GLIDING AUSTRALIA

Issue 24 June - July 2015 www.glidingaustralia.org

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GLIDING AUSTRALIA

No. 24 June - July 2015

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JUNIOR WORLD GLIDING CHAMPIONSHIPS NARROMINE

With only a few months to go before the start of the Junior World Gliding Championships, things are starting to heat up for both organisers and pilots. Entries are coming in thick and fast, with entry forms received from Lithuania, Switzerland and Hungary, as well as our Australian team, with many more on their way - check the website for the latest entries as they roll in.

Many teams are still looking for gliders to hire in Australia, so if you have a club class or standard class glider which you'd be interested in hiring then please get in touch with us by email at jwgc@glidingaustralia.org . Many teams are also looking to arrange swaps with Australian gliders, so if you are thinking about a gliding holiday overseas, then this might be the perfect opportunity to set yourself up with a glider for a few weeks. Cars, trailers and crew are also being sought, so please get in touch if you can offer any of these.

We're also looking for your help to run the event. We need everything from rope runners to crew to social event helpers. If you'd like to be involved, please get in touch with us and let us know.

Keep up to date with the latest information via our website at www.jwgc2015.com, our Facebook at www.facebook.com/jwgc2015 or on twitter follow @jwgc2015 .

There are costs involved with travel, accommodation, glider hire, aerotows. The JWC team has been busy raising funds themselves and working hard to increase their own contributions. But there is still a short fall and this needs to be filled if we are to have a chance to put an Australian junior on the podium.

You can help by making a tax deductible donation to the Australian Sports Foundation now. ASF Web Link to donate

https://asf.org.au/make-donation/?pid=3281

ADAM WEBB
COMPETITION DIRECTOR

GLIDING FEDERATION OF AUSTRALIA

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SHOP The GFA Online shop has a range of useful products including a Form 2 kit,
www.glidingaustralia.org/shop1

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Before calling the GFA office, please check out our website www.glidingaustralia.org to buy items, find documents and other information, and renew your membership.
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FROM PRESIDENT MANDY

DEAR MEMBERS

Freedom, flexibility and successful gliding. When I started gliding almost exactly 20 years ago at the Adelaide University Gliding Club, AUGC, it never crossed my mind that one day I would be sitting down to write a report for the GFA magazine as its President. The operation at Lochiel was simple, with a winch, mostly wooden gliders, and a west-facing ridge. In the summer we had a lot of dust and flies, and in the winter we had lots of mud. I can still well remember thinking that the GFA was not relevant to me. I now have an opportunity to reach out to members who are in that same situation, to explain what the GFA does, how it does it, and how it can be relevant to every member.

I have served on two club committees, for the AUGC and Adelaide Soaring Clubs, and as AUGC Club President. Many of you will know me from my posts and blogs as Team Captain of the Australian teams flying overseas. In many ways I can see that being a Team Captain has parallels with my new role. As Team Captain my role was to keep the Contest Organisers off the pilots' backs, to protect the pilots from the machinations of the organisers, to shield the pilots from politics, protests or gossip, to handle dispute resolution and just let the pilots go flying.

It seems to me that if I replace Contest Organisers with CASA, my new role has unmistakable parallels.

I have been on the GFA Board for almost three years now and in that time I have seen great improvements in the way the business of GFA is conducted, from the introduction of monthly GoTo meetings, similar to Skype, to professional meetings that concentrate on issues, not personalities, early reporting and pre-reading to make efficient use of meeting times. Best of all is our rising stature in the eyes of CASA, giving us scope to push back in ways we just could not do before.

One thing that I have observed is that every new Executive or Board member that has joined us has expressed surprise at the amount of work that goes on behind the scenes to keep gliders in the air. I would encourage all of you to take the time to read the minutes of our Executive and Board meetings to understand what is being done on your behalf.

The minutes are found here

http://www.glidingaustralia.org/GFA-IT/docman-test

In the coming weeks, it is my ambition to speak to every club President to discuss issues that they are facing and to see what the GFA might be able to do to reduce workloads or to simplify processes and documentation. Our IT system is maturing and it is now time for us to focus outwards on our members' needs.

At the moment, gliding in Australia is in a good position. We have money in the bank, though not too much, we are on good terms with the regulator and our documentation will soon be up to date.

The Airworthiness Development Plan, which CASA accepted to allow us to continue to fly after the unfavourable audit in 2013, is progressing well and is on track for completion by the December 2015 deadline. Membership numbers are rising and we have the RAAF Air Cadet initiative stimulating gliding in new centres around the country. In addition we have two World Gliding Championships in 2015 and 2017. Our M&D head John Styles is working tirelessly to take advantage of these events to increase our exposure and grow our membership.

I am optimistic about the future of gliding in Australia and I hope you are, too.

MANDY TEMPLE

PRESIDENT

President@glidingaustralia.org

VSA ALPINE GLIDING COURSE

The VSA Alpine Gliding Course conducted at Mt Beauty from 8 to 14 March was a great success this year, with 27 pilots participating. Among these, 24 were drawn from Victoria, one from Queensland and two from NSW.

The large fleet of gliders included 15 visiting gliders in addition to eight gliders participating from Mt Beauty's own club fleet and private fleet.

Flying conditions were very good. The stand-out day was Thursday 12 March. Following David Wilson's comprehensive meteorology lecture and detailed discussion on convergence in the morning, most pilots were lucky enough to experience convergence conditions in the vicinity of Mt Hotham to 10,000ft that afternoon.

Mt Beauty Gliding Club obviously has some good contacts with the weather gods when it comes to turning on good gliding conditions.

Participants also enjoyed socialising after flying, including a sumptuous casserole dinner prepared by the Mt Beauty Gliding Club catering sub-committee.

Andrew Evans

PRESIDENT MT BEAUTY GLDING CLUB

FAI GLIDING BADGES

TO 25 APRIL 2015

BERYL HARTLEY
FAI CERTIFICATES OFFICER
faicertificates@glidingaustralia.org

A.BADGE

MAYALL GLEN	12017	CENTRAL COAST GC
HASTINGS TIMOTHY	12024	DARLING DOWNS SC
MARTIN ALEXANDER E	12025	NARROGIN GC
HANKS SEAN S Y	12026	ADELAIDE SC
MCAVOY STEVEN P	12027	GEELONG GC
YANG LONG T	12029	LAKE KEEPIT SC
LARSEN SAMUEL R	12032	ADELAIDE UNIVERSITY GC

A & B BADGE

CALDWELL IAN A	12018	SOUTHERN TABLELANDS
KHANNA ROHAN	12019	NARROGIN GC
JOYCE JOSHUA C	12020	HUNTER VALLEY GC
REID AMES M	12021	QLD AIR TC
GOYEN STEPHEN B	12030	BOONAH GC
PIVOVARSKI S	12028	NSW AIR TC 301

B BADGE

KEOGH JACKSON T	12007	V.M.F.G.
ZHELEZAROV VLADISLAV	Z11993	ADELAIDE SC
MIFSUD JORDAN M	11994	ADELAIDE SC

B&C BADGE

DAVIES KYLE T	12001	CANBERRA GC

C BADGE

JAMIESON DANIEL J	11856	SOUTHERN CROSS GC
WILLIAMS HARRY W	12010	G.C.V.
LIGERTWOOD JARRYD W	11997	ADELAIDE UNIVERSITY GC
DUNN PATRICK A H	11998	WAIKERIE GC

A. B. C. BADGE

DU PENG	12022	SOUTHERN RIVERINA GC
KERSHAW DANIEL	12023	CABOOLTURE GC
WEBB BENJAMIN S	12031	QLD AIR TC

SILVER C

JAMIESON DANIEL J	4870	SOUTHERN CROSS GC
HOLMES DAVID	4871	LAKE KEEPIT SC
DU PENG	4872	SOUTHERN RIVERINA GC
WANG YUNHAI	4873	SOUTHERN RIVERINA GC
ROSS DAVID A	4874	MT. BEAUTY GC
SMIBERT PETER J	4875	GEELONG GC
BALL DAVID L	4876	SOUTHERN CROSS GC
LOVELL BRENDON L	4877	GRAMPION SC
SKINNER MARTIN F	4878	GEELONG GC
FAGAN DAVID	4879	SOUTHERN CROSS GC
NAKAMURA JUNKO	4880	BEAUFORT GC
HOLMES JULIAN N	4881	SOUTHERN CROSS GC
GRANT JOHN W	4882	NARROGIN GC

GOLD C

HOMES DAVID	1715	LAKE KEEPIT SC
DU PENG	1716	SOUTHERN RIVERINA GC
WANG YUNHAI	1717	SOUTHERN RIVERINA GC
GREAVES BARRY J	1718	SOUTHERN CROSS GC
STOKES LEIGH M	1719	ADELAIDE UNIVERSITY GC
LOVELL BRENDON L	1720	GRAMPIAN GC

DIAMOND GOAL

SHOLMES DAVID	LAKE KEEPIT SC
DU PENG	SOUTHERN RIVERINA GC
GREAVES BARRY J	SOUTHERN CROSS GC
ROSS DAVID A	MT. BEAUTY GC
LOVELL BRENDAN L	GRAMPIAN SC
NAKAMURA JUNKO	BEAUFORT GC
HOLMES JULIAN N	SOUTHERN CROSS GC
ANDERSON SCOTT	CANBERRA GC

DIAMOND DISTANCE

HOLMES DAVID	LAKE KEEPIT SC
HOFMAN PETER	BATHURST SC
LOVELL BRENDON L	GRAMPIAN SC

600 KM DISTANCE

MADDOCKS NICHOLAS W	110	QLD AIR TC

VALE BILL RILEY SOUTHERN RIVERINA GC

Bill Riley passed away in early April.

Judy Renner of SRGC wrote, "He brought gliding to Tocumwal and put it on the map. I'm sure many tales of his adventures and expeditions will be told in the future. He is a large part of Tocumwal and gliding history."

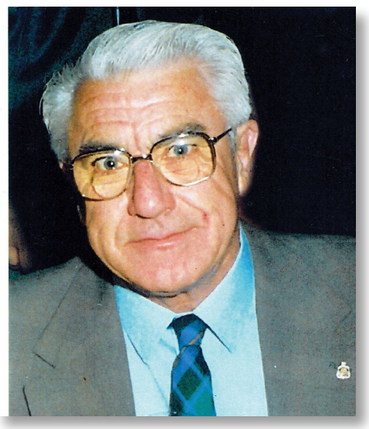
GFA RILEY AERONAUTICS TROPHY

Bill Riley was active in the gliding scene over many years. A glider pilot and light aircraft pilot with international experience, he flew with two other pilots in a formation of three self-launching gliders from Rumania to Essendon airport. Bill based his glider operations at Tocumwal in NSW on the Murray River. His continuing contribution to gliding has involved every aspect of the sport.

The **RILEY AERONAUTICS TROPHY** was originally intended to award the most successful two-seater performance. However, it has been used as an award for other classes as well.

In 1978, when GFA re-allocated its trophies, the Riley Aeronautics Trophy was returned to its intended place in the trophy schedule and was awarded for the longest two-seater flight each year. Accordingly, it could be won at the National Two-Seater Championships.

In 1990 Bill Riley specifically requested that his trophy be returned to its original purpose, as a Two-Seater Trophy for the Sports and Two-Seater National Championships.



EXECUTIVE OFFICER

The GFA Annual Board meeting was held 18 to 19 April in Melbourne and the major activity was to elect and appoint the Executive and Regional officers and also to approve the budget for 2015/16 and set the GFA fees.

NEW GFA LEADERSHIP TEAM

Mandy Temple, who has been standing in as President since the resignation of our previous president in March, was formally elected unopposed into this top role. Peter Cesco from SA was elected as Vice President while Dave Shorter retained his position as Treasurer.

Because Chair of the Sports Committee Marta Najfeld has had to step down from her role for a few months, the Board approved Peter Trotter as her replacement until August.

The Board has also invited the Junior Gliding Club (JGC) to nominate a representative to sit on the Board in an ex-officio position, to represent the views of the JGC and junior pilots in general. The JGC nominated Adam Webb to this position and Adam attended his first meeting of the Board over the weekend.

For a full list of GFA officers and their contact details please see the Contact Us page on the GFA web page.

INSURANCE PREMIUMS TO REDUCE?

In negotiating the renewal of the GFA Broad Based Liability (BBL) insurance policy, our treasurer has managed to secure an increase in Public Liability cover provided by the BBL from $250K to $1m with effect from 1 May. The BBL insurance policy provides the first liability coverage to members, clubs and affiliated organisations for any accident, and this policy continues to help contain the costs of liability insurance for members and clubs.

Glider insurance policies and other airfield liability policies are written with an excess clause based on the BBL insurance limit. As a consequence, from 1 May, clubs and members with liability policies can expect reductions in premiums due to the higher excess.

It also means that all gliders will now have $1m public liability cover without requiring the owner to take out additional insurance, which will help some vintage glider owners and those who wish to fly in competitions. Many clubs and private owners, however, do take out additional public liability insurance, with brokers now recommending $5m to $8m public liability cover.

We are fortunate that a combination of improved claims experience, increased competition and economic circumstances have meant that this improved BBL coverage has been obtained from our insurer for the same premium as we have been paying in the last few years.

NEW GFA EMAIL FORUM

In the interest of increasing communication between members and to enable increased opportunities for members to ask questions of the Board and GFA committees, we are establishing a members' email forum. You should have received an email inviting you to register with the forum. Once connected, you will receive daily emails with questions or comments from members and GFA officers, and you can raise issues and ask question of any of our members. This forum is only available to GFA members and will be moderated so that any inappropriate comments can be removed. When you receive the invitation, why not join up – it will take a little time for the forum to grow but it should be quite interesting. As always, if you change your mind you can always withdraw with a simple click. If you can't find the invitation, just go to the GFA web page and click member services. The bottom option available is the link to the member's forum.

WORLD COMPS PROGRESS

It is only six or seven months before the start of the Junior World Gliding Championships, to be held at Narromine in NSW. Entries are starting to come in and more information is now available on the competition web site at www.jwgc2015.com.

Glider hire is now a major problem. A number of teams are still looking to hire gliders, in particular, Standard class gliders. There are a lot of standard class gliders out there but many pilots appear reluctant to help. This is an Australian World Championship and our reputation as a destination for international soaring will not be supported if pilots do not make gliders available. As a country that always relies on hiring gliders overseas, this impact Australian pilots over the longer term. I am concerned that this same reluctance may flow to Open/18m/15m gliders for the Benalla World Championship.

TERRY CUBLEY
EXECUTIVE OFICER
eo@glidingaustralia.org

We need the gliders for three weeks, during a period that is not the peak season. If you have a suitable glider and can help us ensure a memorable event in Australia, please let me know at eo@glidingaustralia.org.

Benalla Worlds: The pre-world comps for the Benalla World Championship in January 2017 will be held with the Australian National Championships at Benalla in January 2016. The web page is now open at www.ozglide.com. This appears to be a very large event so you are recommended to get your entries in early – a great chance to fly against some of the best pilots in the world.

World comps are helping clubs. Promotion of these two World Championships is being ramped up, with the intention of using the events as a vehicle to promote our sport and to support clubs to grow their membership. With that goal, we will be running a major promotion in the cities of Melbourne and Sydney.

At Federation Square, Melbourne, on Friday 30 October, a glider will be on display with the simulator and a big screen showing videos of gliding. Victorian clubs are welcome to promote themselves at the event, and we are also looking for Melbourne-based members to spend a few hours assisting us to answer questions from prospective members.

At Martin Place, Sydney, on Friday 9 October, a glider simulator will be displayed with a screen showing gliding videos. NSW clubs are welcome to promote themselves at this event as well, and we are looking for Sydney based members to help answer questions from potential members.

MEMBERSHIP FEES TO INCREASE BY 3%

With the review of the 2015/16 budget the Board agreed to a small CPI increase in most membership fees, so from 1 May the full flying member fee will increase from $258 to $265, which includes the Regional Association fee of $12. A full list of fees is available on the web page under Docs.forms/Documents/ Administration/Admin docs. There was no change to the AEF fee, which remains at $30.

There will be some changes to Airworthiness fees, also in line with this approach, and some new charges also being introduced. The GFA shop lists all fees so you can review any changes after 1 May by going to the shop on the GFA web page.

ADVERTISING BOOKINGS NOW AVAILABLE IN THE SHOP

It is now easier to place a classified advert in the Gliding Australia magazine. Simply go to the GFA shop where you can enter the text and pay according to the number of words. Photos can also be attached.

MEMBERSHIP PROJECT – 'BEYOND 3000'

The most critical issue for gliding in Australia is membership renewal and membership growth. If we don't make the effort now then we won't have a sport to support in the future. The good news is that we are now making progress as our membership slowly increases again after a decade or two of decline.

GFA can help promote and provide support, but it is up to clubs and individual members to go out and seek and encourage new members.

Dave Shorter has an article in this magazine about 'Beyond 3000' and I really encourage you to read this and start asking questions at your own club about how you can help grow our membership.

BECOMING A MEMBER – WHO DOES THE WORK?

There are three key methods for people to become GFA members, each demanding different levels of effort from the member, from the club and from the GFA office staff.

Option 1 The simplest way for a person to become a member of the GFA is for them to complete the on-line membership application form on the GFA web page and then pay their membership through the GFA shop. This person gets a receipt and membership number to prove their membership and the GFA office receives their details to upload into our data base. No spelling mistakes, translation errors or delays.

The member then quickly gets their membership card and a welcome to the GFA and their magazine is booked. The clubs using this approach don't have to spend valuable volunteer time to type and submit data to the GFA office.

Option 3 The other extreme, which is still used by many clubs, is when the new member fills out a paper form and pays money to the club. The club secretary then copies the member's information onto a monthly return form and then sends this form to the GFA office. The GFA office staff sends an invoice for the payment of money to the club and the club treasurer then pays or, in some cases, posts a cheque. The GFA office staff copy the information from the monthly return onto the GFA data base and send the membership card and membership number to the new member.

In the worst cases, delays by the club Secretary result in the GFA office receiving the new member's information months later - the worst case was seven months later - often after the person's 3-month membership has expired, so the new member never gets their membership card or a membership number or a welcome letter or a magazine. They must wonder what their GFA payment was for. We cannot be too critical of the club secretary in these cases, they are volunteers and often have many other tasks to complete.

A solution This paper based approach is creating work for the club admin staff, and for the GFA office staff, and is not providing the new member with value for their money.

We will be talking to clubs who cannot quite make the move to Option 1 about other options, including Option 2, for them to reduce their admin workload with processing memberships and improving service for their new members.

CLUB LOANS FUND

As advertised previously, the GFA is supporting clubs through providing loans at competitive interest rates, typically for glider purchases. Two clubs have already received funds under this scheme, another is just finalising the paperwork and one club is preparing its application.

Clubs interested in expanding their operation are encouraged to contact their regional association or the GFA treasurer for details.

INDEPENDENT OPERATOR AUTHORISATIONS

There have been recent comments by members which indicate some uncertainty about the difference between Independent Operator Level 1 and Level 2 authorisations. For full details you are recommended to review Section 13 of the Manual of Standard Procedures Part 2 Operations (MOSP 2) available on the GFA web page. Click on Doc/Forms and then Documents and GFA MOSP. The following is a summary.

Completion of the Glider Pilot Certificate (GPC) provides members with the necessary skills to be issued with the Level 1 Independent Operator authorisation. This authorisation enables them to operate without a Level 2 instructor being present but they still need to have specific approval from the CFI or delegate to operate, and the club is still responsible for the operation.

Holders of Level 2 Independent Operator authority are solely responsible for all aspects of their operations when operating independently. They do not need any approvals from their CFI or club. The initial issue of Level 2 Independent Operator authorisation is by logbook endorsement by the CFI and is required to be confirmed at each Annual Flight Review.

GA

MEMBERSHIP – BEYOND 3000

20 years ago, after the last international competition held in Benalla, total gliding membership in Australia exceeded 3,000. In the intervening years it has steadily declined, reaching a low a couple of years ago. Excluding short term members, at last count we had 2,031 full flying members and 411 student members for a total of 2,442 12 month flying members.

The GFA Board has agreed it's necessary to reverse that decline and regain our former membership strength. Increased membership can

- Improve the financial viability of GFA
- spread costs over more people and improve services provided to members
- ultimately reduce the cost to members
- maintain vitality of the whole gliding movement
- develop a source of new instructors, club officers and maintenance workers
- even having buyers for second hand gliders depends on having new members

So the challenge is to reverse the decline and return membership back to our former strength - 'beyond 3,000'.

A MEMBERSHIP GROWTH TARGET IS REQUIRED

In order to achieve growth, our gliding organisations need to commit to a growth target – without setting a goal for achievement, membership growth will drift – maybe up, maybe down. A goal-focussed approach is needed, and a commitment throughout the GFA and Club organisation is required to achieve the needed growth.

The GFA Board has committed itself to a goal of 10% pa net growth in full flying membership, which it believes is achievable and which would take us 'beyond 3,000' full members in a couple of years and more than 3,500 in five years. That's the target we've set.

SETTING A TARGET HELPS TO ACHIEVE YOUR GOAL

An ambitious target you say? Some clubs are doing it already, others declining. Without a goal, we'll continue to wander up and down – but if across Australia, in each club, each State Association and in GFA, we all set ourselves a goal to grow membership at 10% annually, we stand a good chance.

DAVE SHORTER
GFA TREASURER

MEMBERSHIP – THE CLUBS' PRIMARY RESPONSIBILITY

While membership in GFA is a requirement for pilots to fly in Australia, the Clubs are the key to getting new members.

GFA can assist by increasing its visibility to the general public, and the two world comps will provide good excuses to ramp up promotion of the sport over the next couple of years. Promotional activity organised in the centres of Melbourne and Sydney this year will be an opportunity for clubs to participate and promote themselves. More of this can be done. But ultimately the clubs and their members sign up the new members.

SO WHAT CAN CLUBS AND INDIVIDUALS DO?

CREATE A FRIENDLY ENJOYABLE ENVIRONMENT

On holiday in Queenstown NZ with friends, we were choosing where to dine. Outside an Italian restaurant, the pizza chef behind the front window smiled at us and other staff beckoned us in. After an enjoyable meal, served by attentive staff, the proprietor came around checking everything was OK. I commented on the friendly helpful staff and enjoyable dinner. "That's no accident" he replied. "We meet every day and I tell them they have 30 seconds to entice customers in off the street. I tell them to smile." It obviously worked – he had a thriving, successful restaurant.

Gliding clubs are no different. When a visitor, friend or AEF customer arrives at your club, you have a limited time to convince them your club is a great place to be. People don't come to gliding clubs, often staying around all day, working their butts off, just to fly. There need to be other reasons. Companionship, company, shared experiences, friendship all play a part in attracting that person to your club. A culture of warm welcome, inclusion and involvement will attract these people. Remember, visitors come because they have some interest in glider flight – ideal candidates – and you have limited time to persuade them that your club is where they'd like to spend more time. Include them, give them a job, and make them welcome.

A convivial, friendly and inclusive atmosphere will attract new members

INVITE A FRIEND OR ACQUAINTANCE

How many members of your club joined because they were invited by a friend to try gliding? I'd reckon quite a few. It's by far the most common reason people join a club. Just imagine, if every one of our 2,000 odd members invited just one friend or acquaintance to try gliding, and just 1 in 10 of these became interested enough to take up the sport, we'd immediately gain 10% membership increase!

A USER FRIENDLY WEBSITE

People already interested in gliding, wishing to give it a try, will use the internet to search out gliding clubs. Does your club have a good website, easy to use, that tells a story about your club?

MEMBERSHIP SECRETARY

Does your club have someone devoted to membership issues? Sending letters of welcome and providing info to new members; following up people who drift away or don't renew; maintaining records. Do you collect email addresses of all visitors to the club – they were interested enough to visit once -keeping in contact by email is easy, and you may attract them back again.

KNOW YOUR MARKET

The age profile of GFA members shows we have two very distinct age groups as members. One is made up of young cadets and students under 25 who are the future of our sport. Many of them become talented fliers, learn the skills quickly as only young people do and then, after some years, find other interests, get married, have kids and mortgages and we lose them for a couple of decades. Then there is the 45+ age group whose kids have grown up or left home. With more time available and more financial security, they are ready to try something else.

The Airforce Cadet and Joeyglide movements are doing great things to involve the younger group and deserve every encouragement we can give them.

We need to recognise these age groups as our market where we're most likely to sign up new members, and target our efforts toward them.

SET YOURSELF AN ACHIEVEMENT GOAL

Successful businesses have always known that success comes much more readily to those who set targets for achievement. If we believe in the need for new flying members, we need to set ourselves, in each club, in each State Association, a goal for membership growth. I'd suggest each club and regional association aim for 10% annual growth. Get the commitment of the members of your club to that goal, set some plans to get there, and regularly measure your progress towards the achievement of that goal. You may surprise yourself.

How about setting a personal goal to bring at least one or two friends or acquaintances to your club to try gliding this year? *GA*

GFA 12 MONTH MEMBERS AT 15/4/2014 - BY AGE GROUP

AGE	UNKNOWN	<20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	TOTAL
FLYING MEMBER	9	16	28	68	63	57	129	175	242	272	328	313	188	148	2036
STUDENT	2	320	76	12	0	0	0	0	1	0	0	0	0	0	411
TOTAL BY AGE	22	338	108	87	68	60	135	185	250	291	347	326	198	163	2578

FROM THE SPORTS COMMITTEE

We had a good season last summer with lots of entries in the On Line Contest, good attendance at a range of coaching events and some good distance and competition flying. Now is the time to start preparing for the coming season – work on the glider, read one of the many good books on gliding and set some goals to work towards. You can enjoy the anticipation of the fun you will be having.

Badges and records For those interested in badge or record claims, the Sporting Code and an Official Observer are the go-to resources. Beryl Hartley for badges and Pam Kurstjens for records are always available to help. Remember you can now make your declaration before the flight and claim after the flight online via the GFA website.

Coaching Richard Frawley has taken over as National Coaching Director and is actively making things happen in coaching. G Dale will not be in Australia this coming season but there is a possibility of a different international coach. Our state head coaches and others are arranging many coaching events which will show up in the Coaching Events Calendar soon, or go to the calendar on the GFA website to find events you can line up for next season.

The Masterclass held last year in Canberra will be back in 2016. More on this next year.

International team selection (ITC) It is significant to have a world competition in your home country and we will host two in the next two years, the Junior World Gliding Championships in Narromine in December 2015 and the flapped World Championships in Benalla the following season with pre-worlds this season. So Miles Gore-Brown and his committee are busy handling the strong competition to be selected for these events, finding team captains and all the other logistics associated with this. Australia's world ranking has improved over recent years so something is being done well.

National Competition Committee (NCC) Keeping rules up to date to accommodate changes is part of what Tom Claffey and his committee do. They also have to constantly find clubs and sites to host the expanding number of competitions being held.

International Gliding Commission (IGC) We are very well represented by Terry Cubley at IGC where we have our say in international decisions about

badges and records, upcoming world competition locations and rules and a host of other topics.

Trophies Julie-Anne Johan looks after the host of trophies which need to be maintained and kept a track of so they can be awarded regularly.

The upcoming **Junior World Gliding Championships** to be held in Narromine in December this year rate a special mention. The enthusiasm, airmanship and dedication of this group is really quite impressive. Juniors have received a lot of support from Australia's gliding movement and it is showing results. They are worthy of our ongoing support.

PETER TROTTER
CHAIR SPORTS COMMITTEE

SQUAD WEEK 2015 NARROMINE

Lisa Trotter organised this year's Squad week at Narromine. Naturally, the focus was on the upcoming Junior Worlds in December this year. In addition, the week was attended by Morgan Sandercock who will be flying the 13.5m competition in Lithuania, and Kerrie Claffey who will be representing Australia at the Women's Worlds in Denmark.

We were lucky with the weather as we were sandwiched between a cyclone to the northeast and a trough to the southwest. This allowed us to set tasks and fly on eight out of eight possible days. The days were long - starting at 8am with a debrief, a discussion topic, flying and then a debrief and another discussion topic often not finishing until 9pm. Discussion topics included the Perlan project, Psych, De-hydration, SWOT, What is a Team?, Nuts and Bolts, and Glider Tuning.

We experimented with tasks and on one day when the weather proved to be better than expected, we sent the pilots round for a second lap.

One day we pretended there was bad weather approaching and drove them to start much earlier than they would have liked. On another day, Dylan had his first outlanding in anger and managed very well. See his photo, left.

We had Boris the interfering Eastern European who flew into thermals and dumped water on our guys while saying, "Australian pilots fly like chickens." Next day he turned up at briefing with a bottle of vodka he was keen to share – perhaps he took the role-playing a little too far.

Beryl provided her usual excellent catering service for the week and left us with more time to concentrate on the flying and training.

During the week we were lucky enough to enlist Shinzo to our cause and he agreed to donate his hangar space and briefing room to the team for the training period and the competition. This will be invaluable to the team and we thank Shinzo sincerely.

The JWGC is being held at Narromine from 1 to 12 December. We are expecting entries from all around the World. The Website is

www.jwgc2015.com/?contestID=5409

MANDY TEMPLE
AUSTRALIAN JUNIOR TEAM CAPTAIN

GFA ADVOCACY

GFA sends representatives to many industry associations and forums. I plan to produce a regular column detailing these meetings and issues that we are currently discussing.

REGIONAL AVIATION SAFETY FORUM (RASF)

On 19 March Executive Manager Operations (EMO) Christopher Thorpe represented GFA at the RASF meeting.

Issues of interest to GFA were:

- An opportunity to meet the new head of CASA Mark Skidmore and hear what he had to say.

Mark Skidmore welcomed attendees and explained his new role as the Civil Aviation Safety Authority's Director of Aviation Safety. Mark humorously noted that Board member Anita Taylor would be pleased to know the GFA representative was in attendance. Mark gave a brief overview of his career in the RAAF and civil aviation as a test pilot, business development manager and company director. Mark also explained that the Government's recommendations flowing from the Aviation Safety Regulation Review will be rolled into the CASA Corporate Plan.

- AvMed Review

Mark Skidmore explained that aviation medical concerns were among the more contentious issues raised in submissions to the Aviation Safety Regulation Review and continue to be the subject of industry stakeholder comment. CASA is undertaking a full review of its AvMed capability to ensure that the delivery of its functions are effective and efficient, and fully aligns with CASA's obligations under the Civil Aviation Act.

- Regulatory reform update

GFA queried when the new draft of Part 149 would be released for consultation, given the drafting was nearly complete in October last year. CASA advised it is still about two to three months away from consultation. GFA also asked to be included in the MOS 139 standards subcommittee. Graham Brown, GFA's National Airfields, Airspace & Avionics Officer has been accepted onto this subcommittee.

- Other business

GFA asked CASA whether there was scope for CASA to develop and fund online training modules around issues common to all Recreational Aviation Administration Organisations. CASA will look into this.

CASA AND AIR SERVICES AUSTRALIA (ASA)

On 24 March, GFA President, EMO and Drew McKinnie, Head of Operations, met with a delegation from CASA and Air Services. We discussed the granting of our exemption late in 2014 for gliders to carry Transponders in upper airspace to allow us to use block airspace released for wave flying.

There was a general discussion about transponders and ADS-B going forward and an agreement that units are currently too expensive to mandate in gliders. We also raised the costs of calibration. The ASTRA group are working towards the development of a low-powered ADSB unit that would be more suitable to gliders and other recreational aircraft. CASA has previously informed GFA that the current transponder exemption that applies under CASA Instrument 316/98 is likely to be removed in 2020.

We informed CASA and ASA that GFA has been providing monthly bulletins of Increased Gliding activity to the airlines and other airspace users for the past two years, and that these bulletins have been well-received. Both CASA and ASA asked to be included in our distribution list.

We raised problems experienced by our members in having NOTAMs raised through third parties that has led to errors and delays. ASA has since responded that all NOTAMS for recreational aviation must go through CASA. We are liaising with CASA to develop and document a mutually acceptable process.

SELF-ADMINISTERING SPORT AVIATION ORGANISATION SECTION (SASAO)

Following the meeting with ASA we met with Lee Ungermann from the CASA SASAO. We discussed:

- Part 149 implementation dates.
- Clarification of the CASA Carp 1 insurance for part 21M DAPM Designers and Engineers – awaiting a response.
- Auditor training provided by CASA.
- Fast tracking approval of MOSP parts 2 & 3.
- Push back on the $80 fee charged by CASA for a replacement CofA – awaiting a response.

RAAF AIR CADETS - TERRY DELAHUNTY AM

On 24 March the GFA President, EMO and Head of Operations met with Air Commodore Terry Delahunty AM who is the Director General Cadets - Air Force. Terry told us that the RAAF commitment to the Australian Air Force Cadets (AAFC) has led to an increase in cadet numbers from 7,000 to 10,000, and to the purchase of a further three aircraft.

We had a productive discussion about synergies between the two organisations going forward.

Several representatives of the AAFC will now regularly attend GFA meetings as observers – commencing with the combined Ops/AW/Sports/Safety meeting on the June long weekend in Melbourne.

GLIDERS AT AVALON AIRSHOW

The Australian Gliding Museum, with the support of the Victorian Soaring Association and the Gliding Federation of Australia, and 29 enthusiastic volunteers, ensured that gliding was well represented at the Avalon Airshow from 27 February to 1 March 2015. As well, this year considerable support was shown by the RAAF Cadets, who fielded a brand new ASK-21Mi and trailer as part of our display.

The display consisted of a marquee containing a welcome and information table, the Museum Cherokee II under restoration and at the mid covering stage, the Victorian Soaring Association mobile Flight Simulator, a video screen running vintage and modern gliding films, an information booth manned by Benalla council supporting the World Gliding Championships, and colourful signboards and posters of gliding interest. On the grass outside, adjacent to the large outdoor eating area, were three rigged sailplanes on display. They were the RAAF Cadet's ASK-21Mi VH-NQV, the Melbourne Gliding syndicate Grob 109B motor glider VH-GUM, and the Geelong Juniors' Standard Cirrus VH-GMG. John Callahan's Taifun motor glider was on display in the flight line. The ASK-21Mi won the Manager's Award for Gliders, and the Taifun won the best motor glider award.

Good weather and large crowds ensured the success of the display. There was a lot of interest in the RAAF Cadets, and often the queue to 'fly' the VSA simulator occupied every chair we had available.

There is no doubt that the project was well worthwhile, with many aviation enthusiasts seeing just what gliding has to offer at this important airshow. Hopefully seeds have been planted in the minds of many people, young and old, that will bring them to gliding in the future. Certainly the volunteers felt that the responses shown by many visitors fully justified their time and efforts in assisting with our display. The Australian Gliding Museum would like to offer our sincere thanks to all volunteers and organisations who gave their assistance.

DAVE GOLDSMITH

NATIONAL CLUB AND SPORTS CLASS COMP
LAKE KEEPIT NOVEMBER 2015

Photos S Novak

This year the National Club and Sports Class competition will be held at Lake Keepit Soaring Club from 8 to 20 November 2015.

Those who have flown at Keepit will realise what great competition flying can be had from this site.

The surrounding countryside provides a diverse range of terrain to fly over – flat land to the south and west, the Pilliga scrub further west which can cook up great powerful streets on a good day, river valleys to Barraba, Bingara and Warialda up north, and the great volcanic remnants of Mt Kaputar and the Nandewar ranges. The convergence line that runs early some mornings from Manilla to Kaputar can just be so much fun, and on a good high day you reach across to the New England plateau, Bruce Taylor's favourite country, where the sea breeze convergence in the afternoon can take you from Kentucky to Glen Innes without turning.

In November, conditions are good before the stormy weather that can come later through summer. We've had some great November comp days in earlier years with convection to 12 to 13,000ft.

Keepit airfield is wide and accommodating and irrigation of the launch area has kept grass on the field through recent dry spells.

New glider watering points have recently been installed in the tie down area for the Sports Class gliders.

For comp entry details, check the club website at www.keepitsoaring.com

WOMEN IN GLIDING WEEK AT LAKE KEEPIT

Last November the Women in Gliding week held at Lake Keepit was such a success that we decided to hold it there again in 2015. Many achievements were made and wishes fulfilled by the women who attended. The weather was good if not brilliant and the friendships renewed and made will last for a very long time.

The dates have been set, commencing on **Sunday 18 October through until the final day and dinner on Saturday 24 October.** To all women and support crews who wish to attend, put these dates in your diary and organize your holidays now. Men may come to help their pilot partners and family members. Women, from ab-initio all the way to very experienced pilots, are most welcome. After briefing, separate groups supported by experienced instructors will be formed depending on level of experience to discuss tasks applicable to individual skill levels.

Mentoring is another great part of the week. The more experienced pilots are more than willing to share their experiences and knowledge with those needing a little help and encouragement.

If you are looking to attend or are just interested in what is happening in WIG, contact me with your e-mail address. If you are interested in helping the female members of your club with aircraft, coaching, instructing or crewing please contact me on wendymedlicott@optusnet.com.au

As your new representative with the GFA, I would like to hear from you if you have an issue or ideas on how to improve WIG with marketing, mentoring or special needs for women, or if you just need some help.

The Lake Keepit club members look forward to welcoming all of you in October.

Wendy Medlicott

54TH MULTICLASS NATIONALS BENALLA

The Multiclass Nationals is also the practice event for the World Gliding Championships in the Open, 18m and 15 m classes to be held in January 2017.

Preparations for the 54th Australian Multiclass Nationals – also known as OzGlide - are progressing well. The event will be held at Benalla from 4th to 15th January 2016, and we are expecting a good list of entries from Australia and overseas.

Benalla will be hosting the Flapped World Gliding Championships the following year, so this is a chance for everyone – pilots and organisers – to gain experience and find out what works and what doesn't, well before the big contest.

This competition will be the final selection contest for the Australian team and it is likely to be well attended and closely fought. Foreign pilots will be here in significant numbers to practice in the weather and task area that they will experience at the World Championships – and also to take care of logistic planning such as accommodation and transport for their teams.

The contest will be run to Australian Nationals rules, with minor exceptions to allow an increased number of entries. Because we do expect a crowd, pilots with lesser experience may like to consider their options – there are plenty of other opportunities for competition during the season.

The website is up and running at www.ozglide.com and as I write there are 22 entries listed including five overseas entries.

Benalla has a full-time gliding operation from mid-October until the middle of March, so anyone who wants to come and practice earlier or to stay on later will be most welcome.

I look forward to welcoming all Australian and overseas entrants to Benalla next January.

TIM SHIRLEY
CONTEST DIRECTOR
tshirley@internode.on.net.
www.ozglide.com

GFA CALENDAR

Use the Contact GFA menu at www.glidingaustralia.org to send events to the GFA Secretariat for publishing online and in GA

BUNYAN WAVE CAMP CANBERRA GC - BUNYAN
19 - 27 September.
www.canberragliding.org

WOMEN IN GLIDING LAKE KEEPIT
18 - 24 October 2015
Contact: Wendy Medlicott
wendymedlicott@optusnet.com.au

SPEEDWEEK 15
1 - 7 November 2015
Contact Paul Mander, 0417 447 974
paul@mander.net.au

CLUB AND SPORTS CLASS NATIONALS - LAKE KEEPIT
10 - 21 November 2015
www.keepitsoaring.com

JUNIOR WORLD GLIDING CHAMPIONSHIPS NARROMINE
1 - 12 December 2015
www.jwgc15.com

PRE-WORLDS AND MULTICLASS NATIONALS BENALLA
4 - 15 January 2016
The Multiclass Nationals will be conducted in the usual four classes - Open, 18M, 15M and Standard. Provision will be made for an increased number of foreign entries, allowing for those wishing to practice for the World Championships. A website and entry details will be available shortly.

50TH HORSHAM COMPETITION WEEK HORSHAM
6 – 13 February 2016
This is perhaps the longest continuously running competition in Australia, and is a welcoming and friendly competition suitable for all levels including pilots entering a competition for the first time.

For details contact the Contest Director Ian Grant at ian.grant.gliding@gmail.com or see the website at www.horshamweek.org.au

NSW STATE CHAMPIONSHIPS LAKE KEEPIT
28 February - 5 March 2016
Friendly comp at a great soaring site. All welcome. Enquiries Chris Bowman
chris.bowman@pcce.net
www.keepitsoaring.com

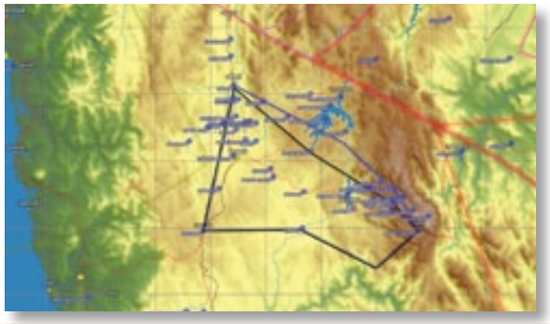
BUNYAN WAVE CAMP 2015

It's only early May and winter is already making its presence felt with early snow on the Victorian and NSW Snowfields, and while that is not expected to last, it lays a good cover preparing the ground for the winter snow falls.

The conditions that bring snow also bring us the conditions we require for Mountain Wave Flying at Bunyan, which is situated approximately 60km north east of the NSW ski fields. Initially, northwesterly pre-frontal winds produce our northwest wave and following the passage of the front we often enjoy southwest wave.

This year the camp will be held **19 - 27 September.**

Several years ago the camp introduced a competition in memory of long time Canberra member and cornerstone supporter of the Wave Camp, Allan Armistead. When we struck a trophy for 'Best Height Gain' during the camp, and this has been hotly contested over the years. This year we are introducing a new trophy, which will be for 'Best Cumulative Climb' during the camp. This hopefully will be a thinking man's trophy as there will be limits to the number of flights a competitor can submit to allow competitors to take rest days. It will require pilots to plan ahead, planning what days and even what time on those days to take a launch.



Other news is that the GFA operations team has successfully negotiated access for non-ADSB gliders above FL280 within the Snowy Mountains High Altitude Soaring Area. This will allow members with suitably equipped aircraft to make an attempt on the Australian Altitude Record that has stood for 19 years.

For those who require it, we can provide electronic airspace files for the Snowy Mountains High Altitude Soaring Area for both SeeYou and XCSoar.

Pilots interested in attending are requested to register their interest with Wave Camp Coordinator Stuart Ferguson sdf01@bigpond.com or 0419 797508 who can add you to the Wave Camp Email Group where you will be kept updated. Club House accommodation bookings are essential with limited spaces available. Wave Camp briefing material is available on the club web site

www.canberragliding.org

Follow the tabs: Pilot Info to Wave Flying

SPEED WEEK 15

SpeedWeek15, to be held again at West Wyalong 1 - 7 November 2015 SpeedWeek is a regatta-based training week whose aims are two-fold. On one hand, it provides a friendly entry into competition flying for those who are interested in putting their toe in the water. On the other hand, it provides a focussed program of self-improvement directed at high levels of performance. The two go together surprisingly well, and a good level of satisfaction and success has resulted from the earlier events.

This year will be the same, hopefully with the improvements that come with experience.

Coaching presentations each morning will be followed by met, followed by collective task setting. The AAT task is flown during the afternoon, and in the evening we download the flights, appraise them, and do the scoring by the Wallington system.

SpeedWeek this year is followed by the Club Class Nationals, with a few days between them that allow for relocation. Several of our participants are using SpeedWeek as a work-up to the serious contest.

Whatever your level of interest, we can accommodate you and we're pleased to have pilots from any state. There are limited positions available.

Contact Paul Mander, 0417 447 974

paul@mander.net.au.

WE ARE SELLING SOARING NOT 'GLIDING'

JOHN STYLES
CHAIR, DEVELOPMENT PANEL
cmd@glidingaustralia.org
www.facebook.com
theGlidingFederationofAustralia

Back in the 1930s, flying was a dream and as inaccessible as manned space flight is today, except for the very wealthy. The solution was to abandon the engine, build simple gliders ourselves and organise into clubs run by voluntary labour. It was a cheap alternative to 'real flying', in other words, flying powered planes, but it was flying. Up until the mid-eighties, gliding had the privilege of being the only affordable alternative to powered flight.

Our original justification was that of providing flying to common man in an age when nobody had money, time was an abundant resource to 'kill' to prevent boredom, and there were no feasible alternatives to gliding. So what has changed since gliding had its glorious time?

The advent of microlight aircraft, hang gliders, paragliders and so on means there are now many alternatives.

Even though the average working week has been shortened since the '30s, changes in family patterns and the economy have meant that time has become a sparse and costly resource to most of us. Why should any sane person choose to fly non-powered gliders if he/she can fly powered airplanes for less? We have lost our original reason for being. But perhaps we can find ways of justifying our sport other than as a cheap flight substitute.

However many still people think that if we could make gliding just a little bit cheaper than many more people would flock to our gates. But is that true? It like a business continuously reducing its prices in the vain hope of retaining or even increasing sales but it does not happen because by focussing in reducing your price you also reduce your service and the quality of your product. It is that old oxymoron of lowest prices and highest quality. In club terms it mean gliders, tow planes, winch and so on, get old and tired. Because income doesn't allow for upgrading, the club eventually dies.

Behind many proposals for solutions you will find that the real drive is the wish to preserve gliding culture, clubs and the traditions and values within, as they exist today. However, we can preserve that and also open ourselves to new ideas and techniques - in other words, make some changes - so that we remain relevant in the 21st century.

Many people are afraid of change, but change is here to stay. Across our lives, change will be even greater in the coming years as technology and globalisation take control in ways we cannot conceive of. Without reinvention, you are doomed to the scrapheap.

So we need to forget about selling gliding as a cheap alternative to so called 'real' powered flying and start selling soaring as an end in itself.

Soaring is an exciting sport in its own right, not just a poor man's way to fly. It embraces high technology and nature to produce an exciting adventure, a combination of science and nature.

So we have to think about how we sell our sport and who we sell it too.

So who are the people we should try to attract and please? The rich, the technically minded, the poor, the adventurous, females, teenagers, empty nesters?

Who should we consult when trying to figure out how gliding could be adapted to life in 2015 and beyond? That tribe of elderly male members among us with the most experience in running gliding clubs? Young people looking for something new in their life? Or even the members who dropped out?

One thing is certain. Those close to the centre, who have been there many years, are often the least able to 'see the wood for the trees'. That is, they are so set in their ways that no matter what, they are unable to visualise a different view and what it might bring.

Another thing is also certain. If we do nothing, nothing will happen. So put your fear aside and plan to invest in the future.

But how? Well, first you have to decide you want to do this and are committed to change and are willing to do the work required. Without this commitment, you and your club are wasting everybody's time and will not succeed.

What really counts, however, is not how many people we manage to get into an introductory gliding flight, but how many people will become glider pilots. For the sustained development of our sport, what ultimately matters is also how many of these pilots will continue to engage with gliding and become active members of our community over the coming years.

The moment a person new to gliding arrives at the airfield for the first time is when the real work begins. Whatever strategies we have and policies that we implement, it is the experience this person will have that day and for the next couple of months and through the years to come that will define the success or failure of our development efforts.

As a sport, we have to prepare well for this and we have to make sure our initiatives reach the people on the flightline and hanging around the pie cart where this is all taking place.

Therefore, it is not just about increasing our membership but increasing the number of people we are able to retain. Think about how many people have passed through your club. How many only stayed for a year or less? Ask yourself why. Ask your committee why and what they have and are doing to address this.

I suspect most club committees, though well intentioned, actually do nothing. In reality, club committees are kept busy just fixing the immediate issues.

So what can a club do? First, you need to identify within your membership, or your member's partners or offspring, someone who can start to work on club development. That person does not need to be on the committee. In fact, if they are not on the committee they can concentrate on their task without all the distraction the committee creates. So start looking now.

In previous articles, I have listed a number of relatively simple tasks that can be done to improve your club's ability to attract and retain members. Has your club done any of these yet?

In the coming months the GFA will be unveiling a series of initiatives to enable clubs to increase and retain membership. Of course, this will only be successful if each club and each state association commit to success. Without you, we will not succeed.

GA

MEET THE SECRETARIAT

CAROL BARAN

I have been working for GFA for three years. My role is bookkeeper for the GFA. This involves maintaining the accounts, finances, payroll and related work. I work closely with the treasurer and currently we are busy preparing for the annual audit at the end of April. I work on Tuesday and Wednesday from 9am to 1.30pm. At audit time you will find me in the office more often. I have been a bookkeeper for over 20 years, working in engineering and manufacturing firms with a large employee base. I have never flown in a glider - I'm not sure about this - but my dream is to go ballooning in the future.

FIONA NORTHEY

Hi everyone. I have been with the GFA since April 2014. Before this, I worked in Early Childhood Intervention for eight years.

My position with the GFA is to organise travel and meetings arrangements for the Executive, Board and employees, as well as Airworthiness.

We are currently busy scanning documents and asking members for copies of their documentation and/or qualifications so these can be added to your membership in the database. This will ensure in the future that all information is kept in one place.

I am currently employed Tuesday, Wednesday and Thursday from 9am to 3pm.

CATHY CASSAR

I have been at the GFA since June last year when Sharon Dew started her maternity leave. My role is mainly looking after all aspects of memberships and sales as well as advertising of gliders in Gliding Australia magazine.

I have previously worked in a similar role in memberships for the Safety Institute of Australia for two years, as well as various other administration roles in higher education. What I love about this role is the variety in what we do and working as part of a small close knit team - and of course, our members!

TANYA LORIOT

I have been working with the GFA for 12 years starting in 2003 as a casual. Then I became permanent part time staff, and now work full time Monday to Friday.

My main role is glider registration and I am a CASA Delegate to perform this function. My other role is membership. When you call the office you will talk to me about glider registration and some functions of membership. I have recently started to send out membership cards in the new format, which has been extremely well received.

My work history is mainly administration and I have worked in various roles at Dimmey's Model Stores, Castlemaine Bacon and International Public Relations. I left the last employment to be a Mum to my two children. One day I was standing in my children's school office and by chance heard about a job advertised at Essendon Airport. I applied and the rest is history! I enjoy working closely with the GFA members and have made some great friends.

AIRWORTHINESS DIRECTIVE

SZD-50-3 'Puchacz' sailplanes
Effective Date: 30 March 2015

Flight Controls – Rudder Control Cable Fitting – Inspection / Reinforcement

An occurrence was reported involving a SZD-50-3 'Puchacz' sailplane, where a rudder cable fitting block, located in the forward part of the fuselage, detached after application of a high load on the steering pedal during spin recovery operation. Subsequent investigations determined that the failure was either caused by a manufacturing deficiency or originated by a crack. This condition, if not detected and corrected, could lead to further cases of rudder cable fitting block detachment, resulting in reduced control of the sailplane.

To address this unsafe condition, Allstar PZL issued Service Bulletin (SB) No. BE-063/SZD-50-3/2014, to provide inspection and reinforcement instructions.

For the reasons described above, this AD requires accomplishment of a onetime inspection of both (right hand (RH) and left hand (LH)) rudder cable fitting blocks to verify proper attachment to the fuselage shell and, depending on finding(s), a repair. This AD also requires reinforcement of the affected structural area.

Required as indicated, unless accomplished previously:

(1) Within 30 days after the effective date of this AD, inspect the area around both (RH and LH) rudder cable fitting blocks in accordance with the instructions of Allstar PZL SB No. BE-063/SZD-50-3/2014.

(2) If, during the inspection as required by paragraph (1) of this AD, any crack or fitting block detachment is detected, before next flight, repair and reinforce the attachment of both (RH and LH) rudder cable fitting blocks in accordance with the instructions of Allstar PZL SB No. BE-063/SZD-50-3/2014.

(3) Unless accomplished as required by paragraph (2) of this AD, within 12 months after the effective date of this AD, reinforce the attachment of both (RH and LH) rudder cable fitting blocks in accordance with the instructions of Allstar PZL SB No. BE-063/SZD-50-3/2014.

(4) Sailplanes modified, before the effective date of this AD, in accordance with former German Democratic Republic Änderungsanweisung No. SZD- 50-3/3 are compliant with the requirements of this AD.

Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. Allstar PZL Glider Sp. z o.o., ul. Cieszy-ska 325, 43-300 Bielsko-Biała / Poland. Telephone / Fax: +48 33 812 50 26, E-mail: techsupport@szd.com.pl.

RECORDS 2014-15 SEASON

LONGEST AUSTRALIAN DISTANCE FLOWN

This season brought a smaller crop of records than last year, but hit the highlights in different ways. **David Jansen's** extraordinary flight on 2 January 2015 stands as the longest distance ever flown in Australia, with a Free 3TP Distance of 1,532 Km, exceeding Chris Woolley's Goal Distance and 3 TP Distance records by 70 km, his Free Distance by 112 km, and his Free 3 TP Distance by 241 km. David had an OLC distance of 1582 Km. He broke eight Australian records in 18m and Open Class, and claims one continental record.

David has written a full account of the flight which has been published in GA issue 23. Such a flight requires great determination, planning and waiting for the day of days, and launching very early. He dealt with the bad weather at Goondiwindi not by abandoning the flight, but by turning it to his advantage with a fast run along the front, taking him quite far to the west where his new track kept him clear of the bad weather extending from Goondiwindi to Narromine. Cloud base was up to 15,000ft on this leg, and then largely blued out towards the end. He completed the scoring distance 52 minutes before last light, indicating that there is still room for an even greater flight in the future!

1,096KM TRIANGLE

On the same day, **Peter Temple** flew a 1,096km triangle from Waikerie, mostly 10-12,000ft in blue conditions, claiming three Australian and one continental record. His highest climb was to 15,000ft. The South Australian summer heat brought bush fires that nearly burned his house down next day.

David Jansen had started the record season off on 20 December 2014 with a 750km triangle from Kingaroy, at 136.63kph for the Australian 18m speed record.

Marta Nadjfeld flew a 500km triangle from Waikerie on 6 January 2015 at 127.16kph, getting to 9,000ft, and claiming two Polish National Records. All the above flights were in 18m ASG29 gliders.

TOP LEFT: David Jansen
BOTTOM LEFT: Peter Temple
BELOW: Gerrit Kurstjens and Pam Kurstjens-Hawkins

OPEN CLASS

Gerrit and Pam Kurstjens were at Narromine in early February 2015, and on 4 February Gerrit flew a 1,063km Out and Return to the north west, turning at Cunnamulla, with most climbs to 8,000ft, and a couple of late climbs to 10,000ft, having a difficult run on the way home as it blued out on track. He claimed two Australian and two continental records in the 23m Quintus M. Pam picked a TP 70km further east, banking on running home east of track to stay with the forecast cumulus, launching an hour later on a 904km out and return, claiming two Australian Feminine Open Class records and one continental record in the 21m ASH31mi.

On 7 February, Peter Temple flew a 1,039km Out and Return from Gawler at 135.58kph in the ASG29/18m, claiming two Australian 18m Records.

On 9 February, Pam flew a 500km out and return from Narromine at 145.21 kph for another Australian Feminine Open Class Record, while Gerrit declared a 750km triangle which didn't work out. There were plenty more good flights posted to the OLC throughout February, but the record season was over until next year.

The full list of Records flown by Australians in Australia and Overseas can be found on the GFA website. For continental records, go the IGC website where you can download a table of minimum performances, but beware this table may contain errors and may not be up to date. Be sure to cross check pending and ratified continental records in the Oceania region on the Records search page.

PAM KURSTJENS
RECORDS OFFICER, GFA
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AUSTRALIAN RECORDS FLOWN IN AUSTRALIA

OPEN CLASS

FREE DISTANCE	D.G.JANSEN	02/01/15	ASG29E	1308.12KM
FREE OUT AND RETURN DIST	GERRIT KURSTJENS	4/2/2015	QUINTUS M	1,063.12KM
FREE THREE TURN POINT DIST	D.G.JANSEN	02/01/15	ASG29E	1532.61 KM
FREE TRIANGLE DISTANCE	PETER TEMPLE	2/1/2015	ASG29/18M	1,095.78KM
STRAIGHT DISTANCE TO A GOAL	D.G.JANSEN	02/01/15	ASG29E	1252.91 KM
THREE TURN POINT DISTANCE	D.G.JANSEN	02/01/15	ASG29E	1342.90 KM
OUT AND RETURN DISTANCE	GERRIT KURSTJENS	4/2/2015	QUINTUS M	1,054.91KM
TRIANGLE DISTANCE	G KURSTJENS	6/2/07	NIMBUS 4T	1132.70 KM
SPEED OUT & RETURN 300KM	J. BUCHANAN	4/2/07	VENTUS 2CX	67.23KM/H
SPEED OUT & RETURN 500KM	J BUCHANAN	5/1/13	ASG29/15M	161.79KM/H
SPEED OUT & RETURN 750KM	J BUCHANAN	5/1/13	ASG29/15M	161.79 KM/H
SPEED OUT & RETURN 1000KM	J. BUCHANAN	7/1/03	ASW22 BLE	138.70 KM/H
SPEED TRIANGULAR 100KM	I. RENNER	14/12/82	NIMBUS 3	195.3 KM/H
SPEED TRIANGULAR 200KM	I. RENNER	13/11/82	NIMBUS 3	162.30 KM/H
SPEED TRIANGULAR 300KM	N BLOCH	10/03/12	ASW 24E	158.26 KM/H
SPEED TRIANGULAR 500KM	G.KURSTJENS	28/1/06	NIMBUS 4T	156.85 KM/H
SPEED TRIANGULAR 750KM	J. BUCHANAN	17/12/03	ASW22 BLE	152.13 KM/H
SPEED TRIANGULAR 1000KM	D.G JANSEN	18/10/09	ASG29	134.99 KM/H
ABSOLUTE ALTITUDE	R.Q. AGNEW	26/8/95	STD JANTAR	10058 M
GAIN OF HEIGHT	L. ARMOUR	7/7/87	ASTIR CS	7750 M

15M CLASS

FREE DISTANCE	H.N. MEDLICOTT	9/12/91	DISCUS A	1004.55 KM
FREE OUT AND RETURN DISTANCE		MIN 1ST CLAIM		1015.16 KM
FREE THREE TURN POINT DISTANCE		MIN 1ST CLAIM		1063.70 KM
FREE TRIANGLE DISTANCE		MIN 1ST CLAIM		1063.70 KM
STRAIGHT DISTANCE TO A GOAL	H.N. MEDLICOTT	9/12/91	DISCUS A	1004.55 KM
THREE TURN POINT DISTANCE		MIN 1ST CLAIM		1063.70 KM
GERRIT	KURSTJENS	4/2/2015	QUINTUS M	1,054.91 KM
TRIANGLE DISTANCE	R.B. TUNCKS	7/2/82	MOSQUITO	1063.70 KM
SPEED OUT & RETURN 300KM	J BUCHANAN	5/1/13	ASG29/15M	161.79 KM/H
SPEED OUT & RETURN 500KM	J BUCHANAN	5/1/13	ASG29/15M	161.79 KM/H
SPEED OUT & RETURN 750KM	J BUCHANAN	5/1/13	ASG29/15M	161.79 KM/H
SPEED OUT & RETURN 1000KM	P TEMPLE	9/12/06	DG 200	117.6 KM/H
SPEED TRIANGULAR 100KM	N BLOCH	10/03/12	ASW 24E	158.26 KM/H
SPEED TRIANGULAR 200KM	N BLOCH	10/03/12	ASW 24E	158.26 KM/H
SPEED TRIANGULAR 300KM	N BLOCH	10/03/12	ASW 24E	158.26 KM/H
SPEED TRIANGULAR 500KM	M.P. MANDER	12/12/87	ASW 20B	143.73 KM/H
SPEED TRIANGULAR 750KM	D.G. JANSEN	31/12/98	LS 6B	133.66 KM/H
SPEED TRIANGULAR 1000KM	G. BEECROFT	14/12/13	LS8/15M	120.74KM/H

18M CLASS

FREE DISTANCE	D.G.JANSEN	02/01/15	ASG29E	1308.12 KM
FREE OUT AND RETURN DIST	PETER TEMPLE	7/2/2015	ASG29/18M	1039.44 KM

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FREE THREE TURN POINT DIST	D.G.JANSEN	02/01/15	ASG29E	1532.61 KM
FREE TRIANGLE DISTANCE	PETER TEMPLE	2/1/2015	ASG29/18M	1,095.78 KM
STRAIGHT DISTANCE TO GOAL	D.G.JANSEN	02/01/15	ASG29E	1252.91 KM
THREE TURN POINT DISTANCE	D.G.JANSEN	02/01/15	ASG29E	1342.90 KM
OUT AND RETURN DISTANCE	PETER TEMPLE	7/2/2015	ASG29/18M	1032.02 KM
TRIANGLE DISTANCE	PETER TEMPLE	2/1/2015	ASG29/18M	1,074.51 KM
SPEED OUT & RETURN 300KM	J.BUCHANAN	4/2/07	VENTUS 2CX	167.23 KM/H
SPEED OUT & RETURN 500KM	J BUCHANAN	5/1/13	ASG29/15M	161.79 KM/H
SPEED OUT & RETURN 750KM	J BUCHANAN	5/1/13	ASG29/15M	161.79 KM/H
SPEED OUT & RETURN 1000KM	P TEMPLE	7/2/2015	ASG29/18M	135.58 KPH
SPEED TRIANGULAR 100KM	N BLOCH	10/03/12	ASW 24E	158.26 KM/H
SPEED TRIANGULAR 200KM	N BLOCH	10/03/12	ASW 24E	158.26 KM/H
SPEED TRIANGULAR 300KM	N BLOCH	10/03/12	ASW 24E	158.26 KM/H
SPEED TRIANGULAR 500KM	J.BUCHANAN	28/1/06	VENTUS 2CX	152.17 KM/H
SPEED TRIANGULAR 750KM	D.G. JANSEN	20/12/14	ASG29	136.63 KPH
SPEED TRIANGULAR 1000KM	D.G. JANSEN	18/10/09	ASG29	134.99 KM/H

STANDARD CLASS

FREE DISTANCE	H.N. MEDLICOTT	9/12/91	DISCUS A	1004.55 KM
FREE OUT AND RETURN DIST	MIN 1ST CLAIM			1000.86 KM
FREE THREE TURN POINT DIST	M GAGE	16/01/14	LS8/15M	1060.76 KM
FREE TRIANGLE DISTANCE	M GAGE	16/01/14	LS8/15M	1048.54 KM
STRAIGHT DISTANCE TO A GOAL	H.N. MEDLICOTT	9/12/91	DISCUS A	1004.55 KM
THREE TURN POINT DISTANCE	L TROTTER	20/12/13	LS8/15M	1026.78 KM
OUT AND RETURN DISTANCE	MIN 1ST CLAIM			1000.86 KM
TRIANGLE DISTANCE	L TROTTER	20/12/13	LS8/15M	1026.78 KM
SPEED OUT & RETURN 300KM	G BEECROFT	3/12/11	LS8	148.72 KM/H
SPEED OUT & RETURN 500KM	G BEECROFT	3/12/11	LS8	148.72 KM/H
SPEED OUT & RETURN 750KM	P. TEMPLE	17/01/14	LS8/15M	145.05 KM/H
SPEED TRIANGULAR 100KM	N BLOCH	10/03/12	ASW 24E	158.26 KM/H
SPEED TRIANGULAR 200KM	N BLOCH	10/03/12	ASW 24E	158.26 KM/H
SPEED TRIANGULAR 300KM	N BLOCH	10/03/12	ASW 24E	158.26 KM/H
SPEED TRIANGULAR 500KM	N. BLOCH	3/12/11	ASW24E	138.22 KM/H
SPEED TRIANGULAR 750KM	A BARNES	8/02/2014	LS8/15M	134.01 KM/H
SPEED TRIANGULAR 750KM	M GAGE	8/02/2014	LS8/15M	134.01 KM/H
SPEED TRIANGULAR 1000KM	G. BEECROFT	14/12/13	LS8/15M	120.74 KM/H

WORLD CLASS

FREE OUT AND RETURN DIST	K. WILLIS	31/12/07	PW-5	507.00 KM
FREE THREE TURN POINT DIST	K. WILLIS	11/12/98	PW-5	513.25 KM
FREE TRIANGLE DISTANCE	MIN 1ST CLAIM			513.25 K
THREE TURN POINT DISTANCE	MIN 1ST CLAIM			513.25 KM
OUT AND RETURN DISTANCE	K. WILLIS	21/12/07	PW-5	507.00 KM
TRIANGLE DISTANCE	K. WILLIS	11/12/98	PW-5	513.25 KM
SPEED OUT & RETURN 300KM	K. WILLIS	08/03/01	PW-5	75.59 KM/H
SPEED OUT & RETURN 500KM	K. WILLIS	31/12/07	PW-5	74.92 KM/H
SPEED TRIANGULAR 100KM	K. WILLIS	16/04/13	PW-5	73.49 KM/H
SPEED TRIANGULAR 200KM	K.WILLIS	16/04/13	PW-5	73.49 KM/H
SPEED TRIANGULAR 300KM	K. WILLIS	07/03/01	PW-5	86.02 KPH
SPEED TRIANGULAR 500KM	K. WILLIS	11/12/98	PW-5	76.42 KPH

20M 2 SEATER CLASS

SPEED OUT & RETURN 300KM	H.& W. MEDLICOTT	27/12/13	ARCUS M	136.35 KMH
SPEED TRIANGULAR 300KM	H.& W. MEDLICOTT	16/01/14	ARCUS M	140.77 KMH

AUSTRALIAN FEMININE RECORDS

OPEN CLASS

FREE OUT & RETURN DISTANCE	PAM KURSTJENS-HAWKINS	4/2/2015	ASH31MI	918.47 KM
FREE DISTANCE	K.E. KAREL	21/1/80	LS 3	949.70 KM
FREE OUT AND RETURN DISTANCE	L. TROTTER	17/1/99	ASW 20	792.6 KM
FREE THREE TURN POINT DISTANCE	P. KURSTJENS-HAWINS	6/2/07	NIMBUS-4T	1045.2 KM
FREE TRIANGLE DISTANCE	L TROTTER	20/12/13	LS8/15M	1027.66 KM
STRAIGHT DISTANCE TO A GOAL	J. HIDER-SMITH	26/1/92	DISCUS A	806.21 KM
THREE TURN POINT DISTANCE	L TROTTER	20/12/13	LS8/15M	1026.78 KM
OUT AND RETURN DISTANCE	PAM KURSTJENS-HAWKINS	4/2/2015	ASH31MI	904.04 KM
TRIANGLE DISTANCE	L TROTTER	12/20/2013	LS8/15M	1026.78 KM/H
SPEED OUT & RETURN 300KM	LISA TROTTER	11/1/07	LS8	138.38 KM
SPEED OUT & RETURN 500KM	PAM KURSTJENS-HAWKINS	9/2/2015	ASH31MI	145.21 KPH
SPEED OUT & RETURN 750KM	K.A. CLAFFEY	26/11/03	DISCUS B	100.13 KM/H
SPEED TRIANGULAR 100KM	S.D. MARTIN	2/2/79	LS 3	139.45 KM/H
SPEED TRIANGULAR 200KM	L. TROTTER	10/01/14	LS8/15M	132.01 KM/H
SPEED TRIANGULAR 300KM	JENNY THOMPSON	26/11/12	ASW27B	144.34 KM/H
SPEED TRIANGULAR 500KM	S.D. MARTIN	29/1/79	VENTUS A	133.14 KM/H
SPEED TRIANGULAR 750KM	P. KURSTJENS-HAWINS	26/11/06	NIMBUS 4T	146.31 KM/H
SPEED TRIANGULAR 1000KM	L TROTTER	20/12/13		102.73KM/H
ABSOLUTE ALTITUDE	V.A. WILKINSON	29/6/80	LIBELLE 201B	8175 M
GAIN OF HEIGHT	V.A. WILKINSON	29/6/80	LIBELLE 201B	5890 M

15 METRE

FREE DISTANCE	K.E. KAREL	21/1/80	LS 3	949.70 KM
FREE OUT AND RETURN DISTANCE	L. TROTTER	17/1/99	ASW 20	792.6 KM
FREE THREE TURN POINT DISTANCE	L TROTTER	20/12/13	LS8/15M	1036.01 KM
FREE TRIANGLE DISTANCE	L TROTTER	20/12/13	LS8/15M	1027.66 KM
STRAIGHT DISTANCE TO A GOAL	J. HIDER-SMITH	26/1/92	DISCUS A	806.21 KM
THREE TURN POINT DISTANCE	L TROTTER	0/12/13	LS8/15M	1026.78 KM
OUT AND RETURN DISTANCE	K.A. CLAFFEY	26/11/03	DISCUS B	771.70 KM
TRIANGLE DISTANCE	L TROTTER	20/12/13	LS8/15M	1026.78 KM
SPEED OUT & RETURN 300KM	LISA TROTTER	11/1/07	LS8	138.38 KM/H

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SPEED OUT & RETURN 500KM	J. THOMPSON	4/2/07	ASW 27	133.97 KM/H
SPEED OUT & RETURN 750KM	K.A. CLAFFEY	26/11/03	DISCUS B	100.13 KM/H
SPEED TRIANGULAR 100KM	S.D. MARTIN	2/2/79	LS 3	139.45 KM/H
SPEED TRIANGULAR 200KM	L TROTTER	10/01/14	LS8/15M	132.01 KM/H
SPEED TRIANGULAR 300KM	JENNY THOMPSON	26/11/12	ASW27B	144.34 KM/H
SPEED TRIANGULAR 500KM	S.D. MARTIN	29/1/79	VENTUS A	133.14 KM/H
SPEED TRIANGULAR 750KM	K.A. CLAFFEY	26/1/02	DISCUS B	100.40 KM/H

STANDARD CLASS

FREE DISTANCE	J. HIDER-SMITH	26/1/92	DISCUS A	806.21 KM
FREE OUT AND RETURN DISTANCE	K.A. CLAFFEY	26/11/03	DISCUS B	774.70 KM
FREE THREE TURN POINT DISTANCE	L TROTTER	20/12/13	LS8/15M	1036.01 KM
FREE TRIANGLE DISTANCE	L. TROTTER	20/12/13	LS8/15M	1027.66 KM
STRAIGHT DISTANCE TO A GOAL	J. HIDER-SMITH	26/1/92	DISCUS A	806.21 KM
THREE TURN POINT DISTANCE	L TROTTER	20/12/13	LS8/15M	1026.78 KM
OUT AND RETURN DISTANCE	K.A. CLAFFEY	26/11/03	DISCUS B	771.70 KM
TRIANGLE DISTANCE	L TROTTER	20/12/13	LS8/15M	1026.78 KM
SPEED OUT & RETURN 300KM	L TROTTER	11/1/07	LS8	138.38 KM/H
SPEED OUT & RETURN 500KM	J DAVIS	1/1/12	ASW 19B	122.15 KM/H
SPEED OUT & RETURN 750KM	K.A. CLAFFEY	26/11/03	DISCUS B	100.13 KM/H
SPEED TRIANGULAR 100KM	L TROTTER	10/01/14	LS8/15M	132.01 KM/H
SPEED TRIANGULAR 200KM	L TROTTER	10/01/14	LS8/15M	132.01 KM/H
SPEED TRIANGULAR 300KM	J. RENNER	6/1/99	DISCUS A	141.03 KM/H
SPEED TRIANGULAR 500KM	L TROTTER	10/01/14	LS8/15M	132.01 KM/H
SPEED TRIANGULAR 750KM	K.A. CLAFFEY	26/1/02	DISCUS B	100.40 KM/H
SPEED TRIANGULAR 1000KM	L TROTTER	20/12/13	LS8/15M	102.73 KM/H

18M CLASS

FREE THREE TURN POINT DISTANCE	L TROTTER	20/12/13	LS8/15M	1036.01 KM
FREE TRIANGLE DISTANCE	L TROTTER	20/12/13	LS8/15M	1027.66 KM
THREE TURN POINT DISTANCE	L TROTTER	20/12/13	LS8/15M	1026.78 KM
TRIANGLE DISTANCE	L TROTTER	20/12/13	LS8/15M	1026.78 KM
SPEED OUT & RETURN 300KM	L. TROTTER	11/1/07	LS8	138.38 KM/H
SPEED OUT & RETURN 500KM	J. THOMPSON	4/2/07	ASW 27	133.97 KM/H
SPEED TRIANGULAR 200KM	L TROTTER	10/01/14	LS8/15M	132.01 KM/H
SPEED TRIANGULAR 300KM	J THOMPSON	26/11/12	ASW 27B	144.34 KM/H
SPEED TRIANGULAR 1000KM	L TROTTER	20/12/13	LS8/15M	102.73 KM/H

WORLD CLASS

FREE OUT AND RETURN DISTANCE	K.A. CLAFFEY	13/07/00	PW-5	507.97 KM
FREE THREE TURN POINT DISTANCE	K.A. CLAFFEY	13/07/00	PW-5	517.38 KM
OUT AND RETURN DISTANCE	K.A. CLAFFEY	13/07/00	PW-5	503.22 KM
SPEED OUT & RETURN 500KM	K.A. CLAFFEY	13/07/00	PW-5	68.82 KPH

AUSTRALIAN NATIONAL RECORDS FLOWN BY AUSTRALIANS OVERSEAS

OPEN CLASS

FREE 3 TP DISTANCE	D G JANSEN	19/12/2006	DG400	1160.92 KM	ARGENTINA
SPEED O/R 300KM	D G JANSEN	11/04/1991	ASW20B	209.90 KPH	USA
SPEED O/R 500KM	R Q AGNEW	3/12/2005	STD JANTAR	162.56 KPH	ARGENTINA
SPEED TRIANGULAR 100KM	R Q AGNEW	13/11/2003	STD JANTAR	198.88 KPH	ARGENTINA
SPEED TRIANGULAR 200KM	R Q AGNEW	21/11/2005	STD JANTAR	167.37 KPH	ARGENTINA

18M CLASS

FREE 3 TP DISTANCE	D G JANSEN	19/12/2006	DG400	1160.92	ARGENTINA
SPEED O/R 500KM	R Q AGNEW	3/12/2005	STD JANTAR	162.56 KPH	ARGENTINA
SPEED TRIANGULAR 200KM	R Q AGNEW	21/11/2005	STD JANTAR	167.37 KPH	ARGENTINA

15M CLASS

FREE 3 TP DISTANCE	D G JANSEN	19/12/2006	DG400	1160.92 KM	ARGENTINA
SPEED O/R 300KM	D G JANSEN	11/04/1991	ASW20B	209.90 KPH	USA
SPEED O/R 500KM	R Q AGNEW	3/12/2005	STD JANTAR	162.56 KPH	ARGENTINA
SPEED TRIANGULAR 100KM	R Q AGNEW	13/11/2003	STD JANTAR	198.88 KPH	ARGENTINA
SPEED TRIANGULAR 200KM	R Q AGNEW	21/11/2005	STD JANTAR	167.37 KPH	ARGENTINA

STD CLASS

O/R DISTANCE `	G J VAKKUR	8/04/1977	ASTIR CS	1000.86 KM	USA
SPEED O/R 300KM	R Q AGNEW	14/11/2003	STD JANTAR	157.23 KPH	ARGENTINA
SPEED O/R 500KM	R Q AGNEW	3/12/2005	STD JANTAR	162.56 KPH	ARGENTINA
SPEED TRIANGULAR 100KM	R Q AGNEW	13/11/2003	STD JANTAR	198.88 KPH	ARGENTINA
SPEED TRIANGULAR 200KM	R Q AGNEW	21/11/2005	STD JANTAR	167.37 KPH	ARGENTINA

WORLD CLASS

FREE O/R DISTANCE	K A CLAFFEY	13/07/2000	PW-5	507.97 KM	USA
O/R DISTANCE	K A CLAFFEY	13/07/2000	PW-5	503.22 KM	USA
SPEED O/R 500KM	K A CLAFFEY	13/07/2000	PW-5	68.82 KPH	USA

AUSTRALIAN RECORDS FLOWN OVERSEAS-FEMININE

WORLD CLASS

FREE O/R DISTANCE	K A CLAFFEY	13/07/2000	PW-5	507.97 KM	USA
O/R DISTANCE	K A CLAFFEY	13/07/2000	PW-5	507.97 KM	USA
SPEED O/R 500KM	K A CLAFFEY	13/07/2000	PW-5	507.97 KM	USA

These pages list records that have been flown. Many many records have yet to be achieved. Find a complete list of all records flown and unclaimed records with minimum 1st claim requirements where applicable, on the GFA website.

Links to the Records pages are located here:
www.glidingaustralia.org/GFA-Sport/records-australia.html

Direct link to Australian Records:
www.glidingaustralia.org/GFA-Sport/records-australia.html

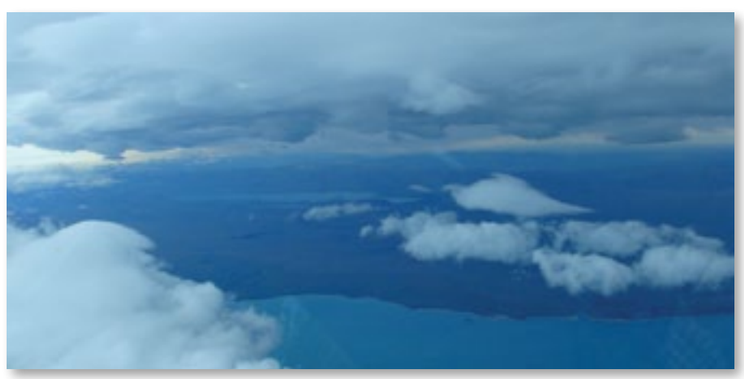
Direct link to Australian Feminine Records:
www.glidingaustralia.org/GFA-Sport/records-feminine.html

THE RELUCTANT 1000KMS
TWICE IN TWO WEEKS

BY GEORGE MARBOT

For over 15 years, I have visited Omarama in New Zealand on a regular basis, mostly in November and December. I have travelled there on my own for many years, but in the last few years a friend of mine has shared some of the costs, in particular the towing, which can be quite expensive. We sometimes hire the Club Duo Discus together, a fantastic machine for the mountains that handles nearly like a single seater. We greatly enjoyed flying the wave, thermal or ridge conditions, alternating flying with taking photos.

If the weather is lousy or the Pinot Noir left some residue behind, we might go fishing instead, a fanatical outdoor activity in the NZ scenery. In the evening we have dinner in different people's chalets or at the pub, or go to a barbeque on mild evenings. In December the sun goes down well after 9pm and there is great camaraderie. The next day, we see how the weather is and have great faith in Lenny Tanner the weather man. By 10 in the morning we have a good idea of what we should do. As members of the local club, we arrange to leave the Duo Discus to the other club members at the weekend, who cannot fly on week days.



Now you may ask, what does this have to do with the title of this article? Quite a bit - in the past, the club had two single seaters and the Duo. However, one of the single eaters, an LS6, has been sold and the single seater Discus was blown away and was a write-off.

So, at this time, the only club glider available was the Duo. Prior to finalising my plans for NZ, advice came from my colleague that he couldn't make it this year due to family commitments, so it left me in a quandary as to whether I should go or not.

In the end I decided to go anyhow. I arrived in November and during the first week it rained with very strong easterly winds. Also, it is hard to handle a two seater on your own. I had one flight in the Duo during the week and then came the weekend. Guess what the weather forecast was on Saturday? A fantastic wave day and me without a glider.

WAVE DAY WITH NO GLIDER

The Duo was booked for the weekend and I was sitting on the ground with a sky filled with lenticulars. After briefing I went to help my club colleague get the Duo ready for his flight. I was cranky as hell at not be able to fly. I returned to my cabin, got the fishing gear together and packed the car for a day on the river.

Ring, ring goes my mobile. "George, would you like to fly today?" I was asked. "Yes" was my prompt answer. "Would you like to fly in an Arcus?" My brain made a somersault and I answered, "Naturally." "But you have to be ready in 5 minutes." Not since my Army days have I got my gear together in such a short time.

There in front of the hangar stood the Arcus in all its glory with Keith Essex, the pilot, ready to tow out for launch. My club colleague advised that the flight might be a little bit long. Thinking of three or four hours, I had no problem.

We took off 20 minutes later. I had a warm jacket, just normal socks, water bottle, some dried apricots for snacks and off we went.

ARCUS

I had never flown in an Arcus before, but heard a lot on my recent visit to Switzerland where the machine was highly praised. Seated behind Keith, the pilot in command, I was very comfortable. We climbed away from Mount Horrible next to Omarama and headed out towards Omarma Saddle. It was a steady climb, with some rotor, which was hardly noticeable in the Arcus.

We climbed over 'Hugo's elevator' and tracked south. Soon we needed clearance from Queenstown Tower for the Dunstan Wave and got clearance without problem to Flight Level 17, past Cromwell, Alexandria, and then near Waikata we turned north again, mainly because the system weakened. Near the Dunstan Range we got down to about 10,000ft. We asked for another clearance and climbed back up to 15,000ft in the Dunstan wave, which now was working very well. About 50kms further south, Queenstown advised that we could climb to 22,000ft, but it was a little bit late.

We were now heading towards the Ahuriri valley and Ben Oahu. From past experience I advised Keith to head towards Lake Pukaki wave. We climbed steadily to 20,000ft and reached the Tasman glacier near Mt Cook. At the Christchurch airspace limit we turned around and flew back where we had come from. Keith advised me that we had reached about 650 or 700kms and should make 1,000km. Now he tells me! My feet are nearly frozen and a p... is absolutely necessary. So the last few apricots came out of the bag in order to use it as an urgent relief container.

We took the next stretch back to Alexandria and then back to Omarma, where we landed 7 h 53 minutes later.

The flight Statistics:
Height achieved: 20,000ft
Distance travelled: 1,111.75km
Time: 7 h 53 min
Average speed: 140.87 km

A great day after all – although I was frozen stiff, thirsty for a beer and ready for warm clothes. I slept very well that night.

10 DAYS LATER

The phone rang at 10 in the morning. "George, do wish to fly with me and try for another 1,000km?" asked Keith.

Flight details

		Distance	Triangle
Points for the flight:	1008.67	975.23	33.44
scoring distance:		1,111.8 km	127.1 km
Speed:		140.9 km/h	16.6 km/h
Duration:		07:53:32	07:38:48
Scoring class:	double		
Index:	114.0		
Club:	Minden Soaring Club		
Date of claim:	29.11.2014 08:01:39		
state:	IGC-File: V Flight: S		

Flight path

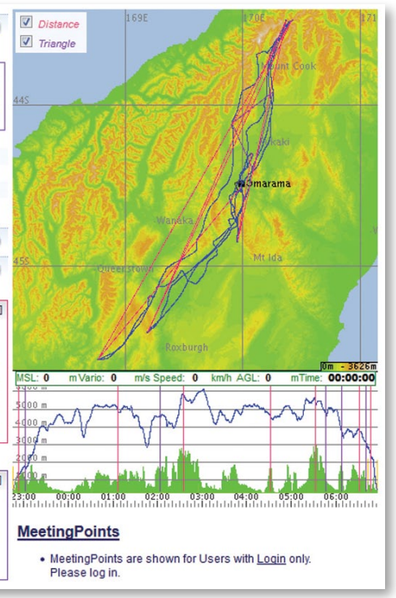
Statistics

Distance (OLC-Classic):

	s [km]	%Kurbel	NAufwinde	R/C [m/s]	E	Vs [km/h]
Leg1	152.03	5.96	5	2.28	-60.67	68.54
Leg2	268.84	4.89	3	4.25	1200.20	181.92
Leg3	236.94	0.00	0	0.00	194.69	120.99
Leg4	235.38	0.00	0	0.00	-247.24	236.69
Leg5	156.94	0.00	0	0.00	94.43	157.78
Leg6	61.62	0.00	0	0.00	46.97	247.59
Total	**1111.76**	**2.59**	**8**	**2.98**	**1161.71**	**140.87**

Triangle (FAI-OLC):

	s [km]	%Kurbel	NAufwinde	R/C [m/s]	E	Vs [km/h]
Leg1	46.89	4.31	4	3.18	-33.80	15.43
Leg2	35.63	1.08	2	3.73	79.35	9.60
Leg3	55.84	0.00	0	0.00	61.57	158.04
Leg4	19.32	0.00	0	0.00	31.56	35.68
Total	**127.1**	**2.24**	**6**	**3.31**	**271.38**	**20.62**



MeetingPoints

- MeetingPoints are shown for Users with Login only. Please log in.

"Why not!" This time I was well prepared with fresh socks, warm underwear, pee bags, snack bag, water, gloves etc.

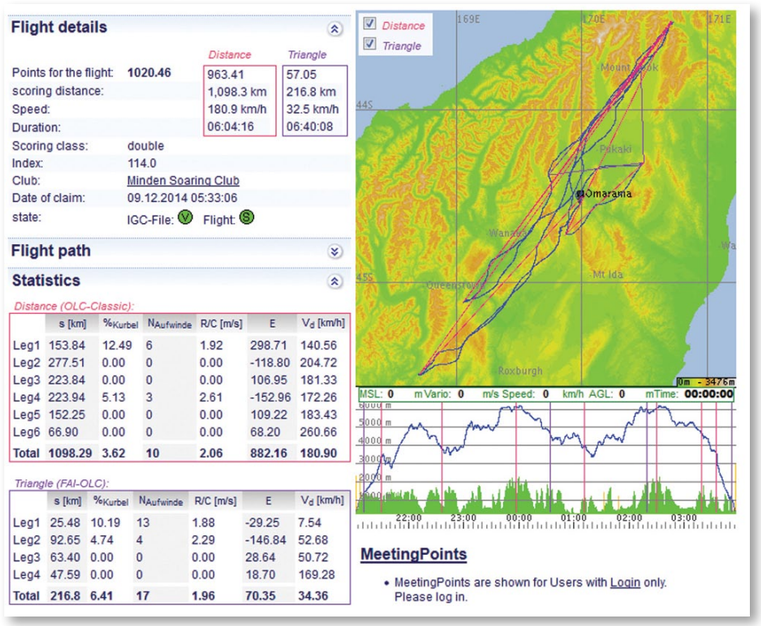
Just after 10.30 we were airborne. A thousand feet over the airfield near 'Black Rock', the air became very smooth. Keith and I said at the same time, "What is happening?" No bumps, no rotors, just smooth climbing. We were in the wave. The sky did not look very friendly but the usual trip south went uneventfully.

Near Waikata, the lenticulars closed in and were as black as night. The sea looked ominous under the clouds. Keith's intention was to head towards the sea, but we decided it was too risky. Heading back towards the Dunstans, conditions turned very weak. Over the Nevis we were down to 9,000ft. However, we had the comfort of knowing that there was an 'Iron thermal' in the fuselage. Gently we made towards the Dunstans. Near Cromwell we caught some lift again but to get up, we had to head north, way into the Queenstown airspace. I think by now the Queenstown Tower must have known us and gave us clearance to get around to the Dunstans, heading well into Queenstown airspace. Off it goes to 15,000ft plus and we tracked towards Mount Cook. This time the mountain is in the clouds, so we headed towards Tekapo and the Godley Range. Again, at the Christchurch airspace border, we turned south to complete the rest of the journey and tracked back to Alexandria.

But by now the air was filled with clouds. On the return, we had to dodge clouds to see the ground. At the St Bathans Range it was hard to see the Omarama Saddle, so the decision was taken to fly via Otematata up Lake Benmore towards Twizzle, around Mt Benmore and back up the valley towards Omarama. No problem with an Arcus. Who needs Singapore Airlines when you have a glider of this performance and comfort?

We landed around 4pm and finished the trip in 6 hours and 4 minutes.

Note: Two great flights – but would I have the tenacity to do it on my own? I do not think so. Thanks to Keith, I had some very memorable flights.



Flight details

		Distance	Triangle
Points for the flight:	1020.46	963.41	57.05
scoring distance:		1,098.3 km	216.8 km
Speed:		180.9 km/h	32.5 km/h
Duration:		06:04:16	06:40:08
Scoring class:	double		
Index:	114.0		
Club:	Minden Soaring Club		
Date of claim:	09.12.2014 05:33:06		
state:	IGC-File: V Flight: S		

Flight path

Statistics

Distance (OLC-Classic):

	s [km]	%Kurbel	NAufwinde	R/C [m/s]	E	Vd [km/h]
Leg1	153.84	12.49	6	1.92	298.71	140.56
Leg2	277.51	0.00	0	0.00	-118.80	204.72
Leg3	223.84	0.00	0	0.00	106.95	181.33
Leg4	223.94	5.13	3	2.61	-152.96	172.26
Leg5	152.25	0.00	0	0.00	109.22	183.43
Leg6	66.90	0.00	0	0.00	68.20	260.66
Total	**1098.29**	**3.62**	**10**	**2.06**	**882.16**	**180.90**

Triangle (FAI-OLC):

	s [km]	%Kurbel	NAufwinde	R/C [m/s]	E	Vd [km/h]
Leg1	25.48	10.19	13	1.88	-29.25	7.54
Leg2	92.65	4.74	4	2.29	-146.84	52.68
Leg3	63.40	0.00	0	0.00	28.64	50.72
Leg4	47.59	0.00	0	0.00	18.70	169.28
Total	**216.8**	**6.41**	**17**	**1.96**	**70.35**	**34.36**

MeetingPoints

- MeetingPoints are shown for Users with Login only. Please log in.

Statistics
Distance travelled: 1,098.30km
Time: 4 h 4 min
Average speed: 180.90 km

GA

HEARING THE RADIO IN YOUR MOTOR GLIDER

WHEN THE ENGINE IS RUNNING

BY ED MAREL

Recently I was surprised to hear a gliding colleague say that nothing would enable a pilot to hear the radio in a motor glider while the engine is running. My view is that it is incumbent upon all motor glider pilots to ensure that they have a working system which enables good radio reception during engine run.

Before I taxi, enter the runway or start my take off roll, I most certainly want to hear if people are calling me to tell me my brakes are open, or that I should see some approaching hazard, or alert me that I may be causing a conflict with other departing or arriving trafic.

HEADSETS

Active noise reduction, or noise cancellation, is electronically achieved by sampling ambient noise and producing opposing waveforms to minimize that noise. This is in contrast to passive noise reduction which just depends on blocking out noise by physical barriers such as earcups or plugs. Active noise reduction works particularly well with constant noise sources such as engines.

In the GA world active noise reduction headsets are now the standard. BOSE, Lightspeed and Sennheiser are three typical and common examples. Some glider pilots are happy to use these but because they are quite large and can be awkward in a glider, most pilots remove them for better hearing of ambient sounds, like wind noise, audio vario and so on, when the engine is not running. Some pilots place them on their headrest or even behind that in the luggage compartment when not in use.

EARPHONES

These are the small speakers that fit inside or partly inside the ear, sometimes called earbuds. These can be either passive or active.

PASSIVE NOISE REDUCTION EARPHONES

Comply www.complyfoam.com is a company that makes a good passive noise reduction earphone that work well. I can personally recommend them.

You need to compress the foam then insert it deeply into the external ear canal and hold it in while it expands, to get a good seal. The noise reduction depends on this seal.

Better yet, they make replacement noise reduction foam tips that will suit pretty much all earphones made today. This means you can just buy replacement foam tips for your favourite earphone set.

The photo below (bottom left) shows what I was using up until recently - 'sports' earphones, which I could slip out when the engine was not running. Instead, I could have them sitting loosely at the ear opening and hear all the usual background sounds, but get better radio reception than the radio speaker provides, now that my hearing is declining with age.

ACTIVE NOISE REDUCTION EARPHONES

I am currently using the BOSE QuietComfort active noise reduction earphones, I read good reports on the ASH 26E owners site, which surprised me because I had thought engine noise would just go around normal earphones. They are quite expensive, but now that I have them I think they are well worthwhile. They are more comfortable than the tight-fitting passive noise reduction earphones and work surprisingly well. They also have a great feature called 'aware mode', which in effect is like turning the noise reduction off. When the engine stops, you turn on aware mode and you can hear all available ambient sound without having to remove the earphones, keeping the benefits of better radio reception while not blocking out any other sound. These have a rechargeable battery, and I find it best to charge them each night for before long flights.

So in summary, here are several options, all of which work, and any of them will make your operation immensely safer than just relying on your aircraft radio speaker. GA

ABOVE, from the top: Active noise reduction headsets from Lightspeed, Bose and Sennheiser.

FAR LEFT: Passive Sports Earphones.

LEFT: Bose active noise reduction eaphones.

HUNTER VALLEY GLIDING CLUB RALLY

BY DAVE GOLDSMITH

Easter Friday morning was overcast with rain forecast, but the Mangrove Mountains boys rigged their club ASK-13 and surprised everyone by producing a pristine yellow two-holer canopy for its first trial. There was no shortage of volunteers. The weather conditions restricted the length of flights so many pilots enjoyed some open cockpit flying before the rain started. The canopy proved to be very popular, having little effect on soaring performance and with effective windscreens controlling the airflow. Built using the plans specified in Schleicher Technical Note number 15, the canopy was fabricated by Peter Rundle with assistance from Rob Moffat.

The weather forecast was for more rain over the weekend, so flying was curtailed until Monday brought some fine weather. Flights of over two hours were made by a number of pilots with heights over 6,000ft. However, mid-afternoon thunderstorms brought an early end to the day. The rainy weather remained for Tuesday and Wednesday. Thursday and Friday were nice days, with climbs to over 5,000ft on Thursday and over 4,000ft on Friday. However our nemesis, the rainy weather, again reared its head for the weekend, so the rally was effectively brought to a close on Friday evening.

The Hunter Valley Gliding Club are to be thanked for again running their Easter Vintage Rally, and despite the uncooperative weather this year, the pleasant temperatures, good facilities and enthusiastic people ensured a good time. Thanks especially to Paul Dickson for managing the event, and Paul and Ah-Li for providing the catering. Lyn and Warren Morrow from the Grafton Gliding Club and Arie Van Spronnsen provided much enthusiasm and support. Thanks also to the many other club members and visitors who assisted enthusiastically wherever their help was needed. The law of averages suggests that we will see great weather next year!

OPPOSITE: Cabriolet 4 - The Central Coast Club ASK-13 sporting the Cabriolet canopy.
From the Pilot's seat. The Central Coast Gliding Club ASK-13 VH-GPU now has the option of sporting its alternative canopy, an open cockpit two-holer, for those wishing to enjoy some open cockpit flying.
First flight was on the first day of the Hunter Valley Easter Vintage Rally, and pilots were queueing up to have a go. All gave it a big thumbs-up, especially one tall pilot who measures in at 6ft 7in. The Geelong Gliding Club is also planning to construct a two-holer canopy for its ASK13 VH-GPZ.

ES-56 NYMPH TO BE RESCUED

Edmund Schneider Pty Ltd constructed four ES-56 Nymph single seaters, with the first flight taking place in December 1955, almost 60 years ago. With an L:D of 25 and a wingspan of 11.9 metres the type was quite popular with pilots of the time. ES-56 Nymph VH-GHG has spent its recent years on display in the ceiling of the Bowermans Office Furniture showroom in Canterbury, Sydney. The building has been sold and is to be demolished, and a team from the central NSW coast are on a mission to rescue the glider. Plans are to assess and if possible return it to airworthy condition, or have it preserved for display.

NYMPH PHOTOS: JOHN MCCORQUODALE

NOT OUTLANDING IN A MOTORGLIDER

ABOVE: Schempp-Hirth Nimbus 4 D-KHXX by Juergen Lehle.

If you fly a self launching glider or a glider fitted with a sustainer, the chances are that you are unlikely to have to make an outlanding. Unlikely... but not impossible.

BY JOHN CLARK

THIS ARTICLE FIRST APPEARED IN THE NEWSLETTER OF LAKE KEEPIT SOARING CLUB, 'KEEP SOARING'.

The problem is that the motors fitted to gliders are far from 100% reliable. It's claimed that self launchers are more reliable, or rather less unreliable than sustainers, because the motor is commonly used for self launching so in most cases, when it is required to prevent an outlanding, it's already been run that day.

Pilots who self launch get used to engine starting procedures and although starting in-flight, especially low-down, is considerably more exciting than self-launching, the procedure is very much the same which makes things a bit less stressful.

SUSTAINERS

Sustainers, especially two stroke sustainers are not built the same way as the motors used in self launchers. They may only be run a few times a year. Motors can get cold soaked while airborne so that when you want to use them, they're at their most temperamental. There's no starter motor, so the pilot has to dive to increase speed until the motor windmills and hopefully starts. Increasing speed while aiming at the ground when faced with an imminent outlanding may be too exciting for most pilots.

This is not just my negative appraisal of the situation. Here's what it says in the manual:

With a motorglider never rely completely on the engine extending and starting. Plan your flight path so that you are always able to carry out a safe outlanding if necessary. Be aware that with the engine extended but not running the rate of sink increases remarkably. This means that with a motorglider you have to decide earlier for an outlanding than with a pure sailplane.

PLAN YOUR OUTLANDING

So what this means is that to fly safely, you need to cease gliding and start landing at closer to 1,200ft than the 800ft suggested by Garry Speight. [See 'Outlanding not Outcrashing' GA issue 23.] Just as with an un-powered glider, you should always have an outlanding site picked out below 2,000ft. You should also have decided on an engine starting height.

Normally, you can tell what sort of day it is and should know well in advance what the chances are of outlanding or starting the motor are. This means to some extent that your engine-starting height will be based on the overall chances of finding a thermal, remembering of course tha on a 10,000ft boomer of a day, the thermals are a lot further apart than on a 4,000ft day! Nevertheless, the air has a feel and if it feels lifeless, then start the engine early.

In my limited experience, there are two ends to the spectrum when facing an outlanding in a self launcher. At one end, you are in catastrophic sink. The sink-o-meter is off the dial and you are falling out of the sky. At the other end, perhaps at the close of an otherwise good day, the air may still be buoyant but there's just not enough lift to get you home.

When you're in sink city, you don't have a lot of time to do anything so you must prepare well in advance and most likely, have a landing field picked out at 3,000 or 4,000 AGL. Sink city normally extends well higher than this!

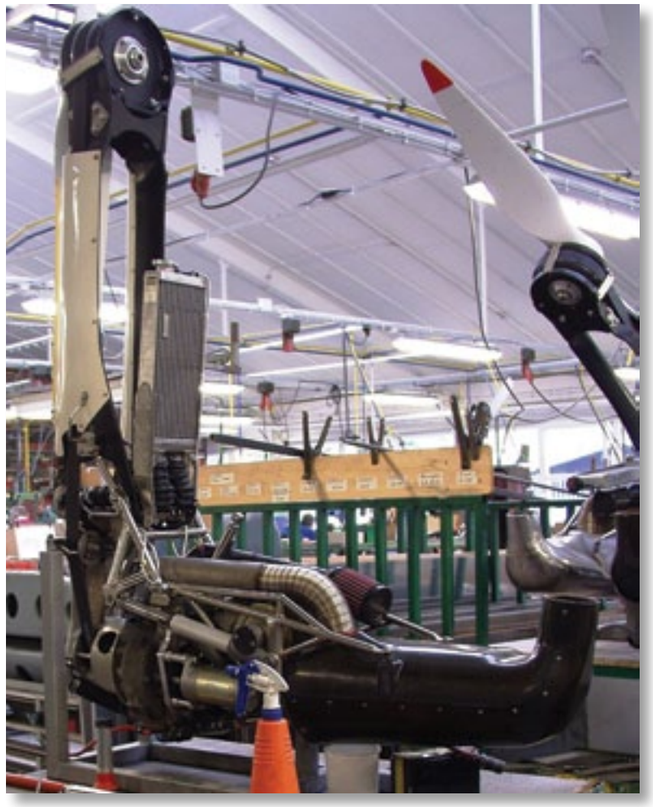
IN THE SINK

Let me give you two examples of big sink and how it shortens your decision time.

1. Once, when caught a the end of the range near Manilla, I was in sink of over 1,000 ft per minute, which had lasted for some time. I was being drilled and although I snaked and sped away from where I thought the sink was, it was plain that I was going to be on the ground very shortly.

I set up on the Manilla strip and started the motor. For several minutes I had a climb rate of zero instead of the normal 800ft per minute.

2. On a safari, a group of us were flying at 13,500ft towards Coonabarrabran, into a 24 knot headwind when we suddenly encountered widespread sink, off the dial. Of course, the headwind should have been telling us loud and clear that wave was likely, especially when flying towards a range like the Warrumbungles... but if it did say anything, none of us took much notice!



LEFT: WankelPP by Dhaluza.

Within 15 minutes, I had lost 9,000ft and was heading sideways towards the Pilliga with no sign of lift. Well, this time I got away, but only just.

The point here is that an outlanding may be only a few minutes away, whatever your height.

If it is late and the day has ended - at least for you! - or if it's plain that soaring conditions are over, then don't piss about. Start the engine early, at a safe height. Why risk anything else?

BEFORE YOU START

There are several things you do before starting the engine while you are continuing to search for lift. One of the most important is to turn the fuel on. Countless people have outlanded with self launchers and sustainers with the fuel turned off... so many in fact that most pilots leave the fuel turned on in flight.

Engines are noisy, so wearing a headset or earplugs is common because it's hard to think with a lot of noise going on. I prefer to wear a headset because it is quick to put on and quiet. Mine is stowed on the headrest so it is a second's work to put it on.

I make a point of putting the headset on, well in advance so I have time to think. I may wind the vario up a notch and concentrate on searching low down but I have climbed away countless times with the headset on.

As you get lower, all the time searching for lift, you can go over your engine starting check-list. Many pilots have a check list on top of the instrument binnacle which can be flipped down when required. For most of us, flying while feeling for thermals is instinctive so giving some time to preparing to start the engine is easy enough

There's normally a maximum speed at which you can raise the engine and flaps may have to be lowered too. Often, when searching, you'll be close to this speed, but if you are in big sink the chances are that you'll be flying fast and have to pull the stick back, otherwise you may strain the engine raising mechanism.

Some pilots recommend lowering the undercarriage at an early stage so that if the motor does not start, it is one less thing to think about. I prefer not to, because I hope I will remember to complete a FUST check at the normal time.

By the time you are near your decision height and ready to abandon soaring, you must be very close to your chosen outlanding field. Because of the unreliability of glider engines, Plan A is that you make a normal and safe outlanding. Plan B is that the engine starts and you climb away.

In fact, it may not be quite that simple. Sustainers, though they might fire, may not run or reach sufficient revs to allow you to climb away. For that reason, for sustainers, Plan B may be to circle the landing site until you are confident that the engine is running well.

For that reason, the outlanding plan procedure for sustainer powered gliders may not be identical to self launchers.

In a self launcher, you would normally attempt to start the engine on the downwind leg. Some pilots recommend

☛ continued over page

ABOVE: Pik20E NASA by NASA Dryden Flight Research Centre.

that with sustainers, where the starting procedure involves diving the glider fast enough to windmill the propellor, you attempt to start the engine on finals. This way, the height you lose while trying to start the engine takes the place of airbrakes and if the motor does not start, you land straight ahead.

The drawback with this procedure is if the engine does not get up to revs properly and soon, you'll run out of airstrip ahead of you... so choose a long strip!

RAISING THE MOTOR

With most modern self launchers, the process of raising the engine is a very quick procedure. Slow the glider, pull the right amount of flaps, flick up the ignition which raises the motor, flick from TE to static and hold down the starter button.

When the engine is fully up, the starter motor will kick over and when the engine is running, you increase revs and climb away. With older self launchers, there may be half a dozen more procedures to perform and all this takes time and increases the stress level... remember, you're about to outland!

When the engine is raised, it acts like an airbrake. With a modern self launcher, "in a normal restarting situation the loss of altitude from starting the extension procedure until the engine is running is only about 70ft". So says the manual, but many things can conspire to make the height loss considerably more.

If the battery is a bit low, the engine lifting mechanism is slow or tired or you are flying a little faster than you ought to, extending the engine can take a lot longer... perhaps enough to lose 300ft.

With the engine extended but not running, the rate of sink at 50 knots increases to 400 ft/min, almost four times the sink rate with the motor not extended. With a glider with a fully exposed motor, the sink rate may be more than this, akin to the sink rate of a hang glider. Of course, this means that you really need to be fairly close to your selected outlanding site when you decide to pop the motor.

Most importantly, because the sink rate is much as if you were using half airbrakes, you must have additional height to raise the motor, attempt to start it and if not, lower it again and attempt to fly a normal circuit, albeit one with half airbrakes pulled.

There's a significant risk, especially with older designs which may be 30 years old, that the engine raising mechanism may fail and leave the engine half way or fully out.

This could be due to anything from a flat battery to a popped circuit breaker to a winding burned out on the basic Bosch windscreen wiper motor used on the screw-jack which, allows it to run but stop intermittently.

In this situation, you might be doing a circuit and landing with the equivalent of half airbrakes. It's essential that you plan for this, fly a shorter than normal circuit and be prepared to use no airbrakes when flaring.

While the engine-less glider can continue searching down to 800ft, a self launcher or sustainer glider should not and your agreed decision to cease soaring should be considerably higher.

This is especially true when you are learning to fly a self launcher. Your stress level rises at the same rate as the motor comes up. Even after hundreds of hours this is still true. It's recommended that when you are learning, engine starting should be at 2,000ft When you're more confident, you can go down to 1,500ft.

Only if your selected outlanding site is an airstrip should you consider starting the engine much lower than this.

Keep Soaring March 2014 page 19: The manual states, "Should a flight be conducted over a wide expanse of unlandable terrain, the engine should then be restarted at 3,300ft above ground level, so that if the engine does not start, all the emergency starting procedures can be followed unhurriedly including retraction of the engine if necessary". The manual does not suggest what you do next.

There are pilots of self launching gliders who choose to have a normal outlanding and then, after doing standard checks, self-launch from the paddock. I confess that I am more confident than this and so far have always successfully started the engine in the air.

I have never met a pilot of a self-launcher who enjoys flying with the motor running and few enjoy in-flight starting, especially in sink conditions where things can happen very quickly and the workload is high.

Nevertheless, climbing out under motor after pressing the button of shame normally beats an outlanding hands down and is one of the things which makes the additional complexity of a self launcher worthwhile.

You might need more friends when you fly a conventional glider compared with a self-launcher but there are those who say that people who fly self launchers have less friends anyway!

GA

AIRWORTHINESS

We have passed a major milestone in reorganising the Airworthiness Department!

- Board approval for the New MOSP 3 version 7 which we have been working on for a year.
- Substantial progress on the Airworthiness Development plan. Ongoing to year end.
- Substantial improvement in record keeping. Ongoing.
- Improvement in the display and provision of airworthiness info on the website. Ongoing.

MOSP PART 3

The new MOSP 3 version 7.0, the RO Handbook and the Permissible Unserviceability Schedule are all new and available together with all other GFA Airworthiness Manuals and Handbooks online. Most of the rest of the Airworthiness Manuals are the old manuals, which will either be updated as shown or will be coming soon. They are together called MOSP Part 3 and provide all Airworthiness Manuals in one place, most of which you will not require, so only use what you need. We use MOSP 3 to simply refer to the Airworthiness rules part of the MOSP, ie Manual AIRW-M01.

The new Manuals have introductions and notes telling you what they are about. So please have a look on the website, download copies of the Registered Operator Handbook - read this first - and the new MOSP 3 - Procedures. Review the commented changes and use the rest for reference.

MOSP 3 Version 7 becomes the current version, which we must use from 1 May 2015. It is not intended to change the way we manage airworthiness in GFA but to allow us more freedoms in terms of the revised regulations. Changes were required to allow these and to make it all clear in a simpler way than the CASA regulations, as well as allowing our exemptions and the rules needed to replace them. So we hope this provides clarity and a clear set of rules on the whole subject of Airworthiness for GFA.

If there is a regulation, we have to comply with it. But that does not mean we have to just accept it. Where we have identified things we can do more simply or better, we are asking CASA to allow it. We have a good working relationship with CASA and they do help if we ask.

REFRESHER TRAINING

We will be arranging Refresher Training all over the country to help you get up to speed with the changes in MOSP 3 so we can all move forward and not get hung up on changes. Some changes will seem foreign but we will assist in implementing these gradually. We will advise you and publish training venues shortly on the webpage calendar and by notices.

SOAR

Please use the new SOAR - Safety, Operations and Airworthiness Reports - system to report Airworthiness Defects, Ops Incidents and Safety Incidents. These days, we use the term Service Difficulty Reports, or SDR, for Airworthiness Defects to highlight that we don't only want reports on defects. We want any failing of the Airworthiness system that may help others if reported. If it is small, we won't do much except add it to the statistics to warn us on things we need to address, so you don't have to do a lot of work on these reports. Conversely, if it is a major defect we will report it to CASA. We may investigate further, and can issue an AD to all owners and let the manufacturers know. We have to do this as aircraft owners, but to make it simpler, GFA will do it all for you if CASA approves.

So please report all SDRs, preferably online on SOAR as the process is quicker and saves us effort, otherwise in writing or via email. We will publish depersonalized and shortened reports to let you all know. The RTOs still investigate these and the CTO acts on them - promptly if required.

DAG

The Design Approval Group is in operation. CASA has issued four delegations of engineers to approve modifications and we have our own Design Approval Procedure Manual, DAPM, to guide the engineers. The objective is:

Anyone can apply for a Design Approval. First submit the form or if unsure ask your RTO-A and they will pass you onto the CTO or CAD. We can advise you in advance.

Modifications, replacing components or repair schemes for non-standard repairs, even paint systems, need an engineering approval, except for very minor mods, standard repairs and replacement of components, which are allowed and detailed in MOSP 3.

To enable this and promote a culture of doing this properly, we have reduced the fee to $50 for minor engineering approvals. We will try to make most things fit these criteria and keep the costs down - for example, a camera on the outside of a glider, replacing a critical bolt, or paint scheme.

However, significant designs and approvals are going to cost. They will take significant effort on the engineers' part and they may charge you for this work. They will tell you when they consider the job. GFA will charge you more as well to recover costs, $250. You are also more likely to have to pay for an Experimental Certificate, a minimum of $250. So if you want to replace an engine, probably even do your own winglets, it is likely to be very expensive and we will tell you.

Standard repairs do not need an engineering order but you need approved data to support what you believe is correct, such as a manufacturer's repair manual or a manual listed in MOSP 3. But be sure you are using proper, correct data and document what you do to cover yourself if it goes to court. Remember, you are liable for what you do even decades later after you sell the glider. So do it properly.

Nevertheless, we are freeing up the Experimental process. Strictly speaking, you may obtain an EC and do whatever mods you like with minimal engineering – at your own risk. However, at the moment we are restricted to one year and then you must get an Engineering Order, or revert to standard, IF YOU CAN. There is serious risk that you may not be able to revert if your modification has stressed the glider or made permanent changes. There may be other avenues, but read MOSP and speak to us first.

USER PAYS

We feel it is better that the user pays for services. As you can understand, if we don't receive money from the user then it has to come from elsewhere. That is why we will charge $250 for significant design approvals and ECs, and more for importing new gliders. It saves us pushing up everyone's fees.

The big increase in fees is going to be the registration of new gliders. We were charging $450 but a lot of work is involved and it really costs, say, $1,000 at best. So we have pushed it up to $950 and must be more efficient to reduce the costs. It will include a Type Acceptance Certificate if required, for which CASA would charge $5,000 to $10,000, registration and an initial CoA or EC as it did before. All other fees were just inflation increases and we should manage to cover costs on those.

GLUE FAILURES IN WOODEN GLIDERS

Alan Patching contacted GFA to give us a warning to look out for glue failures. It may be a UK weather issue but it is wise to take note, especially when you are doing inspections. Please file Defect reports on our new online SOAR system if you find any occurrences. If you prefer, send in a paper report.

Alan commented, "So far our glue failures have been minor and also obvious, however, we must keep watch on the gussets, where failures will show up first."

GLUE FAILURE

To: BGA Inspectors

This affects Schleicher Wooden Gliders (Schleicher Ka 1, Ka 2, Ka 2B, Ka 3, Rhönlercher II [Ka 4], Ka 6 series, K7, K7 conversions, K8 series, K10, ASK 13 series, ASK 14, ASK 16, ASK 18 series and all variants of each type.)

In recent months during inspections we have found significant evidence of glue failure in fins and elevators of some Schleicher wooden gliders built with Kaurit glues. One elevator fell off on a DI and, on another glider, the fin came apart when removed from the glider to fix corrosion in the fuselage. Both of these parts were very close to failing in flight.

Both gliders were in cosmetically good condition and had recently had their BGA 5 year wood inspections accomplished. One of them had had a recent recover. Having spoken to a number of wooden glider repairers, it is clear that failure of parts built with Kaurit glue is, unfortunately, happening more often.

Scheicher wooden gliders are built with two types of glue, Kaurit and Aerodux. Kaurit appears to get weaker with age depending on how it is stored. Aerodux has never shown any sign of problems. Some Schleicher wooden gliders are built with a mixture of the two types. For instance the wings might be Aerodux, but the fin and tailplane might be Kaurit. There is no history as to which glue each part of each glider was built with. Even K13s that were built in 1990 have some Kaurit in them.

In order to safely manage this aging glue issue, in light of known and anecdotal data, we have reluctantly updated the BGA 5 year glue inspection with a 4th revision. The biggest changes to the previous inspection regime are:

1 The glue inspection is to be repeated at the next annual inspection from 1 March 2015 regardless of when the last one was carried out.

ROB HANBURY
Airworthiness Department Chair
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2 A lot more emphasis and advice is placed on finding glue failure in critical components such as the fin, elevator, aileron spar, tailplane and rudder.

3 The fin, held on with 7 bolts, will be removed from all gliders to enable the inspection to be carried out without bolts holding the fin together. Note that the fin will not be removed from K6 or K2 gliders, which have the fin glued on.

4 An inspection report identifying which glue each critical component is made with is to be sent to the BGA, along with details of any parts that failed the inspection.

We are currently unsure why this appears to be a particular issue in the UK. It may have something to do with do with the UK climate and the recent warm summers and wet winters. When we have the results of the inspection reports, we will have a lot more research data.

Gordon MacDonald
BGA Chief Technical Officer

THE MAINTENANCE SEASON

The season started in Waikerie with the Engine Course. Also the first refresher course was well attended and formed the first day of the engine course. Some 50 SAGA members attended the refresher and about 15 were on the engine course – all received ratings.

As a glider pilot who is enthusiastic about maintainance, I like maintaining gliders as much as flying. We also do training, audits and similar tasks in winter, so now is the busy season for glider maintenance. Go well and do it right.

ROB – THE CAD

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THE EFFECT OF HUMIDITY ON THERMALS

BY BERNARD ECKEY

During your basic theoretical training you were probably taught that elevated ground temperatures are the driving force behind thermal activity. Also, you would have learned that the warm air ascends until the air temperature in the thermal is equal to the temperature of the surrounding air mass.

However, in *Advanced Soaring Made Easy* it is repeatedly stated that moisture is a significant contributor to the strength and the height of thermals. Lately some inquisitive readers have asked me to elaborate and therefore we will now look a little deeper into the matter with the help of two German specialists in this field, Meteorologist Dieter Etling and meteorology lecturer and long time competition pilot Carsten Lindemann.

Research dating back to the first half of the last century indicates that a temperature gradient of 3.4º C per 100m in the super adiabatic layer is sufficient for the generation of thermals. This positive buoyancy creates a force, which is not only responsible for the thermal's initial vertical acceleration but also for the usual sink right next to updraughts. It is important to note that a thermal's ascent doesn't come to a sudden hold when the acceleration has reduced to zero. The thermal's vertical speed, however, gradually diminishes due to the ever-present friction along the line of contact with the surrounding air mass.

Field research by meteorologist Carsten Lindeman has provided us with real figures. Using a highly sensitive temperature and humidity recording system on board of his ASK 16 motor glider in Germany, he compared the temperature differentials between the air within a thermal and the surrounding air mass on a day with 1,300m (4,000ft) cloud base and with a maximum ground temperature of 30º C. Even quite large temperature differentials just above the ground shrank to 0.3º C at an altitude of 200 m (656ft). At an altitude of 600m (1,968ft) the temperature difference was down to 0.15º C and at 1,000m (3280ft) a temperature difference could no longer be detected.

It must be pointed out that there can be much larger temperature differences in other parts of the world and that the vertical extent of thermal development also plays a role, but this proves beyond doubt that thermals don't come to a halt when the temperature of the rising air equals the temperature of the ambient air. Other scientists fully agree and believe that on most days the temperature differences are eroded by the time thermals have risen to half their convection height. One of the reasons for the continuing ascent has been discussed above but another reason is the momentum of the huge mass of rising air. Given that thermals contain between around 80,000 and 300,000 tons of air, it is quite plausible that the ascending air masses can overshoot the equilibrium level due to mass inertia.

Now let's consider what role moisture plays in all of this, but to start, we need to remember that moist air is less dense than dry air. If you find this hard to believe just imagine having a long shower and try to think whether condensation will first appear at the top or at the bottom of the bathroom mirror. Yes, condensation first appears at the top, as water vapor has a lower molecular weight than dry air. Put another way, the dry air's higher molecular weight nitrogen and oxygen molecules get replaced by lighter water vapor molecules, which makes the moist air rise above the dryer air. Condensation occurs as soon as the air around the top of the mirror is 100% saturated.

At ground level, there is usually a relatively uniform level of moisture in any given parcel of air. This 'specific humidity' remains unchanged during a thermal ascent as long as there is no entrainment of ambient air. However, the relative humidity is changing quite rapidly as the thermal begins to rise. The reason is simple and easy to explain! The air gradually expands with increasing altitudes, which leads to a reduction in temperature and in turn to a reduced ability to absorb moisture. The end result is an increased level of relative humidity. *See Table 1 below*

If we ignore the bottom row for a moment we can see that at a temperature of 20º C the air can hold 15gm of water vapor but at 10º C it can only hold 7.8gm, or just over half the moisture content. As the thermal ascends, the airs cools down and as long as there is no inversion, it will eventually reach an altitude where the relative humidity amounts to 100%. Now the air is fully saturated and the result is the instant formation of a cumulus cloud. The important point to remember is that due to a reduction in temperature

Temperature (ºC)	-10	0	10	20	30
Maximum moisture content (g/kg of air)	1.8	3.8	7.8	15	28
ΔT(ºC)	0.3	0.6	1.3	2.6	5.1

Table 1 below shows the maximum possible moisture content at various temperatures and at an ambient pressure of 1000 hPa.

continued over page

the thermal's low initial relative humidity at ground level has gradually increased to 100% at cloud base.

Meteorologists use the term 'virtual temperature' when they want to compare the density of various air masses with different temperatures and humidity. Virtual temperature is the temperature to which dry air would have to be heated to in order to possess the same density as moist air at the same pressure. The virtual temperature is always higher than the measured temperature. With this knowledge, let's now focus on the bottom row of table 1. It shows the additional temperature (ΔT) required to provide a parcel of dry air with the same density as air of the same temperature but containing the maximum amount of moisture. If we consider a dry parcel of air with a temperature of 30º C, we can see that it needs to be 5.1º C warmer to have the same density as the same air with 100% moisture saturation. In other words, its virtual temperature would be 35.1º C.

Because you now want to know what all of this has to do with the strength of thermals, I have asked Dieter Etling to come up with tangible figures. He has based his calculations on the following values for the ascending parcel of air:

Pressure: 1000 hPa
Temperature: 20° C
Moisture: specific humidity: 6g/kg (equal to a relative humidity of 40%)

To spare you and me the mathematics, Prof Etling has produced Table 2 below. It is based on different temperatures and various moisture contents of the ambient air. The bold figures in italics show the percentage contribution of moisture to the strength of an updraught in per cent

Now we have discovered a third and perhaps the most significant reason why thermals continue to rise even after the initial temperature advantage has been eroded. Perhaps we have also discovered why thermals seem to be smoother and often significantly stronger on cumulus days and why the effect of humidity on updraughts becomes especially significant when thermals penetrate the usually dryer air of the inversion layer. This begs the question of whether we need to revise our theories on thermals. The answer is certainly not, but it might be a good idea to consider amending some of the textbooks on gliding. GA

The author gratefully acknowledges the assistance and guidance of Dieter Etling, Professor at the Leibniz University at Hanover and Carsten Lindemann, a lecturer of meteorology at the Free University of Berlin.

Table 2: Contribution of moisture to the strength of an updraught in percent for different values of temperature and moisture of the ambient air.

	Specific humidity [g/kg of air] (Relative humidity in %)			
	5,5 (36)	5,0 (33)	4,5 (30)	4,0 (26)
Temp. (°C)	Difference in moisture level compared to ambient air			
	0.5 (4)	1.0 (7)	1.5 (10)	2.0 (14)
19,5	***14***	***26***	***34***	***42***
19,0	***8***	***15***	***21***	***27***
18,5	***5***	***10***	***15***	***19***

THE DEVIL IN THE DETAIL

BY MATTHEW CAMERON

There are hundreds of books on gliding with chapters on how to fly crosscountry. Online, there must be several times as many articles on the same subject, and just as many articles on single facets of cross-country gliding.

For anyone wanting to learn the art of crosscountry flying, initially, perhaps several books would be sufficient to learn the basics. However, I suggest that almost none of books, magazines or articles on the Internet are specific enough about the details I feel are missing. A major problem is that those who are extremely competent in cross country flying either do not write or talk about their competence or, in a large number of cases, they would find it difficult to explain exactly what they do and look at. In other words, most of the time their flying has developed to a point where it is a subconscious act that they do totally automatically.

While reading and research will give you the basics, it seems to me that the details we are missing could be of considerable benefit to those wanting to improve their cross county skills. As I have written elsewhere, one of the problems is that if you ask ten good cross country pilots exactly how they fly, you are liable to get at least eleven answers!

Without a doubt, the biggest single factor in any aviation endeavour is MOTIVATION and this includes crosscountry flying. Without this, your ability to achieve anything is limited. However, no matter what you learn from reading or words of wisdom from those who know, rule No 2 has to be spending as much time in the air as possible in different atmospheric conditions. The more you fly, the better a pilot you will become. Constant practice is a requirement. To progress, you have to set yourself realistic goals and also be aware that at some time during this phase, you will reach a plateau in your learning. This is normal. All training is a progression and it may take time to achieve the standard you want.

So I posed the following question to a number of very competent pilots to see if there was a common thread.

"What single or multiple facets of gliding, that you either discovered for yourself or were taught to you, do you consider have had a significant influence on the way you fly crosscountry?"

As I expected, the results were illuminating and extensive.

- When flying between thermals do NOT rely on the vario' to indicate lift. Due to the lag, by the time you react you will probably be slowing down in sink. At a TAS of 90kts, you are travelling at 152 ft/sec (46 m/sec).
- Always leave a thermal in lift. Accelerating in sink will cost you a great deal of height.
- The size of your turning circle will increase with height and temperature because the TRUE airspeed of the glider is increasing. On a 40° C day at sea level, the temperature at 10,000ft would be 20° C. Thus for an IAS of 50kts, your TAS would be 60.8kts, turning circle for 45° of bank, 199m - an increase of 47.4%
- For good cross country conditions the temperature split between sea level and the 850mb level should be 15° C or above.
- Don't ever sit in a thermal you would be embarrassed to be found in.
- You cannot afford to remain in weak thermals if there is stronger lift around.
- Speed through sink, linger in lift.
- Do not be afraid to ask those who are competent in the art. There is no such thing as a silly question. If you do not ask you will never know!
- All cross country flights are a race against the clock. No matter how good the day, the thermals will eventually die.
- As thermals start to weaken, leave enough time to complete the task before you have to land out.
- You must concentrate on the task at hand at all times while airborne.
- When low, never give up. Try everything to find lift right up to base leg.
- Find the centre of a thermal ASAP.
- Don't accept 2kts of climb. Find the strong lift.
- When under a CU find where the lift is ASAP, in other words, upwind or on the sunny side.
- Plan ahead. Find where the next CU to fly under is, and always have at least three more in mind.
- You have to learn to 'feel the air' to find the best climbs. It takes time to develop this skill.
- When leaving a thermal you should initially track either directly upwind or downwind to take advantage of any further streeting thermals, if it is convenient to do so.
- A constant descent from altitude even at a modest groundspeed will increase your overall task speed considerably.
- Always be aware of the met prediction for your proposed cross country route and weigh up the outlanding possibilities.
- Always ensure that you are at a safe height to plan and execute an outlanding plan ahead.
- For the potential cross country pilot, fly several dual flights with an experienced instructor.
- For a pilot with some cross country experience, attend one or more coaching clinics and fly with experienced coaches.
- Think of thermal streeting as a sheet of corrugated iron. Just make sure you are on the ridges and not down in the troughs!
- The higher you are, the more attention should be paid to the clouds. Conversely, the lower you are, start looking at the ground for thermal indicators.
- Early cross country pilots thermal to fly fast. When established and centered in a thermal, the speed should not exceed best L/D speed for the glider.
- Decide where you want to go, then plan and execute the flight.

Well, there you have it. If it were possible to apply all of the above at once, perhaps any cross country flight would simply be a breeze! Many thanks to all cross country pilots, Instructors and coaches who contributed. GA

BATTERIES

I recently acquired a used LS8-18. As the new owner, I took the opportunity to upgrade the instrument panel with some modern options.

The LS8 has space for two main batteries and one tail battery. I have been using the two main batteries as the primary supply and use a hitless switch arrangement on the panel to effect changeover.

The table below shows the list of equipment installed and the expected current draw as sourced from the manufacturer's manuals. This is within a few 10s of milliamps of that measured.

I have been using two 7AH lead acid gel cells. The result was that I could do a decent day's flying with those two batteries. However, I did find that they were both well drained after six or seven hours of 'on' time.

XLG - LS8		
Device	Fuction	Current maH @ 12v
LXNAV-V7	Vario Vario	180
Butterfly Vario	Nav	300
Butterfly NMEA Unit	Nav	10
Oudie	Nav	250
Flarm Display	Flarm	10
Powerflarm	Flarm	165
XCOM	Radio	140

Now that my flying season is over, I wanted to take the opportunity to put a bit more science into play and see what actual capacity these batteries deliver against the above load. I had sensed that they were not giving anywhere near the labelled capacity and being the curious type, I was seeking hard evidence as proof of that suspicion.

Also, as a radio control pilot, I have a few intelligent chargers that can measure and allow specific current

BY RICHARD FRAWLEY SWIFT AVIONICS
store.swiftavionics.com.au

rates to be set for both charge and discharge. Cut-off discharge voltage can also be set to simulate the need for minimum supply voltage.

BACKGROUND

It's good to remember that lead acid gel cells are actually designed for a different set of use cases than what we use them for. They are, of course, used in Security Alarms, PABX systems, industrial monitoring systems and the like. They tend to be held at full charge by low rates of trickle charge and are subject to fairly low discharge rates of 1 or 2 amps for fairly short periods of time and on a rather irregular basis. They are also a commodity item and built to a competitive price and glider pilots, being of hermetically sealed persuasion, tend to buy those most competitively priced.

The common size Pb cells used in gliders come in 7AH and 9AH forms. Some gliders are fitted with larger capacity, but still come under the same design specifications as above.

Until fairly recently, the current draw in a glider, where the radio is the main source of consumption, was quite small, usually less than 350mah. Drawing on other technologies from other domains, the sophistication of equipment available for gliders today has expanded rapidly over the last 10 years. Large, sun-bright displays, powerful CPUs and clever sensor arrays combine quickly to show the current draw experienced in the table above.

Looking at sports and competition gliders on any flight line today will now an array of high technology options in the cockpit. It would not be uncommon to find average continuous current draw to be around 1 amp.

The need to plug in navigation devices such as Oudies and Nexus tablets into the glider power supply to allow a full day's flying is also very common. Plugging them in at less than full charge puts considerable extra load on power reserves and can increase current drain to 2.5 Amps or more for an extended period of time, something that should be avoided.

GEL CELLS

As the 7AH cells in the LS8 were not giving me as much spare capacity as I would have liked, and on the advice of a club maintenance person, I purchased a couple of new 9AH cells that he had at hand. My thinking was that the extra 4 hours would be quite useful. On using these cells however, I experienced a low voltage alarm well before the time I would have expected. On switching to the second battery, that one also showed similar behaviour. Something was clearly amiss here.

Reading a few of the manufacturers' performance specs for gel cells clearly showed that capacity is directly affected by the size of the current drain. As the current is increased, the internal resistance of the cells rises quickly and more energy is lost within the cell, quickly reducing deliverable capacity.

What was also interesting and in line with the notes in the battery specs, was that the deliverable capacity of the 7AH cell was, in our particular case, higher than that of the 9AH cell. Only at low current rates of less than 200maH was it possible to see any higher capacity delivered by the 9AH cell.

The test results below were undertaken using the following set-up:

- Current drain setting - .91 amps
- Ambient temperature - 22 degrees
- Charge State - Fully charged
- Discharge Cut-out Voltage - 9.5V
- Charge/Discharge Cycles - 4

Discharge Current	Type	Cut-Off	Stated Battery Capacity	Actual Capacity (4 Cycles)	Charge Rate	Weight	Size mm
0.91AH	Pb	9.5V	7AH	5.61AH, 5.62AH, 5.61AH, 5.60AH	1 AMP	2.45Kg	65*94*151
0.91AH	Pb	9.5V	9AH	4.7AH, 4.6AH, 4.7AH, 4.65AH	1 AMP	2.67Kg	65*94*151
0.91AH	LiFE	9.5V	8.4AH	7.1AH, 7.1AH, 7.1AH, 7.1AH	5 AMP	1.01Kg	52*70*150

LIFEPO CELLS

Being rather disappointed with the actual delivery provided by the Pb cells under the load conditions required in the LS8, I was quickly lead to consider alternate battery types. It was clear that from safety, capacity, size, availability and cost perspectives, LiFE cells showed potential.

I did, however, bear in mind that all manufacturers' specs and labelling are geared toward the most optimal scenario for their capacity claims and I did need to test them out.

The Hobbyking cells I acquired are quite good in that two of the 8400maH packs weigh less than a single 7AH gel cell and offer more than 2.5 times the Pb cells' deliverable capacity. Two of the 8400 LiFE packs are also very close to the size of a single Pb battery. The photo below shows the deliverable capacity of the LiFe pack. There was no noticeable difference in the deliverable capacity between 0.91A and 5A, a clear indicator that these cells are designed for much higher current drain scenarios.

It would be possible to have four of these LiFE packs in the same space, with less weight, where I have two Pb cells in the LS8 today, swapping out 11.2AH for a total of

28.4AH. At current consumptions as per table 1, that is close to 28 hours of continuous flying, enough to run the entire flight deck very comfortably plus the ability charge phones, run cameras, have future ADS-B Out technologies and even put in toe warmers for wave flying!

The other advantage of the LiFE technology is that the output voltage stays well above 12V for nearly the whole discharge cycle. Additionally, these batteries are designed for high load discharge and can easily accommodate the peak loads found in a glider.

Unlike Pb gel cells, LiFe are not affected by deep discharge - unless cell voltage goes below 2V, see the note below - and will give more than 2,000 charge cycles with little loss of capacity. In a glider ,they are very likely to last for five to seven years. A low cost low voltage cell alarm is available from Hobbyking for less than $5. In the LS8, the Powerflarm also provides a highly visible low voltage warning at 9V via the Butterfly display.

You will need a special LiFE charger. Intelligent chargers are available for less than $50 and a suitable 240V to 12V power supply from $20 to $60. LiFE can be charged to 5A or greater and, with the right equipment, can be charged while waiting for trigger temperature to arrive on the flight line.

ECONOMICS

It's fair to say that Pb gel cells are still cheap compared to LiFe, but the table below shows another way to consider cost. Drawing 1 amp or greater and running them to near flat is a killer for Pb cells. I hear people complain now that the Pb cells are dying after just two seasons. It's no surprise when you consider their design limitations and how we are literally amping things up!

The table shows comparisons for total cost of ownership over eight years. LiFe will likely last that long but capacity will be at 70% by then.

Of course, this does not take into account the fact that it's now possible to get 28AH of real capacity, opening new possibilities and becoming more future proof. From what I hear, ADS-B Out or an equivalent an concept is likely to be mandated in the next few years. In talking to a few of the current ADS-B manufacturers, we can expect the transmit side to continuously chew up at least 1 amp. The above tests show that those needs would be beyond what Pb can deliver. GA

Item	Capacity	Cost	8 year Cost	Charger	Total
LiFe	8400	84	84	80	164
Pb Gel	7000	34	102	35	137

RUNWAY EXCURSION
EUROFOX GLIDER TUG

CHRISTOPHER THORPE EXECUTIVE MANAGER, OPERATIONS

On 2 November 2014, the pilot of a RA-Aus registered Eurofox 2K was conducting glider towing operations at a regional gliding site. The pilot commenced his third launch at 1110, towing a LS8 single-seat glider to about 1800ft AGL. Following the glider's release, the pilot joined circuit for a landing on runway 18.

Figure 1:The aircraft after coming to rest.

The pilot then conducted a normal stabilised approach and both wheels touched down at the pilot's selected point. The aircraft bounced slightly at touchdown coincident with a gust of wind from the right. The starboard wing of the aircraft lifted and the aircraft started to veer to the left towards the airfield boundary fence. The pilot could not correct the swing with control inputs and elected to conduct a go-around. He applied full power and the aircraft became airborne but the wheels impacted the wire fence. The drag of the fence pulled the aircraft to the ground and the aircraft came to rest on its nose facing north. The aircraft was substantially damaged (Figure 1) and the pilot was uninjured.

METEOROLOGY

The weather at the time of the accident showed good visual meteorological conditions (VMC). Weather observations from a nearby airport were:

Time	Wind Direction	Wind Speed kts	Wind Gust kts
Sun 11:00 EDT	SSW	11	15
Sun 11:30 EDT	SW	12	21

The GPS-based flight recorder log from the glider that was last launched records the average wind to be from 213° at 16kts at ground level during the launch phase. Witnesses noted the wind to be about 10kts with strong gusts to 20kts at the time of the accident.

ANALYSIS

During the final approach onto runway 18, the pilot established himself on an aiming point displaced about 500m from the runway threshold in order to overfly gliders lined up and awaiting launch at a safe height. There were a number of gliders taxying along the western edge of the runway during the landing, so the tow plane was aligned to the left of the runway centreline. The runway's length of 1,400m and width of 120m provided sufficient margin for a safe landing. (Refer Figure 2.)

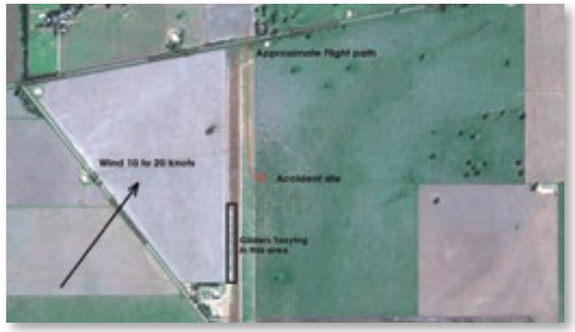

Figure 2: The glider was flown into the paddock pictured above, showing the final flight track (red) and power line (yellow).

Witnesses observed the aircraft on a stabilised approach, crabbing slightly into wind to maintain runway heading. The aircraft was observed to touch down normally on both main wheels and bounce, at which time it was subjected to a wind gust from the right of around 20kts. The wind lifted the starboard wing and the starboard wheel left the ground. The pilot applied right-hand aileron and rudder control but was unable to maintain the runway heading and the aircraft started to veer to the left towards the airfield boundary fence some 25 to 30 metres away. The pilot made a decision to conduct a go-around and opened the throttle fully. The aircraft continued to veer to the left and just as the aircraft became airborne the wheels struck the wire and picket fence. (Refer Figure 3.)

As the aircraft broke through the fence it was slowed and pulled towards the ground while rotating to the left. The left wheel broke off at impact, the right wingtip was damaged by contact with the ground, the composite propeller struck the ground and shattered, and the aircraft came to rest on its nose facing north. The pilot switched off the fuel and electrics and disembarked the aircraft without injury.

The maximum crosswind component of the Eurofox aircraft is 15kts. Calculations indicate that the gust loading may have been near the designed maximum (refer Table 1), thereby making control difficult.

Runway Heading (Magnetic)	180°	180°	180°	180°
Wind Direction (True)	200°	210°	220°	230°
Wind Speed (knots)	20	20	20	20
Crosswind Component	7	10	13	15
Head wind component	19	17	15	13

Table 1. Wind Component Calculations

Source: Gliding Federation of Australia

Another possible causal factor is torque effect. The propeller spins clockwise from the cockpit, so the effect of opening the throttle and commanding more power would be for the forces to act towards the left, thereby exacerbating the aircraft's turning to the left.

Gyroscopic and asymmetric blade effects may have also contributed.

GLIDING OPERATION

The glider pilots held a briefing during the morning and the first launches were scheduled for 1130. The pilots were asked to marshall their gliders at the launch point prior to launching commencing. A number of glider pilots sought to take advantage of an earlier start and were positioned at the launch point well ahead of schedule. These pilots convinced the tow pilot to commence towing operations before all the gliders had reached the launch point. The tow pilot agreed but when landing following the last tow, the right-hand, or western, side of the runway was occupied by a number of gliders taxying to the launch point. As a consequence, the width of the operational runway was reduced by nearly one-third.

Figure 3. Airfield eastern boundary fence.

PILOT

The pilot was medically fit and qualified to undertake the flight. The pilot's aeronautical experience was predominantly flying aircraft with the right-hand on the control column and using the left-hand for auxiliary controls or throttle. The investigation considered the ergonomics of the pilot flying left-handed in the Eurofox, using his right-hand for throttle. The pilot did not recall this being a factor and advised that his employment as an earthmoving contractor requires him to regularly move between machines with conflicting control configurations. The control configuration is not considered to have contributed to this incident.

The pilot also advised that he felt under pressure before the launch as a number of pilots were looking for launches before the scheduled launch time and that he had limited support on the flight line.

CONCLUSIONS

- The command pilot was appropriately qualified and medically fit for the flight.
- The aircraft had a valid Maintenance Release and had been maintained in accordance with relevant requirements.
- The aircraft encountered a strong crosswind gust on touchdown.
- The crosswind gust, coupled with torque and asymmetric blade effects resulted in an uncontrollable runway excursion to the left and collision with terrain.
- The aircraft was capable of normal operation up until the time of impact with the fence wires.

UNDERCARRIAGE DOWN AND LOCKED

From January through December 2014, there were 18 wheel-up landings caused by pilots failing to lower the undercarriage. Landing mishaps usually occur due to poor workload management, so it is important to get some of the tasks, like lowering the undercarriage, out of the way early. Refer also to OSB 01/14.

Circuit and Landing Advice

www.glidingaustralia.org Under the Docs/Forms - Documents/Forms - Operations - Operational Safety Bulletins - Circuit and Landing advice.

NOTES FROM THE OPS PANEL

MANUAL OF STANDARD PROCEDURES, PART 2 - OPERATIONS

MOSP 2 (Operations) has recently been updated and the Board approved its reissue as Version 3 in April 2015. Previous versions and paper copies are superseded. It is the master reference for all Operational issues; all instructors and flying members should be familiar with its scope, as it describes how we comply with aviation regulations, and the processes for club officials and pilots to operate responsibly. It is available on the GFA website as part of the GFA Operations Manual and can be accessed via the Documents/Forms tab wwwglidingaustralia.org/GFA-IT/docman-test

LIST OF THE AMENDMENTS

- The functions described in the Foreword have been updated in line with the new Deed of Agreement with CASA.
- The requirement for both occupants of a sailplane to carry oxygen has been included at paragraph 8.1.2. This GFA requirement was unintentionally omitted during the 2012 rewrite of the Operational Regulations and MOSP2.
- Mutual flying has been defined at paragraph 8.1.4 and rules for mutual flights by medically unfit pilots is now at paragraph 10.1.1. Operations Advice Notice (OAN) 01/06 – 'Mutual Flights' has been made obsolete by this update.
- The concept of non-training clubs has been introduced at paragraph 9.1. Further information is provided below.
- The process for cancelling or suspending a CFI authority has been formally documented at Paragraph 9.1.2.3.
- Annual Flight Review requirements have been included at paragraph 10.4.
- The content of Operations Directive (OD) 01/14 – 'Aerotow Rope Lengths' has been included at paragraph 16.2.2. The OD is now obsolete and has been removed from the system. There are no ODs current at this time.
- Aerodrome operational standards and procedures at Paragraph 18.2 have been updated to reference CASA publication CAAP 92-1 'Guidelines for Aeroplane Landing Areas'.
- Paragraph 21.2.2 has been added to formalise the EM/O's discretion to conduct an investigation into any accident or incident on behalf of the GFA.

FLYING OPERATIONS BY NON-TRAINING CLUBS

Gliding clubs can be established for many reasons. Typically, new gliding clubs are formed to provide opportunities for members to participate in the full range of gliding activities from learning to fly through to competition flying. Today, however, we are seeing demand for a new form of club that exists solely as a means of facilitating flying operations by experienced members without providing flight training operations. In some cases, clubs have shrunk and lost their two-seater glider training capabilities, or blended with other aero clubs.

In order to cater for non-training clubs and to ensure GFA operational standards are maintained, the GFA Board has approved the concept of non-training clubs based on the principles of primacy of Pilot-In-Command responsibility, and that all gliding clubs conducting flying operations must have a Head of Flying Operations.

In training clubs, the Head of Flying Operations will be the Chief Flying Instructor. In non-training clubs, a Club Operations Manager will undertake the role.

In addition, a non-training club must have a club committee with club officers appointed by members, and must meet

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requirements for affiliation with their regional association and GFA as an active, affiliated club. This also means that Regional Manager Operations must complete an initial safety audit on proposed clubs, and approve the gliding site and Club Operations Manager. Clubs must meet ongoing audit and safety requirements to retain affiliation.

The role of the Club Operations Manager is not that of a CFI but simply to ensure the Club provides all facilities and documentation required under the regulations, including the GFA Operations Manual, to facilitate safe operations at approved sites. The responsibilities of a Club Operations Manager is therefore limited to:

- ensuring the Club's flying operations are conducted in compliance with the regulatory framework within which we fly;
- overseeing operational safety in accordance with the Club's Safety Management Plan;
- ensuring that accidents and incidents are reported in a timely manner;
- supporting the conduct of Operational Safety Audits; and
- refering any breaches of flying discipline to the RM/O.

To be a flying member of a non-training club the pilot must hold a Glider Pilot Certificate and comply with the lawful directions of the Club Operations Manager.

Individual pilots will be responsible for maintaining their own currency and will need to maintain a relationship with a Training Club that can facilitate annual flight reviews and the granting of flying privileges and ratings.

While a non-training club cannot conduct Air Experience Flights, they are eligible to apply to CASA for an Air Operator Certificate to conduct Charter Flying Operations in accordance with paragraph 4.2 of the GFA Operational Regulations. The pilot in command of a Charter Flight must hold a current GFA Charter authorisation issued by the CFI of a Training Club.

Full details are at Paragraph 9.1 of the GFA Operations Manual.

NAVIGATION TOLERANCES

The Aeronautical Information Publication (AIP) has recently been updated and navigational tolerances have been revised. Specific distances from CTA boundaries are no longer stipulated. Pilots operating VFR in Class G or E airspace are now merely required to ensure that controlled airspace, or restricted areas, are not infringed.

AIP ENR 1.1-41 para 19.12 – 'Avoiding Controlled Airspace' now states:

"Unless an appropriate clearance has been obtained, the pilot in command of an aircraft operating in Class G airspace, or a VFR aircraft operating in Class E airspace, must not allow the aircraft to enter:

- airspace for which ATC clearance is required; or
- an active restricted area.

Note 1: Aircraft within controlled airspace or a restricted area may be operating up to the boundary of the airspace.

Note 2: For aircraft operating in close proximity to an airspace boundary where there is a risk of an airspace infringement, the pilot in command should consider obtaining a clearance to enter the airspace or altering track to remain well clear."

It is unwise to rely solely upon electronic navigation aids to remain outside controlled airspace. Batteries can fail, and finger faults can reduce situational awareness. Close attention to visual navigation is recommended. There is still a place for paper charts in our operations.

ANNUAL FLIGHT REVIEWS

The Annual Flight Review, AFR, is defined in the GFA

OPERATIONS

If you have any questions or feedback please contact me at:

CHRISTOPHER THORPE
Executive Manager, Operations
emo@glidingaustralia.org

Operational Regulations as 'An annual competency check undertaken by the CFI or delegate'.

Occasionally a pilot may not be able to present at their home club to have their AFR and will seek to have the check undertaken at a different club. This is quite acceptable subject to the following:

- The checking instructor should contact the pilot's CFI prior to the review where practicable to ascertain whether they have any concerns or comments; and
- The pilot's CFI is to be advised of the outcome of the AFR. Refer to GFA Operations Manual, paragraph 8.1.15 and Operations Advice Notice No. 02/12).

Where a pilot is a member of more than one club, it is the CFI of the Club the pilot has nominated to GFA that must keep the pilot's records.

An Instructor AFR, required for revalidation via the Active Instructor Report, can only be undertaken with the consent of the CFI of the pilot's nominated club (refer GFA Operations Manual, paragraph 11.3.1). Instructors who instruct at more than one club should nominate the club in which they predominantly instruct.

Pilots who hold a L2 Independent Operator rating can only have their rating revalidated with the consent of their CFI (refer GFA Operations Manual, paragraph 13.2.2).

Notwithstanding the above, there is no obligation for clubs to conduct an AFR for members of another club. Indeed, there are some clubs that have a policy not to do so. Pilots wishing to avail themselves of an AFR at another club should make inquiry first.

AEROTOW TRAINING AND ENDORSEMENTS

As mentioned in previous articles and communications, CASA is devolving management of tow pilot training and endorsement to GFA. This has necessitated GFA devising new processes and procedures, and developing a new competency-based training system. This work is mostly complete and is reflected in a revised Aerotow Manual that has just been produced through the consultation process. Before this new system can be implemented, CASA needs to approve the Aerotow Manual and grant GFA some additional exemptions and authorities. In the meantime, it remains business as usual – although tow pilots converting their licences under Part 61 will find CASA will not be recording towing endorsements in expectation of the transition to GFA. Once GFA is granted CASA pproval to manage the process, existing tow pilots will be issued with GFA logbook endorsements and their old CASA endorsements will then lapse. Further information will be provided once CASA approval has been granted.

UPDATED HANDBOOKS AND MANUALS

Pilots are encouraged to review the current editions of the GFA operational documents that are available online GFA website. These can be accessed via the Documents/Forms tab (http://glidingaustralia.org/GFA-IT/docman-test).

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SAFETY PAYS **Recognising that education is more important than documentation, the Safety Committe is offering a cash prize of $50 for the best safety story submitted to the magazine. On top of this, there is a $300 cash prize for the best story of the year.**

Sharing information of incidents and occurrences is a great way to raise awareness of safety issues so please help your fellow pilots learn from your experiences. Details of how to write and submit your stories are on the Safety home page of the GFA website. www.glidingaustralia.org/GFA-Ops/Safety

DON'T DO WHAT I DID

It is amazing how many things can and do go wrong on airfields every day and every week. Let's try to learn from the experiences of others. The following tale describes an issue that is high on our list of Occurrence reporting and one that accounts for almost 10% of reported incidents.

It was a fine day, with light NE winds swinging to ESE. We were using runway 34 and a club regatta was in progress. Two tugs were operating - a Pawnee and an Auster, the latter of which was also being used to train tow pilots.

I had finished the tow pilot training and had to taxy the Auster down runway 34 to refuel. I was asked if a small boy could occupy the right hand seat for the taxy back. No problem, so I strapped him in and gave him a headset so that he could feel like a real pilot. I checked that there was no launching in progress and that the base and approach for runway 34 was clear of traffic. I fired up the Auster and gave a taxy call before entering the runway. The small boy was having trouble seeing where we were going so I put on a little extra power to raise the tail so that he had a better view. At this point I noticed that the radio master switch was in the 'off' position and I turned it on. No sooner had I switched on the radio that I heard a circuit call and at the same time saw a glider turning finals for runway 16 on a reciprocal heading! By this time the Auster had just lifted off the ground, much to the delight of the small boy but to the embarrassment of the pilot. I closed the throttle, landed somewhat firmly and exited the strip hastily, weaving through some newly installed solar powered flare-path lights to avoid them. The glider landed normally. Whew!

LESSONS

- On light and variable wind days consider the distinct possibility that pilots may elect to use a different runway.
- Double check radio is properly selected before entering runway.
- Don't try to impress small boys, or anyone else for that matter, with your prowess. It can so easily come unstuck.
- Stupidity will override experience at any level.
- Aviate, Navigate, Communicate

OBSERVATIONS FROM THE EM/O

This incident highlights the importance of completing cockpit checks, even when only taxying around the aerodrome. Since good radio discipline is the key to preventing runway incursions at uncontrolled airports, it is important to ensure the radio is switched on and operating before starting to taxi.

CHRISTOPHER THORPE
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ACCIDENTS & INCIDENTS FEBRUARY / MARCH 2015

All clubs and all GFA members are urged to report all accidents and incidents promptly using the using the GFA's occurrence reporting portal at glidingaustralia.org/Log-In/log-in-soar.html as and when they occur.
This is always best done while all details are fresh in everyone's mind.

1/02/2015 GQ
AIRCRAFT CONTROL LS7

An experienced and current pilot was undertaking his first flight in a new type. During landing, the pilot misjudged the flare and touched down heavily.

2/02/2015 VSA
LOW CIRCUIT DG-300 ELAN

The pilot was competing in a local competition. Conditions on the day were weak and the pilot was the first of the competitors to launch. The pilot released in weak lift but failed to centre it and so headed off in search of better air. Despite making a number of attempts to climb in weak lift, the pilot found himself at low height on the dead side of the circuit. The pilot commenced a right-hand circuit but flew too far downwind for the conditions and completed a very low base and final turn onto the runway. The pilot recognised after the event that he could have safely conducted an outlanding or modified his circuit to land on another runway. Potential causal factors include fatigue due to lack of sleep the previous night, poor pre-flight preparation due to interruptions, and task fixation leading to a failure to break-off the flight at a safe height. The pilot later advised that he will develop personal minima for breaking off the flight and focus on planning his circuit to ensure the final turn can always be completed at a safe height.

2/02/2015 NSWGA
AIRCRAFT CONTROL ASK21

Returning from a local training flight, the Air Traffic Controller informed the pilots that wind speed had picked up to 20kts and suggested a crosswind landing be conducted on another runway. A circuit was flown appropriate to the conditions and a crabbed approach was conducted due to the crosswind. Just as the trainee rounded out, the glider flew into a wind shadow area caused by the hangars and dropped to the ground heavily, yawing to the right. Neither occupant was injured but the aircraft suffered minor damage to the left wingtip and the tail wheel tyre rolled off the wheel rim. When flying in strong wind conditions pilots should take into account the effect of curlover or wind shadow when setting their aiming point.

3/02/2015 WAGA
WEATHER GROB G 109B

The pilot was keen to return to his home airstrip and self-launched into a storm front. The glider experienced strong lift to 10,000ft. The pilot tried but was unable to outrun the fast moving front and was engulfed in a violent sandstorm. The pilot successfully landed at the home airstrip in the rain. Pressing on into adverse weather is one of the major causes of accidents in general aviation. Pilots who fail to plan for the weather conditions, who do not properly assess the weather during flight, or who decide to continue to fly in marginal conditions are exposing themselves to unnecessary risk of an accident.

9/02/2015 VSA
TERRAIN COLLISIONS ASW 20

The glider was being launched from the winch release by a low powered RA-Aus tow plane, in cross-wind conditions and on a grass runway. The pilot had set full negative flap and a small amount of airbrake to assist with aileron control, and trimmed full forward. The initial roll was normal. During acceleration at about 20kts, the airbrake was retracted and the flap was moved to negative 2, when the right wing dropped rapidly and the glider became quickly out of station 20°. The pilot released, at which point the trajectory headed towards a wire fence. Maximum braking was applied and the pilot deliberately ground-looped. As the glider decelerated it impacted a shallow drain and stopped parallel to and up against the fence. The aircraft suffered substantial damage, including distortion to undercarriage assembly from side loads, and de-lamination of one lower attachment point. There were also extensive wire scoring and scratches to port wing lower and flap under surfaces, and a wire scratch to left-hand side of canopy. Aerotowing off the belly

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The latest incident and accident reports. The complete list can be seen at www.glidingaustralia.org/GFA-Ops/accidents-incidents.html

release is not as directionally stable as when using a nose release. Pilots should keep their hand near the cable release during the launch and must get off if the wing drops. When flying flapped gliders, or when using airbrakes for aileron control at low speed, pilots should keep their hand near the release until positive lateral control is assured before changing flap/airbrake settings. In this accident the pilot had everything going against him - towing from the CG release, a low-powered tow plane, a grass runway resulting in slower acceleration, and a cross wind. Pilots should be aware that when towing off the belly release the glider is more prone to swing than a glider towed off a nose release. Should it swing, it is more likely to continue into a ground loop.

9/02/2015 VSA
WILDLIFE LS 6

While thermalling during a cross-country flight and just prior to entering the final turn point sector, a wedge-tailed eagle drifted in front of the glider and struck the canopy causing minor scratches. The pilot noted he had full control and a visual inspection by another pilot flying above confirmed there were no signs of damage. The pilot turned short in the sector and returned to the home airfield without further incident. Note: An adult wedge-tailed eagle has a wingspan of up to 2.5 metres and can weigh up to 4kg.

10/02/2015 VSA
RUNWAY EVENTS ASW 27 18

While towing the glider back to the tie down area after a competition flight, the experienced glider pilot stopped at the holding point of the runway to avoid conflict with landing gliders. The pilot then heard the 'bank run' aircraft pilot call downwind and took the opportunity to cross the runway. The glider pilot gave a call 'entering and backtracking' and then entered the runway. Unfortunately, the glider pilot missed the call that the bank run aircraft was already established on final approach and committed a runway incursion. The bank run aircraft executed a missed approach and re-entered the circuit. The glider pilot contacted the bank run pilot and apologised.

10/02/2015 VSA
LOW CIRCUIT DUO DISCUS T

During a competition flight the glider dropped below final glide by a few hundred feet. The pilot took a thermal some 10km from the airfield and climbed the aircraft to 1,550ft AGL and again set off on final glide for a straight-in landing. The glider again encountered sink and at 1,100ft AGL the pilot elected to deploy the sustainer motor. Lift was again encountered and the motor was put away but it did not fully retract, leaving the propeller and engine-bay doors in the slipstream. The pilot completed his pre- landing checks and at about 150ft AGL he dived the aircraft to within a couple of feet from the ground (stubble paddock) to use the principle of 'ground effect' to complete the flight. The aircraft touched down twice in the paddock, after which the pilot climbed several metres to cross the paddock fence, a public road, and then the airfield boundary. The aircraft touched down on the airfield runway and pulled up short, contrary to competition requirements to land long. The pilot then taxied the aircraft off the runway in front of another landing glider that had to take avoiding action. Cross-country soaring and competition flying are stressors, where high workload and fatigue can lead to impaired decision making and reduced situational awareness. Human factors including decision biases, goal fixation and cognitive tunnelling in competition may lead to pilots eroding safety margins more than in normal non-competition flying. Being aware of the dangers of continuing into marginal circumstances, setting boundaries, having a sound knowledge of rules and procedures, disciplined adherence to minima and performance requirements, prioritisation of options, and planning to deal with potential situations will act as defences against unsafe conditions. Note: Pilots should not resort to using 'ground effect' to stretch the glide. In order for ground effect to be of significant magnitude, the wing must be quite close to the ground, such as during the lift-off for take-off or just prior to touchdown when landing.

14/02/2015 NSWGA
AIRCRAFT SEPARATION DG 1000S

The pilot and instructor were undertaking a type conversion check flight in a DG1000. After conducting some spins and other handling manoeuvres, the pilot flew towards a gaggle of four gliders thermalling about 2km away. The thermal was joined uneventfully but after several turns it became evident that the lift was broken and the glider was not climbing. The pilots left the thermal and headed north in search of better lift. Some weak lift was subsequently encountered and the glider commenced a shallow right-hand turn. After completing one full turn, both pilots observed another glider approaching from the right and behind. As the DG1000 pilots continued the turn they noted that other glider appeared to be on a collision course and the Flarm emitted a collision warning. Almost simultaneously the pilot under check banked the DG 1000 steeply to the left as the pilot of the other aircraft banked steeply to the right, narrowly avoiding a collision. Both gliders returned to the airfield and landed uneventfully. The DG 1000 Instructor confronted the other pilot who confirmed that he had sighted the DG1000 and continued towards the thermal believing the DG1000 pilot would make way for him! When joining a thermal, a pilot must not interfere with other gliders. Entry should be judged so you position the glider roughly opposite the established glider. This can be achieved by flying towards the outside of the circle made by the other glider, from a safe distance out. When pulling into a turn, remember that the glider entering the thermal has changed the situation significantly and its pilot must take primary responsibility for remaining clear of other gliders. Gliders already in a thermal should not have to manoeuvre to avoid a glider entering, so gaggles must be approached carefully, and once in the thermal, the pilot should match the other gliders' bank angle and speed so that he flies the same size circle as they are flying. For any reason you are not comfortable, GET OUT! Flying in a crowded thermal is an advanced skill. If you are not up to it, GO FIND ANOTHER THERMAL.

15/02/2015 SAGA
TERRAIN COLLISIONS TWIN ASTIR

While flying cross-country in central Australia the pilots experienced strong conditions and climbs to over 11,000ft. During the course of the flight, the glider got into the lower levels of convection, where thermals were rough and far apart, and an outlanding became inevitable. Outlanding options in the area are limited to known airstrips or public roads. The pilots searched for lift within reach of a public highway but were unsuccessful in climbing away, so a decision was made to land on the road. As the pilots flew a circuit they noticed a single motor car heading towards them in the distance. The pilots moved their aiming point further along the road to avoid the vehicle, resulting in the aircraft landing towards a culvert passing under the road that was bordered by ARMCO railing. Unable to stop in time, the command pilot maintained the wings level to clear the ARMCO railing but as the aircraft slowed the right wing lowered and collided with a traffic sign half-way along the railing causing the aircraft to ground loop. The aircraft suffered substantial damage but neither occupant was injured.

21/02/2015 SAGA
TERRAIN COLLISIONS DUO DISCUS

After a normal aerotow launch into a 5 to 10 knot headwind and at about a height of 200 to 300ft AGL, the combination flew through some strong lift causing the glider to climb above the tow plane. The pilot lost sight of the tow plane and released in accordance with proper practice. The pilot lowered the nose to maintain airspeed and flew a turn to land back on the same runway as the take-off, rather than landing in a suitable paddock. The pilot managed to complete the turn but was too low to make the runway and landed in scrub. After touchdown, the left wing dropped to the ground and the aircraft turned through 90° with the nose wheel on the ground, and skidded to a halt in a cloud of dust. The aircraft was substantially damaged but the pilot was unhurt. The pilot, who was experienced but had not flown much in the last five years, was solo subject to daily check flights. The pilot had completed a satisfactory check flight earlier. Investigation by the pilot's CFI revealed that the pilot was sitting low in the seat, which when flying in what would be a 'normal' high tow position may have placed the pilot in a position where she could not see the tow aircraft. The decision turn back was inappropriate for the height and an off-field landing ahead was preferred. The pilot has been made aware of landing options and the actions to take in an emergency. This accident highlights the importance of always being aware of landing options during the early stages of the launch. As demonstrated here, the main risk is trying to get back to the airfield. It is much safer to make a controlled arrival into a field ahead than risk low turns, catching a wing tip, stalling or spinning. Remember, the less you have to turn, the safer you will be.

21/02/2015 SAGA
AIRCRAFT CONTRO HK- 36TTC

The experienced pilot was engaged in aerotowing operations and had just taken off with a Duo Discus in tow. Early in the climb and at about 300ft AGL the glider pilot lost sight of the tow plane and released. The tow pilot continued to climb to join circuit. Upon entering downwind the tow pilot noticed the Duo Discuss had landed to the left of the runway in a cloud of dust and became concerned for the pilot's welfare. Due to this distraction, the pilot forgot to wind-in the tow rope, on a TOST electric rewind system. The pilot conducted a power-on approach and touched down in the normal glider landing zone. During the flare, a jolt was transmitted along the tow rope and the pilot realised that the rope was still extended. The rope and rings had impacted a vehicle parked near the approach. This incident highlights how distractions can affect human performance by causing us to omit procedural steps, forget to complete tasks, or take shortcuts that may not be for the better. It also provides a reminder to members to ensure people, vehicles and other obstructions are kept clear of the runways at all times.

24/02/2015 WAGA AIRFRAME
SZD 48 3 JANTAR STANDARD 3

Due to excessive sink after launch, the pilot found himself on circuit. The undercarriage was lowered and a pre-landing check was carried out. As the aircraft touched down, the undercarriage collapsed and the glider came to a stop suffering minor abrasions to the fuselage. Although the handle for lowering the undercarriage was activated, the pilot did not confirm that the undercarriage lever button was fully up, signifying the locked position. Pilots should familiarise themselves with the locked position of the button and visually check it during the pre-landing checks.

1/03/2015 NSWGA
SYSTEMS TWIN ASTIR

During the first flight of the day the pilot in command noticed the ASI was under-reading. Following an uneventful landing, the Pitot tube was inspected and found to be blocked by mud where wasps had nested. After cleaning the pitot, the aircraft was returned to service. The experienced command pilot acknowledged that he failed to conduct an instrument check as part of the Daily Inspection. This incident highlights the importance of diligently carrying out the DI, which includes undertaking a check of the functioning of instruments. The Club now employs pitot covers for all their aircraft.

6/03/2015 GQ
AIRSPACE INFRINGEMENT
SZD-48-1 JANTAR STANDARD 2

The pilot entered controlled airspace without a clearance. While certain areas of the airspace are routinely released for gliding operations, in this instance it was not. The pilot did not confirm the status of the airspace prior to launch and proceeded in the mistaken belief that it was inactive. In an airspace infringement, there is the potential for your aircraft to operate in unsafe proximity to other aircraft. An airspace infringement may also increase air traffic control and pilot workload, and result in delays to other aircraft. Thorough pre-flight preparation is a good defence against an airspace infringement. By solving potential problems on the ground, the likelihood of an airspace infringement is reduced. Make sure that you have current charts to cover your entire operation, and consider Control Area (CTA) steps along and around your planned route.

6/03/2015 GQ AIRSPACE
INFRINGEMENT DUO DISCUS

The pilot inadvertently entered controlled airspace while climbing in a thermal close to the airspace boundary. The airfield is sited under restricted airspace, and a local arrangement is documented for the use of a portion of the restricted airspace by the local gliding club. On the day of the incident the airspace had been released but the pilot was observed by ATC to be outside the released area and within the boundary of controlled airspace. ATC contacted the club and the club informed the pilot, who promptly vacated the area. This incident highlights the importance of pilots maintaining adequate separation from airspace boundaries, both laterally and vertically.

12/03/2015 SAGA
GROUND OPERATIONS HK-36TTC

While taxying the Super Dimona motor glider to position for the launch of a Duo Discus, the tow pilot misjudged the distance between the two aircraft and the left wingtip of the tow plane collided with the glider causing significant damage to the canopy. The ground handler did not see the problem develop until it was too late to stop the accident. The tow pilot taxied close to the glider, with a view to minimising ground handler activities to pull out the tow rope. This aircraft has a retractable towing system. Tow pilots must ensure they maintain a safe distance to manoeuvre while preparing for the tow, and to ensure that comfort and ease of operation do not compromise safe operations.

12/03/2015 VSA FLIGHT
PREPARATION/NAVIGATION ASK 21

During an extended soaring flight over the Victorian High Plains, a convergence lift line had formed a bank of cloud between 7,000ft to well above 10,000ft. There was good lift on the north side of the convergence and several gliders made use of it to gain height and explore the area. One of the gliders had a camera and filmed the conditions including thermalling with another glider, subsequently posting the footage on the internet. The footage revealed that at least one glider had breached VMC by flying too close to the cloud. The pilots concerned were counselled by their CFI. While it is tempting to fly close to cloud when conditions allow, pilots need to comply with the VFR visibility and distance from cloud criteria stipulated in ENR 1.2 Section 2, which is 1,500m horizontal and 1,000ft vertical when above 3,000ft AMSL or 1,000ft AGL.

21/03/2015 GQ
MISCELLANEOUS NIMBUS-4DM

On launch at about 850ft AGL, the tow rope failed at the glider end of the rope. An immediate return to the airfield was initiated, followed by an uneventful landing. Another tow rope was attached to the tug and glider and as the tug was applying take-off power the tow rope again failed at glider end of the tow rope. The club has been testing the suitability of 10mm 1,600kg polypropylene rope. The rope failures occurred towards the end of the trial period and the club has now implemented a replacement/rotation policy based on the demonstrated useful life of the ropes.

21/03/2015 NSWGA
TERRAIN COLLISIONS PW5 SMYK

Under investigation. The pilot flew too far downwind for the conditions and upon return to the airfield the tail clipped the top strand of the boundary fence resulting in the rudder and elevator being torn from the aircraft. The aircraft landed heavily and stopped just past the fence. The pilot suffered minor injury. While the pilot was experienced, he only had 10 flights on the accident type, which was of substantially lower performance than the pilot was accustomed.

28/03/2015 VSA
AIRCRAFT CONTROL DG-300 ELAN

The airbrakes deployed during a winch launch. The pilot experienced difficulty closing them due to acceleration forces and was unable to lock them. Nevertheless, the airbrakes remained closed and a normal launch ensued. The pilot advised that he recalled checking the airbrakes were closed but he obviously had not fully locked them. Investigation revealed that his seating position was such that he had to fully extend his arm and marginally lean forward against the harness in order to lock the airbrakes. The pilot's CFI reminded him that the first 'C' in the post-boarding check is: CONTROL ACCESS (Seat adjustments secure and positioned to allow for comfortable access to all flight controls, panel switches/knobs and the tow release. Rudder pedals adjusted for reach if applicable).

28/03/2015 WAGA
RUNWAY EVENTS DG 1000S

A motor vehicle was driven onto the runway by an experienced club member across the path of a glider established on final approach. The glider pilot avoided conflict by closing the airbrakes and overflying the vehicle. The glider landed safely further down the runway. The driver of the vehicle failed to sight the glider and may not have been using radio. The Club CFI has counselled the driver and will reinforce the club's policy to use radios when entering or leaving the runway. **GA**

GFA CLUB LIST

Please send any corrections, updates, additions for inclusion in the club list to

sean@glidingaustralia.org

716 FLIGHT GLIDING CLUB

JOperations weekends, Public Holidays and school holidays. Club aircraft 1 two seater. Tel# 08 9571 7800

2 WING AAFC

Operations from Warwick airfield shared with Southern Down GC. E, Located 12km NW of Warwick on Warwick-Allora back Rd, L at hall. Aerotow on 1st Sunday and third weekend of every month plus first week of school holidays. Club fleet 2 x two seaters and single seat with Tug. Facilities include own hangar complex. Tel 07 3879 1980.

www.2wg.aafc.org.au

ADELAIDE SOARING CLUB

Operations every day except Tuesday Hangars, Bar, Clubrooms, Bunkhouse, Caravan park, Camp sites, Workshop, Club leases airfield Easter Regatta (April), Gawler Week (December), Flinders Ranges camp (May) Gawler (YGAW) -Ward Belt Road Gawler P.O. Box 94, Gawler, SA 5118 Tel (08) 8522 1877, Fax: (08) 8522 3177 Aerotow, Piper Pawnee (BOT PIT)

www.adelaidesoaring.on.net

ADELAIDE UNIVERSITY GLIDING CLUB

Operations from Stonefield with Barossa Valley Gliding Club. Winch launching weekends and public Holidays year round. Facilities include, Clubhouse, bunkhouse, toilets, showers, Kitchen, BBQ area and entertainment. The club owns 5 gliders including 2 x two seaters, 4 private gliders. Tel 0412 870 963. www.augc.on.net

AIR CADET GLIDING CLUB

Ward belt Road Gawler airfield. Facilities and operations shared with Adelaide Soaring Club. Located at: -34° 36' S, 138° 43' E. Operations weekend sand school holidays or by arrangement. Aerotow and self launch. 2 private two seater motor gliders. Clubhouse, Bunkhouse and briefing room. Tel 08 8522 1877.

ALICE SPRINGS GLIDING CLUB

Located at Bond Springs 20km's North of Alice Springs.-. Winch launching Saturdays and public Holidays. 4 club aircraft including 2 x two seaters. Facilities include Club house, camp sites, Hangars, Tel 08 8952 6384.

BALAKLAVA GLIDING CLUB

Weekend operations by winch 10km's NW of Balaklava on the Whitwarta Road. Tel 08 8864 5062. Located at. 4 Club aircraft including 2 x two seaters, 10 private gliders. Facilities include Bar, Canteen, clubhouse, caravan Park, camp sites, workshop, Hangar sites, Club owns Airfield. www.bgc.asn.au

BALLARAT GLIDING CLUB

15 members operating from the Ballarat airfield. Airport Road Ballarat. 47.5 E Tel 5339 2444. Aerotow operations most weekends or by arrangement. Single club two seater. Access to hangarage and airport facilities for Bar, showers and rooms.

BAROSSA VALLEY GLIDING CLUB

Stonefield, 16km East of Truro, L 5km, behind Stonefield church, Tel 08 8564 0240, Winch operations weekends and public holidays or by arrangement. 2 club Gliders including 1 x two seater, 5 private gliders. Facilities include canteen, clubhouse, caravan park, camp sites workshops, Hangarage and spare sites. Club owns airfield.

BATHURST SOARING CLUB

Pipers Field - (On Fremantle Rd, 1.5km from Eglinton) E. Tel: (02) 6337 1180. Aerotow operations weekends and public Holidays. Club has two tugs and 6 gliders including 3 two seaters. Private fleet is 34 aircraft. Club Facilities include: Clubhouse, ablution block, Caravan park with Power, Hangars, Full Kitchen, Dormitory.

www.bathurstsoaring.org.au

BEAUFORT GLIDING CLUB

Shared facilities with VMFG and Geelong GC at Bacchus Marsh airfield. 26 members, Aerotow by arrangement with GGC and VMFG, operations on weekends and public Holidays. 4 club aircraft with 2 two seaters, 17 private gliders. www.beaufortgc.org.au Tel 03 9497 2048

BENDIGO GLIDING CLUB

Borough Rd, Raywood. Own airfield. Operates weekends and public holidays. Hangars, workshop and club house with cooking and ablution facilities. Aerotow with Eurofox tow plane. Club fleet a PW6 two seat trainer and a Junior. Approx 20 private gliders. Tel 03 5436 1518 or 0459 485 281. www.bendigogliding.org.au

BEVERLEY SOARING SOCIETY

Beverley Airfield, Bremner Rd Beverley WA, Tel 08 96460320 Clubhouse, Bunkhouse, Fully equipped Kitchen and Briefing room.
Members Caravan Park with Ablution block.Large workshop. Operations Friday to Sunday and by arrangement on Public Holidays. 3 Pawnee tow planes, 8 club aircraft including 4 two seaters Private fleet of 40 single seat gliders.

www.beverley-soaring.org.au

BOONAH GLIDING CLUB

is in South-East Queensland about 25 minutes south of Ipswich. Contact the Boonah Gliding Club via Email infomail@boonahgliding.com.au for any queries 7 days a week. If you wish to speak to someone about bookings, call our mobile 0407 770 213. www.boonahgliding.com.au

BORDERTOWN-KEITH GLIDING CLUB

Western Hwy 5kms west of Bordertown, Tel 08 8752 1321. Operations by winch every Saturday or all year by arrangement. 5 club aircraft including 2 x two seaters, 1 private glider. Bar canteen, clubhouse, bunkhouse, Caravan Site, Camp Sites.

BUNDABERG GLIDING INC

Elliott Gliding field, Childers Hwy Bundaberg, Tel 0417 071 157, Winch operations weekends and public Holidays. Club Fleet includes 1 single seat and 1 two seat glider, Private fleet 1 x 2 seat glider. Club Facilities: Clubhouse, Area available for camping & caravans, 2 hangars. Grass and sand runways. www.gliding.inbundy.com.au

BYRON GLIDING CLUB INC.

Tyagarah Airfield (council owned) - E side of Pacific Hwy, 5 kms N of Byron Bay. Entry off Gray's Lane then 2nd left into Old Brunswick Road passed the blue hangars to club white hangars at the eastern end of this dirt road. Telephone (02) 66847627. Operations are 4 days a week, self launch only. The club owns 1 Jabiru Falke and there are 4 private motorgliders - Falke 2000, 2 Dimonas and Grob 109A (some available for hire). Facilities include: Clubhouse with kitchen and bathroom, 2 hangars, with only basic camping on grounds. www.byrongliding.com

CABOOLTURE GLIDING CLUB

45 km's North of Brisbane on Bruce Hwy PO Box 920, Caboolture, Qld 4510
Tel 0418713903
Flying: Fridays, weekends, Public Holidays. Aerotow with Piper Pawnee (SPA) Licensed aerodrome, bar - canteen

www.glidingcaboolture.org.au

CANBERRA GLIDING CLUB

Bunyan Airfield , 1297 Monaro Highway, Bunyan NSW 2630 (13km north of Cooma, Western side of highway), Located at: -36° 08' S, 149° 09' E. Tel# 0429 523 994. Aerotow operations weekends and public Holidays. The club has 4 aircraft including 2 tow seaters. Private fleet is 11 gliders. Facilities include: Clubhouse, bunkhouse, club and private hangars, Club own the airfield. www.canberragliding.org Wave flying centre for NSW

CENTRAL COAST SOARING CLUB

Bloodtree Road, Mangrove Mountain NSW 2250, Tel 02 4363 9111. Rope Winch operations Thursday, Saturday and Sundays. 5 club aircraft including 2 two seaters, one private glider. Club facilities, workshop, hangar and clubhouse. www.ozstuff.com.au/ccsoaring

CENTRAL QUEENSLAND GLIDING CLUB

Lot2, Gliding Club Rd, Dixalea.
90 km SSW of Rockhampton
Tel 0488 781821 Winch operations
Weekends and weekdays by arrangement. Club fleet: Grob103 twin, Astir CS, 5 private gliders, Hangarage Clubhouse, bunks, lounge-briefing room, kitchen, showers, 12V solar power, 240V gen set Club owns airfield 06/24, 1700m, grass/gravel www.cqgliding.org.au

CORANGAMITE SOARING CLUB

Kurweeton Pastoral Co, Kurweeton Derrinallum - Private strip. Tel 03 5593 9277. Winch and self Launch. Club Fleet 1 x two seater, 2 private aircraft. Flying by arrangement.

CUDGEGONG SOARING P/L

Gulgong - (199 Stubbo Road, North from Gulgong. Leave on Medley St., road becomes "Barney Reef Road" after level crossing. At 7km, turn right onto Stubbo Rd. Airfield 2km on left). Tel 0418 286 033. Winch operations weekends and by arrangement. All aircraft are privately owned. The club owns the airfield, has a clubhouse, caravan Park, camp sites, workshop and hangars.

DARLING DOWNS SOARING CLUB

McCaffrey Field (Warrego Hwy, at 8km W of Jondaryan, turn S down Mason Rd), Tel 0409 807 826. Aerotow operations weekends, public Holidays and by arrangement. There are 26 private gliders. Facilities include: Bar, Kitchen, Cluhouse, Bunkhouse, caravan park, camp sites, BBQ area, Showers, Wi-Fi, Lounge, Workshop, Hangarage, Club own the airfield. 100 members. www.ddsc.org.au

GEELONG GLIDING CLUB

Shared facilities with VMFG and Beaufort GC at Bacchus Marsh Airfield. Tel 0409 212 527. Operations by aero tow weekends and public Holidays and by arrangement. Monthly winching also available. 3 Tugs, 6 club gliders including 2 x two seaters, 16 private gliders,

GLIDING CLUB OF VICTORIA

Samaria Road Benalla, Tel 03 5762 1058, State Gliding Centre of Victoria. Club rooms with Bar and large lounge dinning, Office, Members kitchen and commercial Kitchen Toilets and briefing rooms with storage. Members Caravan Park with Ablution block and dormitory accommodation. Weekends from April-Sept, 7 day a week operations at other times. GFA approved workshop. 8 club aircraft including 4 two seaters, 41 private aircraft. Hangar space, Large private hangar complex. www glidingclub.org.au

GLIDING CLUB OF WESTERN AUSTRALIA

GCWA is about 1.5 hours, 160 km's east of Perth, towards Kalgoorlie. The club operates weekends and public holidays, with sealed runways, hangar, club rooms and a fleet of 7 aircraft and Pawnee Tow plane. The club operates from the Cunderdin airfield and can be contacted on 0417 992 806 or see us at www.glidingwa.com.au
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GLIDING TASMANIA (The Soaring Club of Tasmania)

is situated half way between Launceston and Hobart on the Midland highway (4km east of Woodbury). 28 members. Operations every Sunday and Saturdays by arrangement. Club owns ASK13, Club Libelle, Pawnee Tug. MotorFalke also available for dual flying. Private fleet includes Nimbus and Grob 103M. Ph. 0419992264

www.soaringtasmania.org.au

GOULBURN VALLEY SOARINGN

Lot 2, Tidboald Road Wahring, Located at: -36.41S 145.14E. Winch operations Saturdays and Sundays by appointment. 4 club aircraft and 2 private. Clubhouse, Shower and toilets. Caravan Park, Private units, Hangars. 13 members. Private owned strip.

GRAFTON GLIDING CLUB

Waterview Heights (Eatonsville Rd, 8km W of South Grafton). Tel 02 6654 1638. Winch Operations Saturday or by arrangement mid week. The club has two aircraft including 1 two seater, with one single seater. Facilities include a hangar. .

GRAMPIANS SOARING CLUB

Located at Ararat Airfield (Victoria) the club operates at weekends and public holidays with independent operator mid-week activities by arrangement. Launching is primarily by aerotow; winching also available. Fleet comprises basic trainer (Puchacz) and advanced trainer (Janus C) plus Jantar Std 3 and H201B Libelle; 8 private single-seaters. Hangar space often available for visiting pilots plus club-house and bunkroom accommodation. Locality offers excellent XC, ridge soaring and mountain wave opportunities. Camps at Jallukar (near Grampians) Easter and Queens Birthday. Well-deserved reputation as the Soaring Centre of Victoria. Clubhouse phone 0490 487 708 weekends or 03 5342 9946 weekdays.

www.grampianssoaringclub.com

GYMPIE GLIDING CLUB

Located at Kybong 10 km south of Gympie, 26 degrees S, 152 degrees 42 E. on the Bruce Highway. Telephone 54851895/54477647 . Winch operations . Operates Wednesdays and Saturdays and other days by arrangement.Facilities include Club House and Hangars . Gympie Airfield is a CTAF and hosts other power aviation and commercial operations.The Club has 2 Club two seaters, 2 single seaters and 10 private single. www.ggc.gympiegliding.org.au

HORSHAM FLYING CLUB

Horsham airport – Geodetic Road Horsham. Tel 03 5382 3491. Weekends and public holidays, aerotow. Clubhouse, Bar, canteen, Bunkhouse, campsites, Caravan Park, Workshop, hangar space. 5 club aircraft including 2 x two seaters. 8 private aircraft.

HUNTER VALLEY GLIDING CLUB

Warkworth - (10km W of Singleton. S along Putty Rd to Mt Thorley intersection, then W towards Denman. 1st turn right after crossing the river at Warkworth), Tel 02 6574 4556. Aerotow operations weekends, Public Holidays and one friday/month. Club owns 2 two seaters and 2 singles and the private fleet includes 16 gliders. Facilities: Clubhouse, bunkhouse, caravan park, camp sites, workshop, club owns airfield. www.hvgc.com.au

KINGAROY SOARING CLUB

Situated at Kingaroy Airfield, Club Gliders include Duo Discus X, Ask 21,2 Discus CS and Astir CS77. 30 Private gliders, Facilities include Club House with licenced bar, Bunk House accommodation for 35 in single and family rooms. New Club Hangar to be completed by late 2013. Operations every weekend, First Thursday of the month 4 day weekend and two after 3 day weekend i.e. Friday, Saturday and Sunday. Come and visit one of the friendliest clubs around. Club House 61 7 4162 2191 Launch Point 0438 179 163

www.kingaroysoaring.com.au

LAKE KEEPIT SOARING CLUB

The Club lies within Lake Keepit State Park off the Oxley Highway between Gunnedah and Tamworth, Elev 1120ft AMSL. Tel: 02 6769 7514. Operates 365 days a year. Aerotow every day, winch every second Saturday. 9 Club Gliders including 4 two seaters, 40 private gliders. Facilities include Flight Centre; Clubhouse; kitchen/BBQ; double, single, twinshare accommodation; camp sites; workshop; hangarage. .

www.keepitsoaring.com

LATROBE VALLEY GLIDING CLUB

Latrobe Valley regional Airport – Airfield Road Morwell. Tel# 0407 839 238, Weekends, Public Holidays and mid week by appointment. 3 club gliders, 3 private gliders.

LEETON AVIATORS CLUB

Brobenah - (9km N of Leeton PO, on E of main canal at foot of Brobenah Hills). 26' 07" E. Tel 02 6953 6970. Winch operations Saturday and Sunday by arrangement. Club A/C 1 tow seater and one private motorglider. Facilities include Clubhouse showers toilets, Canteen, hangar with workship, Camping.

MELBOURNE GLIDING CLUB (VMFG)

Bacchus Marsh Airfield 8 km's south of town on the Geelong Road. Operations weekends, Public Holidays and Fridays. Tel 0402 281928. 115 members, aerotow operations. Two tugs and 7 gliders in the fleet with 4 two seaters and a two seat motorglider. 34 private gliders.

MELBOURNE MOTORGLIDING CLUB

Moorabbin Airfield, Grange road Mentone. Tel 0418 511 557. Operates Motorglider AEF's around Melbourne anytime by booking. Royal Victorian Aero Bar and restaurant. Controlled airspace operations.
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MILLICENT GLIDING CLUB

Mt Burr Road Millicent. Tel 0427 977 241. Winch launch operations Sundays or by arrangement. Two club aircraft one two seater, 3 private aircraft. Bar, Clubhouse, Workshop, Hangarage.

MORAWA GLIDING CLUB

We are a small club located in the best soaring weather of all WA clubs approximately 4 hours drive north of Perth. We operate on Sundays and for nominated blocks of time to cater for training courses and cross country events. Members participate in Club and private operations of winch, auto launching and motor glider flying. ph (08) 9971 1137

https://sites.google.com/site/glidingwesternaustralia/home

MOUNT BEAUTY GLIDING CLUB

Mount Beauty Airfield operations weekends and public holidays and by arrangement. Winch launching with a two seater and single seat fleet. 30 members with a range of private gliders and motorgliders. Tel 0417 565 514. www.mtbeauty.com/gliding

MOURA GLIDING CLUB

Location: On Moura-Theodore Rd , 5 mins from Moura, Tel 07 4997 1430. 3 members, operations Sunday by winch. Facilities include Club House, hangar, 1 x two seater.

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MURRAY BRIDGE GLIDING CLUB
Pallamana (7km from Murray Bridge on Palmer Rd). Tel 0403 318 277 www.murraybridgegc.com Operations are self launching and by arrangement. 1 club 2 seater motorised and 3 private motorgliders. Club House, Hangarage. www.murraybridgegc.com

MURRAY VALLEY SOARING CLUB
Redlands Road Corowa 3km's west of town. Tel 02 6033 5036. Seasonal professional operation, aerotow or self launch. www.australian-soaring-corowa.com Large hangar, clubhouse with office, internet, bar, Showers, BBQ, Swimming pool, Spa, water ballast, battery recharging services, Paved roads and runways, camping and caravan sites. Two tugs. We own and operate four unique 40ft sea containers to ship 6 gliders per container.

NARROGIN GLIDING CLUB
Located 8 km's west of Narrogin Township WA on Clayton Road This is about 200km's Sth East of Perth. The club features a powered Caravan Park, Ablution Block, kitchen, workshop, Licenced Bar, clean accommodation, Sealed Runways. The club fleet comprises three two seaters and three single seat A/C with Pawnee Tug. The club operates weekends and public Holidays and conducts 5/6 day beginner courses. The club conducts annual wave camps at the Stirlings, Fly-ins to local farms and Cross country courses. Contacts at Tel 08 9881 1795 or 0407088314,
www.narroginglidingclub.org.au

NARROMINE GLIDING CLUB
The club owns and operates Twin Astir, Duo Discus, LS4, Libelle, Discus B. Tugs: club owned Pawnee 260 and private owned C-180.14 private owned gliders. Facilities include club house with licenced bar and kitchen. Private owned tourist park on site with En-suite rooms,airconditioning, kitchen, recreation room, laundry. Walking distance from town. The club operates full time November to April and Fri, Sat, Sun, Mon for the rest of the year. The club welcomes all visitors.
www.narromineglidingclub.com.au

NSW AUSTRALIAN AIR FORCE CADETS
Flight Commander (Pres) - FLTLT(AAFC) Bob Sheehan 0429 485 514
Chief Flying Instructor - SQNLDR(AAFC) Bill Gleeson-Barker 0408 443 009
Restricted full week courses, ADFC and ADF Personnel only - mainly during school holidays. Bathurst A/D

NORTHERN AUSTRALIAN GLIDING CLUB
Batchelow adjacent to the township. Tel 08 8941 2512. Operations Saturdays and public Holidays. Aerotow operations, 1 two seater, 3 private gliders. Club House, Hangarage available.

NORTH QUEENSLAND SOARING CENTRE
Corinda Avenue, Columbia, Charters Towers, Tel 0428 797 735, Operations by winch Sundays and public Holidays by arrangement. 5 Private gliders. www.nqsoaring.org.au

RAAF WILLIAMTOWN GLIDING CLUB
Williamtown airforce base 25 km's North of Newcastle on Nelsons Bay Road., Tel 02 4982 9334. Club fleet 2 Two seaters and 2 single seat gliders. Facilities include: workshop. 14 members. Operations weekends by appointment.

RENMARK GC - RIVERLAND SPORT AVIATION
Renmark airfield, Turn off 6km on Renmark to Berri Rd, Tel 0417 890 215. Operations weekends, public Holidays and by arrangement. Two club aircraft, 1 private, Bar, canteen, Club house, bunkhouse, workshop, hangar sites. www.sportaviation.riverland.net.au. Aerotow operations.

SCOUT GLIDING CLUB
Armstrong, (On Morgan Rd, 10km N of Blanchetown, W side of River Murray). Tel 0418 815 618. www.airactivities.sa.scouts.com.au Operations weekends and by arrangement. Self launching 2 x motorfaulks. Club House, Bunk house, Full kitchen and dining facilities, camp sites.

SOUTHERN RIVERINA GLIDING CLUB
Gate 3 Tocumwal Aerodrome 2km east Operations 7 days a week all year round. Launching by aerotow. 3 club operated gliders - 2x2 seaters and one single seater 76 members with a range of private gliders and motor gliders. BBQ and full kitchen facilities. CFI 0358 743 052. www.srgc.com.au.

SOUTHERN CROSS GLIDING CLUB
Located at Sydney Metro Airport Camden, a licensed General Aviation airport, hosting operations in the commercial, private, sports and recreational aviation areas. It has a reputation as Australia's leading sports/recreational aviation airport. Hangar sites available, GFA approved workshop on the aerodrome. Aerotow Piper Pawnee (CPU, FBI, SMS) Flying Friday, Saturday, Sunday, Monday and Wednesday. P.O. Box 132, Camden, NSW 2570
0425 281 450 or airfield on 0402 055 093
www.gliding.com.au

SOUTHERN TABLELANDS GLIDING CLUB
Lockesyleigh" Carrick (11nm NE of Goulburn - N on Hume Hwy 12km, Left onto Carrick Rd, 8km, over railway on right). Tel 0408 647 671. Winch operations Saturdays or by arrangement. Facilities include hangarage. www.stgc.org.au The club has 2 two seaters and a single.

SOUTH GIPPSLAND GLIDING CLUB
Leongatha airfield 8km's south of Korumburra. Tel 0437 041 709. Operations weekend and public Holidays and by arrangement, Winch launching with rope. Aerotowing by arrangement. 4 club aircraft including 2 x two seaters. 2 Private gliders. 14 members. Camp sites, workshop, hangar

SOUTHWEST SLOPE SOARING P/L
Operations from Bendick Murrell airfield. Tel 0488 531 216. Winch and self launch by arrangement. Club own 1 two seater and has 3 private gliders. Facilities include: Hangar, powered camping area.

SPORTAVIATION – TOCUMWAL
7 day a week all year round operations by Aerotow. Gate 10, Babbingtons Road Tocumwal airport. Tel 0427 534 122.
5 club aircraft including 2 two seaters, 9 private aircraft. Caravan Park, Kitchen, Bathroom, BBQ area reception/Office, Conference and briefing rooms, Wi/Fi Hangarage water, full time courses. www.sportaviation.com.au

SUNRAYSIA GLIDING CLUB
Winch launching Weekends and public Holidays. 3 km's West of Koorlong, Mildura. Tel 03 5025 7335. 22 members, 2 two seat and 2 single seat aircraft, 5 other private aircraft. Canteen Clubhouse, camp sites. www.sunraysiaglidingclub.org.au

SYDNEY GLIDING INC.
Operations from Camden Airport.. Tel 0412 145 144. Self launch operations weekends and midweek by prior arrangement. Club has 2 self launching 2 seaters. www.sydneygliding.com.au

SOAR NARROMINE P/L
Operations from the Narromine airfield west outskirts of town. Tel 0419 992 396. 7 day a week aerotow operation 2 tugs. 10 club aircraft including 3 two seaters. Facilities include: Caravan park with En-suit rooms and showers and air-conditioning. Camp Kitchen self cooking, recreation room with TV and Laundry Facilities. www.soarnarromine.com.au

SCOUT ASSN OF AUSTRALIA NSW GLIDING WING
Operates from the Camden airfield. See Sydney gliding for location details. Tel 02 9773 5648. Operations with self launch motor glider and 1 two seater glider. Weekends and other sites by arrangement. Membership restricted to youth scout Assn members.

TEMORA GLIDING CLUB
Operations from Temora Airfield 2km's Nth of the township off airport Road.. Tel 02 6977 2733. Operations by aerotow weekends with full time camps in January and others by arrangement. Club owns a two seater, Private fleet, 7 single seaters. Facilities include: Bar, canteen, Clubhouse, camp sites,

WARWICK GLIDING CLUB
Warwick Gliding Club is a small, friendly gliding club located at the Warwick Airfield on the Darling Downs in South-East Queensland 2 hours drive from Brisbane. Tel: 07 3077 6973 www.warwickgliding.org.au

WAIKERIE GLIDING CLUB
Operations weekends and by arrangement, 7 day operations December and January. Waikerie airfield 3 km's east of town. Tel 08 8541 2644. Aerotow operations. 4 club aircraft including 1 x two seater, 17 private gliders. Trailer park. 29 members. www.waikerieglidingclub.com.au

WHYALLA GLIDING CLUB
Tregalana (25km from Whyalla on the Whyalla to Port Augusta Highway on the Right) Tel 08 8645 0339. Winch launching operations Sundays. Two single seat club aircraft, 1 private. Club House, hangarage available.

CLASSIFIED ADVERTISING
www.glidingaustralia.org

For members convenience, Classified Ads can be purchased through the GFA shop at www.glidingaustralia.org. Go to GFA Shop then select the category 'Classifieds'. Copy and paste your ad text in the text box provided. Your ad will be placed on the GFA website for a month from the date of payment. Ads that are financial at magazine deadline (10th of every second month) will appear in the GA Magazine. For any enquiries please contact the GFA office on 03 9359 1613.

GLIDERS FOR SALE SINGLE SEAT

Mosquito B VH-FQR

Winglets, refinished wings, good panel, tow out gear and enclosed metal trailer. Only 1250 launches from new. Form 2 until 2016. $28750. **Daryl 0447 574 700.** Full details at http://tinyurl.com/puxvd29

VH-IZW Grob Speed Astir 2

refinished 2015 in PU by Peter Holmes, L/D 40/1 at 65kts, 1700 hrs, Altair colour moving map glide computer on XCSoar driven from B50 vario, winglets, Flarm (display on Altair), Microair 760, GRP clamshell trailer, 150L water, full covers, tow-out gear, slim pack chute. Excellent performance, great condition, very affordable at $25000. **Ray 0438 286 228**

LAK-12 VH-GFH
Open Class glider $30,000. 1996 built; L/D 50:1, Min sink 87 fpm @

48Kts (Google Richard Johnston flight test Lak-12); 20.5m wingspan; TT 500 hours. Beautiful, majestic glider, easy to fly, light controls; big comfy cockpit. ASA handicap of 0.865. Tailwheel and wingtip mods carried out which are great improvements to ground handling. Good trailer. Trouble free flying, has required no maintenance whatsoever since I have had it. Hangared Stonefield SA. See photos at http://www.flickr.com/photos/100805789@N07 Currently undergoing its 20 yearly inspection and will have a new Form 2 about May/June 2015 Greatly reduced price as am keen to sell. **Contact Chris Hamilton 0418 234 000** or ultrabat@gmail.com

LS6
good condition. clamshell trailer reg. tow out gear. $45,000
katalyst.international@bigpond.com

LS8 VH-GPO 15/18m,

Completion Ready. Complete polyurethane refinish by Peter Holmes in 2012. LX V7 Vario connected to panel mounted Oudie. LX Mouse Flarm. Winter mechanical vario & ASI. Shire Newton trailer ready for Nullarbor crossing. Form 2 till Sept. 15. Located in Beverley W.A. $105,000. Contact: **Paul on 0421 875 031 or Paul.Oakley@chevron.com**

Janus VH-IUX
Low 2100 hoursTT, new canopy, basic instruments. Excellent cross country machine, Schempp-Hirth quality. In good condition and regelcoated by John Rowe. Enclosed trailer. $57,500 ONO located Western Victoria Call

Tracey 0428 133 243 or David 0412394065
david@finecut.com.au

Schempp-Hirth Standard Austria SH1, VH-GUN

Offered for sale due to fleet restructure. The only one in the country, and a national record holder in her day (816 km from Mildura to Collarenabri!). Built in 1964, GUN is in excellent condition with a survey completed in 2011. Total of 2155 hours for 1266 launches, fitted with FSG71M radio and facility for OzFlarm. Current Form 2 until the end of August 2015. Top condition dry trailer with LED lighting and recent professionally fitted suspension and mechanical disc brakes. Currently located at Bacchus Marsh, Victoria. $10k ono. **Contact Caleb** Email: gliderdriver@gmail.com or **0414 902 196**

Rolladen Schneider LS3a VH-IZR
No.3163 with 2370 hours and 1066 landings.This glider has been very well maintained, still has the original gelcoat and has had no major repairs. The glider has been fitted with a nose hook. All ADs have been completed and has a current form 2 and current maintenance contract. The glider is currently hangered at DDSC. Instruments include Borgelt B50 and

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B11 varios, Colibri data logger, Avier flight computer running LK8000 and a brand new compass.The harnesses have just been re-webbed. Comes with an enclosed metal trailer and tow out gear.Price $35k.Call **Peter Bell 0429 034 064 or Graham Hennessy 0429 170 648**

VH – KYV. Jantar 2. 21 meters

of great Polish engineering. 48:1 = come home comfortably!! Just had a ten year life extension by Joe Luciani. (can be extended every ten years). Basic instruments. Currently hangered at Benalla. Includes tandem trailer and factory covers. $25,000 O.N.O. (Hanger spot also available at $18,000) **Call Darcy Hogan – 03 5767 2187.**

LS6 C , 15m / 17.5m, VH-GLP, Serial No. 6246, 1991,

MTOW 525 kg Total hours 4360hrs

1500 launches. Average of three hours per launch! Complete with a Cambridge 302 and 303 for dependable reliability, Winter vario, FLARM, Dittal radio, Dual batteries, Tow out gear, Wing stand, As new waterbags. No major incidents, fuselage wings top surface refinished in 2010. Great condition! .With enclosed fibreglass trailer. LS8 performance with a LS6 price with flaperon's For Sale due to change in life direction! Only $67,500.ono. rookes@yahoo.com **Grant Rookes phone: 0407 998 959**

TWO SEAT
VH-VHI, Grob 103 Acro II

(not a Twin Astir). Fresh Form 2. X-Com radio front and rear, boom mics.Tasman vario and all flight

instruments. Excellent condition inside and out. 4,600 hours, 9980 launches. Enclosed registered trailer. Reluctant sale due to fleet upgrade. **Bob 0427 977 127 or Mike 02 4655 7079.**

MOTOR GLIDERS - POWERED AIRCRAFT - TUG

Nimbus 4DM 26.5m VH-IHY

Better than new! 1000K flights made

easy! 2004 build 809hrs 208land SOLO eng 38hrs Top condition aircraft giving maximum performance Never damaged Factory PU Full instrumentation - Zander ZS1 +Flarm Becker radio Solar panels & much more Spare prop, spare new clutch &

more Full tow out gear Full covers (un-used) Cobra all aluminum trailer + rigging gear Fastidiously kept Single owner from new Many extras not listed here.
For complete info package of sale contact **Mark Morgan** morgans@sctelco.net.au AU$240k Compare the price & package to a new 2 seat long wing selflaunch, hard to beat!

Alpin DM2 VH-GVW, two seat motor glider, 50hp Rotax 503, short T/O and good climb.All paper work up to date, sold with new form 2. Very low hrs , good condition. 32-1 solo, 28-1 at MTOW. $39,900.00 NSW **PH 0418 253 466**

Grob 109, VH-ZAK

excellent long distance cruiser, 2589TT, Eng 103 SMOH. All Limbach mods, wings repainted in poly, performance enhancing approved mods external oil cooler, cowl flap, exhaust fairing. Sold with all AD's, fresh form 2 and engine 100 hourly. Excellent condition. $60K **Ray Tolhurst 0414 559 742**

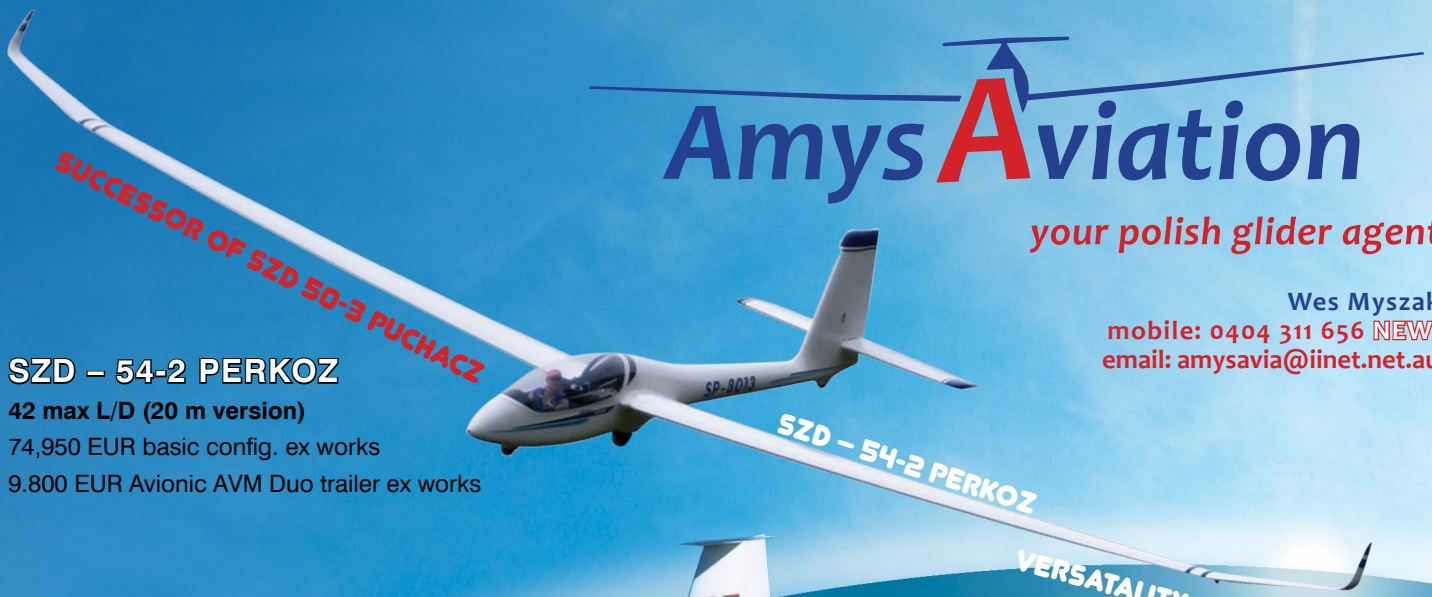
INSTRUMENTS AND EQUIPMENT

Glider storage hoist will fit single seat glider. chain block for lifting on wheels. $1250.00 **ph 0418 253 466 or 0429 301 289**

Amys Aviation

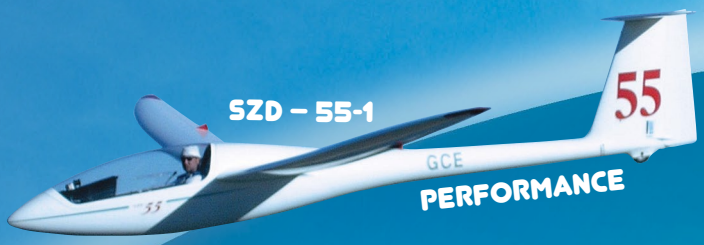
your polish glider agent

Wes Myszak
mobile: 0404 311 656 NEW!
email: amysavia@iinet.net.au



SZD – 54-2 PERKOZ

42 max L/D (20 m version)
74,950 EUR basic config. ex works
9.800 EUR Avionic AVM Duo trailer ex works



SZD – 55-1

44 max L/D – measured
Wing loading range 28.5 – 52.1
44,950.00 EUR basic config. ex works
6,835.00 EUR Avionic AVG 15 (15/18)
trailer ex works

PW6U

34 max L/D
56,000.00 EUR basic config. ex works
8,900.00 EUR PW6 Avionic trailer ex works

Glimpse of the production version of SZD-54-2 PERKOZ with redesigned back-seat instrument panel. (photo Michal Ombach 2015)

ZS JEZOW NEWS · ZS JEZOW NEWS

ZSJ includes hydraulic disc brake (TOST), CG hook (TOST) and anti-collision marks into standard/basic configuration.

ZSJ currently offers 3 months lead time.

ALLSTAR NEWS · ALLSTAR NEWS

The PERKOZ wallet of orders for 2015 is filling up fast...

Typical lead time 9 months
(soon to be increased to 12 months)

Only 2 slots for 2015 left!

Special Information for Lovers of THE JUNIOR in Australia. From Your Agent Wes Myszak !

DUE TO POPULAR DEMAND THE LEGENDARY SZD-51-1 JUNIOR WILL BE BACK IN PRODUCTION !!! ALLSTAR IS STARTING NEW PRODUCTION STRING OF 6 JUNIORS. THREE OUT OF THE SIX ARE STILL UNASSIGNED.

PRICES START FROM 36,500.00 Euro. ex works.
Grab your bargain!
Order 2 and combine the shipments.

'capitalizing on 50 year experience in manufacturing gliders'

SZD Allstar

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available from Alstar:
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SZD 59 ACRO
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PW5

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