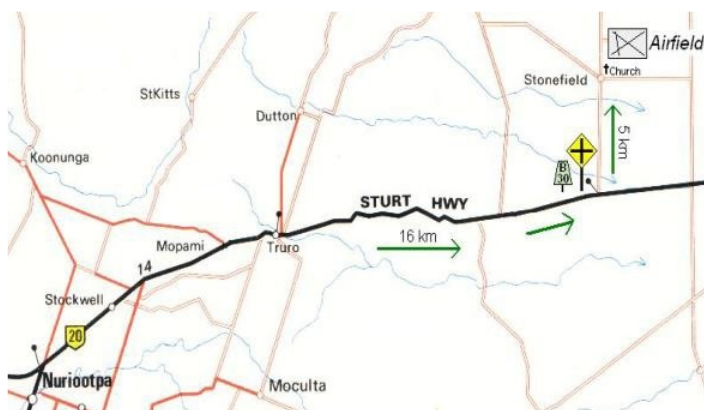
i Stay In Touch

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.

i Fly This Weekend!



Want to go flying on the weekend? You must ring the club contact person, Gabe, 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:

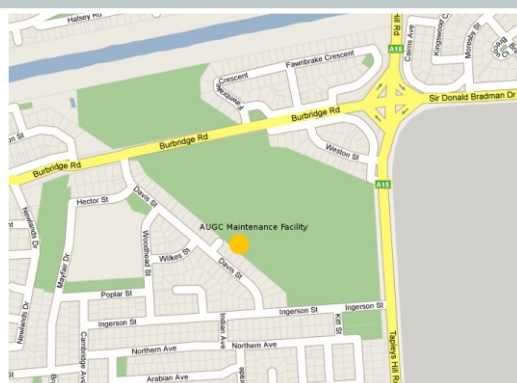
<http://booking.augc.on.net>.

You can either drive up yourself by following the map at left, or Gabe 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).

i 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 and Tuesday evenings. The entrance is at the end of Foreman St, West Beach.

So you want to help fix the gliders 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.



i Club Contacts

President:	Derek Spencer	0429 028 065
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