

Issue 31 August - September 2016

www.glidingaustralia.org

AGW & SOARING SEWINAR



AUSTRALIAN TEAM AT WGC LITHUANIA

WGC BENALLA - GUIDE TO INTENSIVE TRAINING
ACCOUNTING FOR GLIDING CLUBS - BOB HALL AM









Providing experience, commitment and care when you need it most.



- Australia's largest independent aviation insurance broker
- 20 years experience, specialising in all classes of aviation insurance including gliders
- Most AIA brokers are qualified and passionate pilots with 90 years of combined experience
- Committed to providing the best insurance package to suit you and your individual needs
- Always competitive, always comprehensive, always accessible – 24 hours a day, 7 days a week
- Proud to be the new broker for the Gliding Federation of Australia

Contact

David Tait, Dylan Jones or Sara Barnard on (07) 3274 4732.

admin@aviationinsurance.com.au www.aviationinsurance.com.au



No. 31 August September 2016

2 FROM THE PRESIDENT - EXECUTIVE OFFICER -SPORTS CHAIR AND THE LATEST FAI BADGES

What's happening in the Australian gliding airspace.

9 COACHING WITH G DALE

The GFA is sponsoring G Dale to travel to Australia to provide dedicated coaching training at clubs across the country.

12 AUSTRALIAN TEAM AT WGC LITHUANIAMeet the six pilots on the Australian team travelling to the World Gliding Championships coming up in Lithuania in August.

16 GFA AGM AND SOARING SEMINAR

At the AGM, a crowd of attendees was treated to fascinating presentations, met the retired Chief of the Air Force and celebrated with many Awards recipients.

21 WGC BENALLA - TEAM SWEDEN

Team Sweden will participate in WGC Benalla with pilots in the Open and 18m Classes, all looking forward to competing in Australia.

22 THERMAL DISTRIBUTIONLearning about cloud distribution patterns and cycles can help you find thermals and stay airborne, even on blue days.

24 INTENSIVE TRAINING

An intensive training course can be an ideal way to save time and accelerate your learning, before or after you've gone solo.

John Styles has drawn up a list of ideas that can help any club to improve, to keep current members and to attract new ones.

Vintage glider pilots across the country have been busy this season, preserving, repairing and maintaining Australia's vintage fleet.

32 ACCOUNTING FOR CLUBS

A club's accounting system is critical to its well-being. The first in a series, this article introduces setting up and managing key accounts.

34 BEST USE OF THERMALSMost cross-country soaring in Australia is done by gliding along almost straight tracks and pausing to gain height by circling in thermals.

38 OPERATIONS & AIRWORTHINESSThe Occurrence Reporting System and Service Difficulty Reports can help improve our safety standards and maintenance programs.

40 INCIDENTS & ACCIDENTS

43 CLUBS LISTING

46 CLASSIFIEDS

GLIDING FEDERATION OF AUSTRALIA

MEMBERSHIP CLASSIFIED ADVERTISING

www.glidingaustralia.org

Or contact: Cathy Cassar cathy@glidingaustralia.org

Tel: 03 9359 1613

AIRCRAFT REGISTRATION & related

Tanya Loriot tanya@glidingaustralia.org

SHOP The GFA Online shop has a range of useful products including a Form 2 kit,

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.

9am-5pm Monday - Friday 9am-3pm Firday Tel: 03 9359 1613 Fax: 03 9359 9865

C4/ 1-13 The Gateway **Broadmeadows VIC 3047**

Non GFA members are welcome to subscribe to Gliding Australia.







Sean Young **Editor** sean@glidingaustralia.org

Adriene Hurst Deputy Editor





FDITORIAL SUBMISSIONS

We invite editorial contributions and email sean@glidingaustralia.org

Other large files and photographs and can be uploaded at www.glidingaustralia.org/ga

DISPLAY ADVERTISING & sean@glidingaustralia.org

GLIDING AUSTRALIA Tel 02 9332 2822 PO Box 246 Edgecliff

oublication of The Gliding Federation of Australia Inc. 433 264 489 (GFA). ia a member of the Féderation Aéronautique International (FAI) the Australian Sport Aviation Confederation (ASAC)

Opinions expressed in Gliding Australia are not necessarily those of the publisher, nor does the publisher give assurances or warrants that the information published is accurate. Readers are advised to check any information contained herein. Editorial submissions are welcome but the publisher reserves the right to eith, abridge, amend and correct any material supplied for publication as the publisher sees fit. All rights reserved. Reproduction witho permission is strictly forbidden without the permission of the publisher. © The Gliding Australia, Gliding Federatio of Australia Inc 2015 **Print Post Publication Number PP 381712/02675**

WS Media Design & Publishing Services info@westsunsetbooks.com

FROM PRESIDENT MANDY

A NEW MODEL FOR TRAINING?

Wikipedia defines 'churn' thus: in its broadest sense, a measure of the number of individuals or items moving out of a collective group over a specific period of time. With our new database, we can now confirm what we have long suspected. That is, that GFA has a churn rate of 25% per year. Last week when I met with the other Sport Aviation groups (HGFA, Parachutists etc) I asked them about churn in their membership and they didn't understand what I was talking about. They have schools with professional paid staff to train their members, who are happy to pay for the service.

We know from the GFA Members survey last year that time is more of an issue than cost for many members and in order to service that need, clubs must consider changing the way they deliver instruction to new members.

The following email is an eloquent description of one pilot's struggle to learn to fly gliders. It is typical of emails I receive every month.

Clearly the author is one of us, he is passionate about aviation, and he loves flying.

It makes me terribly sad that as an organisation we have not been able to help him fulfil his dreams.

He writes:

"I have been a member of the xxx gliding club since November last year, I am 32 and very passionate about flying. At this point in time it is likely I won't be renewing my membership and I thought I would give you a few reasons why.

Firstly I'd like to stress that I would actually really like to be with a club and continue to fly. It is a goal of mine to one day go solo and do some cross country. I like many other people my age am very time poor. I work a full time job 6 days a week and the only day off I have is a Sunday in which I'd be able to go to the airfield twice in a month. In order for me to go gliding. I have to drive to and from the airfield (2 hours) stand around helping for at least 4 hours and if all the stars align I might get to fly once for 15 minutes. There is no communication as to who will be attending on any given day and how much flight time one could expect and the expectation of what is required of trainees is very hazy. This is really not an effective use of my one day off and at this rate it would take me

years to go solo.

I'd like to mention before I go any further that I have no problem with helping out, in fact I even offered to help with the promotion of the club via social media given my background in design and marketing.

I saw in the magazine an article that made the conclusions people want more danger/excitement in sport and a more professional approach, with the later point I certainly agree with the former I'd disagree. People want to do it but are time poor and leave because they are not getting results. I do not crave danger the same way a 16 year old does, I crave achievement and fulfilment and the joy of flight.

POSSIBLE SOLUTIONS

- Clubs could look at a proper induction. If the instructor/s feel this is unfitting of their time then I'd happily pay extra for my club membership to cover their time.
- Create a buddy type system for instructors and trainee pilots so the instructor has a better understanding of where the trainee is at in terms of progression and forming a better relationship and in turn a bond to the club. When I turn up I don't know who will be there on the day, I don't know anyone and I'm treated like a stranger.
- Have a booking system for trainee club members. If you want to train one day, book ahead and cap the number of trainee pilots relative to instructors allowing for timers, wing runners, etc. There is no point turning up if you are not needed and can't fly.
- Offer a fast tracked training program for trainees with no time but lots of money. I will be looking to train over one week with Benalla in order to maximize my flight time toward my solo. This will cost me more money but far less time, which is more valuable to me.
- With the last point I'll end my rant in saying that these days, people around my age in most cases have lots of money, lots of choices, but no time. If my club had an option to pay let's say \$3,000 for a solo fast tracked I would have taken the option. I think in the time it would take me to do this I would have more of a tie to the club and its members who helped me to achieve my goal and would most likely stay on as a solo pilot.

MANDY TEMPLE



PRESIDENT
President@glidingaustralia.org

ADVOCACY

GFA sends representatives to many aviation associations and forums. Here is the next article detailing these meetings over the last two months and the issues that we are currently discussing.

REGIONAL AIRSPACE AND PROCEDURES ADVISORY COMMITTEES (RAPAC) NSW AND VIC

CASA has proposed changes to the CTAF procedures at Narromine/Dubbo and Wangaratta/Benalla, due to the ending of NDBs at Narromine and Wangaratta. Our regional RAPAC representatives supported by our National Representative have prepared a submission for CASA outlining our views.

DEPARTMENT MEETINGS IN JUNE

Last month saw meetings of all GFA departments in Melbourne. This is a great opportunity for networking and cross-pollination across departments. Much work was done and many decisions were made around policy and strategy for the coming year.

CASA SPORTS AVIATION SAFETY FORUM 22 - 23 JUNE

Executive Manager Operations (EMO) Chris Thorpe and President Mandy Temple attended the annual CASA Sports Safety Seminar in Sydney. This is a good opportunity to talk to other Sports organisations such as Hang Gliding and Parachuting, Warbirds, Gyrocopters, Model aircraft, Experimental Aircraft, RA-Aus and Ballooning. We share common issues and face a lot of similar challenges. This meeting was an opportunity to meet the new CASA Sports Team with an extra two levels of administration between our point of contact and Mark Skidmore. It remains to be seen if this will

OTHER ISSUES OF INTEREST

CASA.

 RA-Aus are going to lobby CASA to increase their maximum weight and to gain access to controlled airspace.

achieve the desired results. The two

new appointees are from outside

 Parachute federation have QR codes on their membership cards which links to their database, making it unnecessary to issue new cards for a new qualification or membership expiry information.

- RA-Aus has 5% female membership. Ours is now 6%. I am going to work with Katie Jenkins at RA-Aus to develop joint strategies.
- I had breakfast with Jonathan Aleck on Thursday and had a good discussion around current GFA issues and the world post CASR Part 149.
- Jonathan Aleck spoke on Thursday about a Just Culture and a culture that looks forward with re-education rather than punitive retrospective actions.
- I raised the issue of CASA staff advising the German LBA that the GPL was NOT ICAO compliant - when actually it is. CASA are looking into it.
- Andrew Ward spoke of changes to CASR Parts 149, 132, 131, 105 and 103. Under CASR Part 132, glider towing will be a special purpose operation for historic aircraft used for tugs.
- It is proposed that the Standards Subcommittee, of which GFA is a member, will meet to discuss the proposed NPRM on CASR Part 149 prior to it going public.

• There will be a dedicated CASR Part 149 page coming soon to the CASA website.

REGIONAL AVIATION SAFETY FORUM -UPDATE

Following discussions at RASF on 30 March 2016 where Regional Express again raised concerns about Air Proximity (Airprox) events with gliders, CASA has commenced development of a Sector Risk Profile (SRP) in regard to Airprox events outside controlled airspace. As part of the SRP process, CASA is seeking industry involvement and consultation via an online survey to provide the basis for risk reducing safety initiatives. The survey seeks to identify threats and any controls and recovery measures that operators and individuals in different sectors use to reduce the risk of Airprox events. GFA has received the survey and is preparing a response.

MANDY TEMPLE

SPORTS COMMITTEE

The following are a few of the changes made at the last Sports Committee meeting held in Melbourne in June

NCC

National competition rules and guidelines were updated and will be published on the GFA website in the near future.

The competition program for the next season has been completed with Multiclass at Kingaroy in October 2016, Club and Sports Class at Waikerie in November 2016, and 20m Class at Narromine in February 2017. The Grand Prix will be held at Horsham in December 2016, and Joey Glide will be held at Temora in December 2016. See the GFA calendar for the actual dates.

Horsham has also been awarded the Grand Prix for the 2017 season.

At the moment we do not have expressions of interest for the 2017/18 season of competitions. if any club wishes to host a national competition in this season please contact the NCC. If the sports committee can help you with the running of a national competition, please contact me.

FΔI

Berryl and Tim Shirley will be instituting an online training package for the revalidation of Official Observers. There was a suggestion that Coaches should have an OO rating.

COACHING

The schedule for G Dale's coaching dates was finalized. The format will be a 2-day seminar followed by coaching the coaches at various clubs. Please see GFA calendar for details.

ITC SELECTION CRITERIA

A Master Ranking list will be used, comprising the total of the normalised competition results (60% + 40%). Pilots will be selected by class first in descending order of ranking until all the positions in that class are filled. The selection of the teams for each class will be carried out one class at a time. If class positions cannot be filled by this process or pilots withdraw, then the Master Ranking list will be used to fill the vacant positions based on order of the pilot ranking within the Master Ranking list.



GREG SCHMIDT
CHAIR SPORTS COMMITTEE
csc@glidingaustralia.org

The Sports Committee at the annual Meeting in Melbourne decided that all International pilots competing at the Nationals will be scored as HC. As such it will not be necessary to re-score the results of the Nationals for selection purposes.

TASMAN TROPHY

The Nationals at Kingaroy later this year will be the next Tasman Trophy event.

EXECUTIVE OFFICER

The Annual General Meeting was held in Melbourne on Saturday 16 July. This was a month early compared to previous years due to a number of key people being overseas during August and concern that September would be getting a little late. It was a fairly simple AGM with no changes to our Articles and no motions, so it was primarily to consider the President's report, financial report and appointment of officers.

We changed the articles last year so that all officer positions except for the President, VP and Treasurer are now appointed at the AGM. This is mainly a verification of decisions made by the Regional Associations and Departments (Operations, Airworthiness, Sports, Marketing, Safety), but it does give the members the ability to veto any appointments that they are concerned about. To see the list of appointments, look on the web page under Contacts.

Any member can apply to become President, Vice President or Treasurer, but these are elected by the Board at the meeting on the day after the AGM. At the time of writing we still have one week before applications close so I cannot advise who was nominated and appointed for each of these three key positions. Again, look under Contacts on the web page.

This year we held a soaring seminar on the same afternoon as the AGM with a broad range of speakers. We will provide a report on this in a future edition of the magazine. We have a reasonable number of people attending the seminar and also the presentation dinner.

SIMULATOR

GFA has asked Justin Couch from Southern Cross GC to lead a team of people investigating the manufacture and application of simulators in gliding. The GFA proposal is for each region to have simulators as a training aide and possibly for promotion purposes. We have some expertise within Australia and Justin is coordinating these people to come up with a solution to help GFA with its aims to improve flying training.

MONTHLY PAYMENTS?

GFA is now offering a recurring payment option to make it easier for you to pay your annual GFA membership fee. When your membership is due for renewal you will have the traditional payment options but now you can also choose a recurring payment from your credit card. You can elect to have this automatically come out of your card every 12 months or you can pay monthly.

INTENSIVE COURSES BROCHURE

Some common feedback regarding our current training regime is that people are disappointed by the small number of flights they get each day at their club and the variation of training provided by having many instructors delivering their training.

Some members have even calculated that learning to fly with RAAus is cheaper than at their local gliding club and they don't need to hang around all day just to get one or two flights.

We are now promoting to new members that they can accelerate their training through attendance at an intensive training course. This makes for faster progression, typically at a lower cost, and is less demanding on their home club's instructors.

We then expect the member to return to their home club to continue with their training and enjoy the soaring.

Clubs that offer these courses have been invited to advertise on our Intensive Training Course promotion brochure which can be seen at this link:

http://tinyurl.com/hpx22x5 It is available on the GFA web home page down the right hand side menu icons

This brochure will be promoted to all new members and, of course, any current members wanting to accelerate their progression.

WORLD GLIDING CHAMPIONSHIPS

The World Gliding Championships will be held at Benalla in Victoria in January 2017. We are expecting over 100 gliders from more than 30 countries to make the big trip to Australia. Hopefully the weather will cooperate and they will experience some great flying conditions. Twelve towplanes from at least three states will be launching the gliders each day. It's a great opportunity for GFA members to come and experience the excitement of the world championships, even if just for a few days. The opening ceremony is on Sunday 8 January and the closing ceremony on Sunday 22 January, but the Benalla skys will probably be full of gliders from Xmas onwards.



TERRY CUBLEY **EXECUTIVE OFICER**eo@glidingaustralia.org

WE NEED SOME SUPPORT

Do you have a modern 15m, 18m or Open Class glider that you would be willing to hire to an international competitor - either for cash, or by doing a swap and flying their glider in Europe or the USA?

Do you want to crew for one of the international pilots? Become a key part of the championships and one of the teams. Your pilot may even become world champion!

Are you available to help with the running of the championship? We are looking for keen workers to help with launching and other important tasks for periods of 3 days up to 3 weeks.

If you can help with any of these options, please send a note to info@ wgc2017.com

OSTIV CONFERENCE IN JANUARY

OSTIV is the Scientific and Technical organisation for gliding, with major involvement in aerodynamics, materials, instrumentation, meteorology, training, safety and so on. They have a conference every two years and the next conference will be at Benalla from 8 - 15 January 2017, in conjunction with the World Championships. Any member is welcome to attend the lectures and demonstrations, and you are also invited to submit papers for consideration at the conference.

The program will be published in the Gliding Australia magazine and the web page as we get closer to the event. If you have any questions or wish to discuss issues with the event organisers, please drop me a note at eo@glidingaustrlaia. org and I will forward this to the organising committee.

HOW HEALTHY IS YOUR CLUB?

The health of our sport in terms of membership, activity and opportunity is in the hands of the clubs around Australia. The GFA can make decisions from the top, but it is the clubs who provide services and facilities to our members, which directly impact on their enjoyment and advancement within our sport.

We have developed a club health check survey so that clubs can seek input from some of their members. Have you been asked to contribute? The aim is for members to give feedback on how they think their club is progressing across a broad range of criteria including fleet and assets, airfield, training opportunities and club culture. The clubs will get a summary of their members' responses (but no names) so that the club can identify their strengths and maybe some areas of opportunity so that the club can better meet the needs of the current members and future members.

We will publish a snapshot of the great things that clubs are doing and some common issues so that clubs can then discuss plans for future improvement.

CLUB AFFILIATION MOVES TO OCTOBER

Gliding clubs must be affiliated with GFA to ensure that clear communication can happen and that all necessary audits and checks are up to date – Ops audit, airworthiness, safety, etc. There is no charge for this so it is mainly about checking that all information is current. This was previously done in April ready for the new GFA financial year, but is now moving to October. Most clubs hold their AGM in August-September and will have current office holders' details in October.

ANNUAL FLIGHT REVIEW

All members are required to have an annual check flight or AFR each year. We will collect data on your AFR date and then send you a reminder a month before it is due, to ensure members do not inadvertently miss the date. The date will also be shown on the membership details sent to clubs each month. As we don't currently know the date of your AFR we have allocated a nominal date of the end of October, but when you renew your membership next we will ask you to tell us the actual date of your last AFR.

If your date is October then you have until the end of October to get this completed, and you can complete the check in say September and the AFR date will remain as October.

HORSHAM SAILPLANE

Entries for the Horsham Sailplane Grand Prix 14 - 20 December 2016 are now open.

This will be the first event in the 8th Series of the Sailplane Grand Prix, and is a qualifying event. The top two scoring pilots will be selected for the SGP final which will be held in Chile later in 2017.

Competition Director Tim Shirley said, "This will be the first time that the Australian Sailplane GP has come to Victoria, and we are looking forward to it as a lead-up to the World Gliding Championships at Benalla the following month. We are expecting a high quality field of Australian and overseas competitors. Horsham is a fantastic place for gliding, with good weather, no airspace restrictions and an excellent airfield and local community.

"This event will be run in the 18m Class. No handicaps apply, although we may introduce a wing loading limit if the entry list warrants it. Only 20 entries are allowed, and seeding via the IGC list will apply if it is necessary.

"As the Contest Director for the SGP I and the organising committee would like to invite you to enter this contest. It is a simple format, and the emphasis will be on fast racing around fixed tasks rather than endurance tasks, where the first pilot home will win. Typical tasks will be 2.5 to 3 hours.

"We do expect that several members of the Aussie team for the Worlds at Benalla will enter, and there has already been interest from overseas WGC contenders as well.

This promises to be a significant and spectacular event in this year's gliding calendar. Don't miss it!"

GRAND PRIX FORMAT

The format of a Grand Prix is a traditional race with a single start time and a fixed course, where the first across the line is the winner. This makes for very different tactics to normal gliding competitions. For example, there is little value in simply following another pilot, because eventually the winner has to be in front. There are a maximum of 20 competitors.

Tasks are set for speed – generally the Grand Prix tasks will be shorter than those in traditional gliding competitions and they are always fixed racing tasks. There is a single start line and a height limit will be set such that the start can be observed from the ground.

Finishes will be at a finish line located on the boundary of the airfield, and high speed finishes are encouraged by the rules, though of course there will be some minimum height requirements for safety reasons. This again will provide spectator interest, and being only 5km from the town of Horsham we are hoping to attract some crowds!

The aim is to provide a simple and spectacular format for spectators, whether they are on site or watching remotely. We want to attract spectators from the general public as well as those who are involved with the sport.

Scoring is similar to motor racing with 10 points for 1st, 8 for 2nd,then 7,6,5...1. It doesn't matter if you are second by 10 metres or 10 km, you still only get 8 points for it. Because the format is simple, daily prizes be awarded on a podium the same evening – watch out for popping champagne corks!

Each glider will be fitted with a tracking device, which will automatically transmit position information to a website which will display the current race situation as it unfolds – though there will be a delay to avoid the information to be used tactically. The trackers we will use are Australian made, and we expect to be using them at the WGC in Benalla as well. These trackers use GSM (mobile phone) technology. The task area generally is well served by the mobile network, and less well by the rival OGN setup.

This is an exciting international event, aimed at gaining spectator interest with an easy to understand format and visual opportunities. For pilots it is a challenging and different way to race, for organisers it is easy to run and for everyone else it is a way to see gliding competition in a whole new light. More details are at

www.sgp.aero/australia2016

If you have any questions please contact the organising committee at horshamsgp@glidingaustralia.org.

END OF YEAR FINANCIAL REPORT TO MEMBERS 15 MAY TO 16 APRIL

It is with a great deal of excitement that the GFA remains in a very secure financial position with accumulated assets attributable to members of around one million dollars. We have around \$700,000 cash at the bank and in term deposits, loans to clubs of \$180,000, and we own our office premises in Melbourne, worth another \$200,000.

In addition, the GFA manages another half million dollars of funding on behalf of the RANGA junior scholarship fund (\$47k), the ITC (International Teams) fund (\$440k), and special purpose government grant funds (\$27k).

FINANCING CLUB GLIDERS

The GFA can assist with financing of club gliders. At present Darling Downs, Hunter Valley and Mangalore clubs have loans with GFA. These loans provide clubs with better than bank interest, while earning the GFA a reasonable rate of return.

The GFA ran a small financial surplus for the year of \$26,000, following a loss of \$29,000 in the previous year. We had budgeted a deficit for 2015-16 with the board determining that we needed to spend more to remedy airworthiness shortcomings, and to market and promote the sport to build membership. As it turned out, we spent less on the Airworthiness Development Program, and John Styles, Chair of Marketing and Development was able to get substantial Government grant assistance to help with the promotional program.

While the GFA remains in such a sound financial situation, the GFA Board has resolved to continue spending funds in 2016-17 - rectifying shortcomings in the organization - still work to go on airworthiness systems; continuing promotional efforts to make the sport more visible - utilizing the upcoming World championships at Benalla for publicity; and delivering improved services to members. Our budget for 2016-17 is an operating shortfall of \$66,000.

It's interesting to look at the key contributing factors in the GFA financial operations.

On the income side, GFA receives a contribution from CASA each year for the work we do that otherwise would be CASA's responsibility as the governing authority for aviation regulation. One would expect that this should pretty much fully cover our costs of operation - or, at least the costs of aircraft registration, safety management and operating procedures. Unfortunately it doesn't come close - CASA pays just \$123,000 to GFA, which is about 12% of our operating cost. Also, in the past few years it hasn't been indexed for inflation.

INCOME

Our biggest single contributor to income is membership - around 65% of our income. Which is why the GFA is pushing so hard to promote membership growth as a No 1 priority at the moment. Every 10% increase in membership is another \$60,000 increase in GFA income - that can result in lower membership costs for all, or improved services (or both). Membership growth is vital to maintain the health of the organization. It provides new students for instructors, new officebearers to run your clubs, and new buyers to ensure a continuing market for gliders. Hence the 'Beyond 3000' slogan a target to increase membership by 10% per year for the next few years, and the 'Fly a Friend in June' campaign last month. Did your club gain any members last month?

GFA also manages the glider airworthiness system and seeks to recover costs from glider owners



DAVE SHORTER
TREASURER

treasurer@glidingaustralia.org

for these services. Income from airworthiness was 16% of the GFA total, acconting for most of the remaining GFA income for the year.

On the expenses side, salaries and wages is the biggest single item, accounting for around 45% of our costs of operations. Insurance is another 20%. The remaining money paid out during the year is spread broadly across administration, training and meeting expenses, and the costs incurred by volunteer officers performing the many support functions of the GFA.

INSURANCE

Insurance rates have remained stable with a continuing good claims history, and we are realizing improving premium rates for the Broad Based Liability (BBL) policy the BBL excess cover is now \$1m and premiums for next year will reduce by 21/2%. The GFA group Hangar Keepers Liability (HKL) policy continues into its fourth year with 40 clubs participating this provides clubs with public liability cover at considerably reduced rates. GFA is currently working with clubs on a new insurance opportunity - the Club Insurance Program (CIP) - to help owners achieve up to 15% savings on glider hull and liability. This can be achieved simply by aligning groups of club and private policies to a common expiry date.

Full audited accounts for the financial year are accessible for members' inspection on the GFA website.

\$200, 000 SAVINGS!



That's how much I reckon we can save on glider insurance across the whole of GFA.

Last issue of this magazine I wrote of the Club Insurance Program (CIP) being organised by the GFA insurance broker, Aviation Insurance Brokers Aust (AIBA). This is a program where the insurer will offer significant discounts on glider insurance premiums to groups of gliders who all renew their insurance policy on a common date. Logically this can be organised by getting all glider owners from a club to work as one group, and align their insurance renewals with the Club's insurance policy.

The problem is getting a bunch of independent-minded glider pilots to cooperate. More difficult than herding cats!

At my club, Lake Keepit, the Club Treasurer and I decided to try and round up the cats. We have eight gliders in the club policy, due for renewal on 30 September, and we've managed to identify another 48 private gliders associated with the club, PLUS a dozen private GA aircraft. It's been necessary to chase, hound and beseech some owners to get their go-ahead to include them in our negotiations with the broker organising the deal - at this stage we have over 40 gliders and aircraft owners who've agreed to participate in the initial explorations into the program.

Reactions from the insurer have been very positive, and indications are that we will receive around 15% off insurance premiums. The insurer already does a similar deal with 19 GA aircraft owners at another airfield – initially they received around 10% off their premiums and at the following renewal, that discount was increased by another 5%. With our larger group we expect to equal or better that deal.

FOR THE CLUB, THIS SHOULD SAVE US OVER \$4,000 PA!

There have been a number of concerns expressed by owners about the CIP.

Q - Some pilots are worried that this is a group policy and if there is a major claim by another pilot, their premiums

another pilot, their premiums

- A The insurer has affirmed that each policy will remain separate, and independent of other policyholders in the program. No-claim bonuses and any other special conditions will be assessed separately based on the experience of each owner.
- Q Current policies have a wide scatter of renewal dates which do not correspond with the club's policy.
- A Aviation Insurance Brokers Aust (AIBA) will facilitate the alignment of the policy dates with a pro-rated premium. You need to contact AIBA to organise this.
- Q Owners currently have policies arranged by different brokers and insurers.
- A It will be necessary to assign your insurance business to AIBA to participate in the CIP the CIP is an initiative of AIBA. AIBA places business with all insurers and can act on your behalf with your existing insurer if it's a different company. AIBA have also said they will not place a broker charge on transferring policies (broker charges are the practice of other brokers), which means that your existing policy may be cheaper with AIBA as your broker.

At the onset of the CIP or at renewal, if not satisfied that the program gives you a better deal, that arrangement can be reversed.

- Q Can I opt out if the deal is not good enough?
- A Your policy is separate and if the price you are offered as a participant in the program is not attractive, you are not bound to the

group and can place your business elsewhere.

- Q I want a policy with a higher excess, and lower premium – catastrophe insurance only.
- A Separate policies and conditions may be negotiated with each owner, according to their circumstances. You would need to speak to the broker.
- Q I like the lay-up provisions of my present insurer.
- A There are two Australian insurers and both will be invited to quote for each CIP the CIP insurer may be the same as your present policy, or it may change. If the deal is not to your liking you don't have to proceed.
- Q I have a GA aircraft can it be included with the CIP?
- A Yes. Club members with GA aircraft can be included in the Club Insurance Program.

If our experience at Keepit is typical, you'll need to nominate one key figure in each club to organise your group. If your club is small with only a few gliders, there is also opportunity to amalgamate with other CIP groups. As the Insurance Officer for GFA I'm happy to assist smaller groups or individuals wanting to join up with a larger group. My feeling is that it would be desirable to get groups together of 20 or more gliders into each CIP. Don't forget your mates with GA aircraft. They can join in and add to the numbers and save on their policies as well.

Ultimately, apart from giving the insurers the opportunity for administrative cost savings, having large groups buying their insurance at one time is no more than what small hardware stores and other franchised businesses have done for years – group buying. It has to carry more weight. It's just surprising that we haven't got ourselves together on this many years ago.

We might not save enough to throw it around but the savings can be meaningful for your club, and may help buy something new for your instrument panel. Time to get with it!

For more information on the CIP, contact the GFA insurance broker who has been the initiator of this program

dylanj@aviationinsurance.com.au

(07) 3274 4732 or me at

treasurer@glidingaustralia.org
DAVE SHORTER

BOB HALL MEMBER OF THE ORDER OF AUSTRALIA



On 13 June 2016, Bob was made a Member of the Order of Austriala (AM). Congratulations to Bob from the GFA and the whole Australian gliding community.

Dr Bob Hall of the Bathurst Soaring Club has been made a Member of the Order of Australia for his contribution to sport aviation. Bob has had a long involvement in gliding, serving as Chairman of Operations and GFA President and, more recently, as President of ASAC and the major spokesperson for sport aviation with regards to regulations and safety.

DR ROBERT JAMES HALL AM

For significant service to sport aviation, particularly to gliding, through leadership, advocacy and training roles, and to the promotion of safety standards.

Service includes

AIR SPORT

AUSTRALIA CONFEDERATION (ASAC)

President, 2005-2008.

Chair, Technical Committee, since 2008.

Board Member, 1998-2008.

Representative, Industry Forum, Australian Strategic Air Traffic Management Group, 2009 - 2015.

GLIDING FEDERATION OF AUSTRALIA

President, 2001-2005 and Immediate Past President, 2005-2006. Vice President, 2000-2001.

Chairperson, Operations Panel, 1991-1996.

Convenor, Airfields and Airspace Committee, 1990-2006.

Chief Flying Instructor (by rotation), Bathurst Soaring Club, circa 1970s-2015 and Level 3 Instructor, since 1977 and Instructor, since 1972 and Vice-President, 2000.

Member, Standards Consultative Committee, Civil Aviation Safety Authority, since 2011.

Contributed to establishment of Airspace and Environment.

Regulatory Unit, Airservices Australia.

AWARDS AND RECOGNITION

Recipient of the Paul Tissandier Diploma, Federation Aeronautique Internationale, 2009.

Recipient, Gold Medal, Air Sport Australia Confederation, 2012.

Life Member, Gliding Federation of Australia, 2006.

MEMBER OF THE ORDER OF AUSTRALIA

In the Australian honours system, appointments to the Order of Australia confer recognition for outstanding achievement and service.

The Member of the Order of Australia is awarded for service in a particular locality or field of activity or to a particular group.

Recipients of the Order of Australia are from many fields of endeavour and all walks of life.

HOW IT IS AWARDED

The Order of Australia is the pre-eminent way Australians recognise the achievements and service of their fellow citizens.

Nominations for awards in the General Division of the Order of Australia come directly from the community.

QLD COACHINGWITH G DALE

The GFA is creating an excellent opportunity by sponsoring G Dale to travel to Australia to provide dedicated coaching training. This is an opportunity available on a National scale through which each state can run a dedicated coaching event. Queensland, New South Wales, South Australia and Western Australia have taken advantage of this opportunity.

SEPARATE LECTURE AND FLYING DAYS

The Queensland event will break from tradition by separating the lecture series from the flying. The week will include two days of lectures followed by five days of flying. In the past, coaching events have been scheduled with five days of intensive flying including lectures before and after flying. This new concept was decided upon as it was felt that combining the lectures and the flying was too intensive and limited the lecture series to those that could only attend all the flying days, which are usually held outside of a central location. By having the lectures over two days at the weekend will provide an opportunity for a wider audience. As it turns out, this is the format that G intends to use for future events and he has tailored his lecture material accordingly.

NOVEMBER

The coaching week is scheduled for **29-30 October, Brisbane seminar** and **31 October-4 November, Coaching at Kingaroy**. Pilots who wish to improve their cross country coaching skills and general cross country knowledge are invited to participate in this two-day lecture series followed by five days of one-on-one flying with G Dale in a Duo Discus.

G Dale is well experienced to conduct such an event. He has worked as a professional gliding instructor for many years at several UK clubs including Lasham, Bristol, Gloucester and Booker, and more recently has worked as a dedicated coach in New Zealand and Australia. He is extremely experienced in the art of coaching the coach and those who have had the opportunity to attend his previous events will attest to his excellent delivery techniques.

The lectures will be held at Griffith University, Southbank Campus, central Brisbane. The University has kindly sponsored the event by providing lecture theatre facilities for the two days, free of charge. The lecture series is planned in central Brisbane in





order to attract as much participation as possible from those Queensland pilots who will find it easier to travel to Brisbane than a gliding field, for one or two days. The lecture series will have extremely informative content that will interest all pilots from early solo right through to experienced cross country pilots. The focus will be on coaching the coach.

The lecture series will be over an intensive two days combining content that is usually covered in a 5 day lecture / flying coaching event. Additional guest speakers will also be invited. **Professor Sidney Dekker has accepted the invitation to provide a lecture on Human Factors.**

FIVE FLYING DAYS

A five-day flying event will follow the two day lecture series from 31 October through to and including 4 November at Kingaroy Soaring Club.

DUO DISCUS

The flying will be carried out in the Kingaroy club Duo Discus. It is expected that two pilots per day will be accommodated on a short cross country flight where tuition on coaching techniques will be the main content for each flight. The flights are not intended to be specific cross country training flights but will focus specifically on coaching techniques.

All pilots are invited to attend the two-day lecture series. The maximum seating capacity will be 60. The five-day flying event will accommodate a maximum of 10 pilots with each pilot conducting a short cross country coaching flight under the instruction of G Dale. Other pilots will be invited to attend and fly their own gliders, including two seaters, where each day will be run as a small competition with short tasks being set with other pilots encouraged to race against the Duo. This will provide a competitive environment, ideal for coaching. A short morning briefing and post flight briefings will be held. Eight pilots will be selected for the coaching flights with another two pilots on standby. This will provide flexibility in the case of lost flying days due to weather. Pilots are invited to apply.

The Queensland coaching event is in the final stages of being finalised. Full details including costings will be published in the next edition of the gliding magazine.

For more details and expressions of interest please contact QLD RTO/SPORTS MILES GORE-BROWN mgb7773@gmail.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

GCWA/BSS COMBINED WAVE CAMP

1 - 9 August 2016 Contact Owen 0417 917 947

2016 BASIC SAILPLANE ENGINEERING COURSE WARWICK GLIDING CLUB

13 - 19 August 2016

Annual Inspection and Replacement of Components. Numbers are limited to 20 participants. Contact either Laurie Simpkins on lahina2@hotmail.com or returns@glidingaustralia.org

QLD STATE CHAMPIONSHIPS

1 - 8 October 2016

Darling Downs Soaring Club. For more information please go to www.ddsc.org.au

55TH MULTI CLASS NATIONALS KINGAROY

10 - 21 October 2016

Contact Greg Schmidt on 0414 747 201 or gregschmidt88@gmail.com

G DALE COACHING SCHEDULE

This series will comprise two-day seminar programs followed by several days of flying.

NSW

19 and 20 October Sydney seminar, 21 - 27 October Coaching at Temora contact Mark Rowe justsoaring@gmail.com

QLD

29 and 30 October Brisbane seminar, 1 - 4 November Coaching at Kingaroy contact Miles Gore-Brown mgb7773@gmail.com

SA

6 to 10 November South Australia contact Peter Temple pete.temple@internode.on.net

WA

12 and 13 November Perth seminar, 14 - 18 November coaching contact Greg Beecroft greg.beecroft@bigpond.com

VINTAGE GLIDERS AUSTRALIA MELBOURNE CUP RALLY

29 October - 1 November 2016 Bacchus Marsh VIC 3340.

All welcome for a weekend of fun, friendship and flying as it used to be. The event also includes the Australian Gliding Museum Open day held on Sunday 30 October 2016.

Please contact **Dave Goldsmith**, **0428 450 475** for more information.

CLUB AND SPORTS CLASS NATIONALS WAIKERIE

11 - 19 November 2016

For info, http://

clubandsportswaikerie2016.blogspot com. au/ or email johnridge16@gmail.com and practice available from 8th November

WAIKERIE ORANGE WEEK COMPETITION

21-26 November 2016

Contact John Ridge email: johnridge16@

NARROMINE CUP

20 - 26 November 2016

narromineglidingclub.com.au For further details contact arnie.hartley@gmail.com

NSW STATE CHAMPIONSHIPS NARROMINE

26 November - 3 December 2016

Organised by Bathurst Soaring Club Contact – Graeme Cant graemecant@internode.on.net www.nswgc2016-2017.com.au

WOMEN IN GLIDING WEEK MT BEAUTY GC

3 - 11 December 2016 Wendy Medlicott wendymedlicott@ optusnet.com.au

AUSTRALIAN JUNIOR NATIONAL CHAMPIONSHIPS

10 - 17 December 2016

10 December - practice day. 11 December - first competition day. Enquiries **Eric Stauss** at estauss@internode.on.net

COACHING WEEK AT WAIKERIE

27 - 31 December 2016

For further details please feel free to contact Bernard Eckey on **08 8449 2871** or send an e-mail to eckey@ internode.on.net.

8TH SERIES SAILPLANE GRAND PRIX HORSHAM

14 - 20 December 2016

Entries for the Horsham Sailplane Grand Prix 14 - 20 December 2016 are now open.

This will be the first event in the 8th Series of the Sailplane Grand Prix and is a qualifying event. The two top scoring pilots will be selected for the SGP final which will be held in Chile later in 2017.

This promises to be a significant and spectacular event in this year's gliding calendar. Don't miss it! www.sgp.aero/australia2016

AUSSIE LIBELLE GATHERING 2016 BENDIGO

28 - 30 December 2016

Contact Mark Kerr secretary@ bendigogliding.org.au 0417 005 986 or Phil Organ vicepresident@bendigogliding.org.au 0407 315 511

www.bendigogliding.org.au/Main/ libellegathering

34TH FAI WORLD GLIDING CHAMPIONSHIPS BENALLA

8 - 21 January 2017 wgc2017.com facebook.com/WGCBenalla

OSTIV CONFERENCE BENALLA

8 - 13 January 2017

Deadline for Abstracts and Summaries - max. two A4 pages including figures - is 15 July 2016. ostiv.org/newsdisplay/xxxiii-congress-2017.html

VINTAGE GLIDERS AUSTRALIA 40TH ANNUAL RALLY BORDERTOWN SA

8 - 15 January 2017

Enjoy relaxed summer gliding in pleasant company at Bordertown SA, a great place to fly! For more details please contact JR Marshall 08 8733 441

AUSTRALIAN NATIONAL 20 METRE CHAMPIONSHIPS NARROMINE

12 - 19 February 2017 www.narromineglidingclub.org.au

WEIGHT AND BALANCE SATURDAY

13 August - Bathurst Len Diekman

Contact for booking : Graeme Cant graemecant@internode.on.net

BASIC AIRWORTHINESS COURSE

4 - 11 September - Bathurst Accommodation available at the clubhouse. Bookings and accommodation - Graeme Cant. graemecant@internode.on.net

PRESIDENT AND NSWG REPRESENTATIVE MEETING

17 September - Narromine

Accommodation provided Friday and Saturday night. Contact Beryl Hartley for bookings. arnie.hartley@gmail.com

NEW SOUTH WALES GLIDING AGM

17 September - Narromine All members welcome.

Time - TBA

AIRWORTHINESS REFRESHER COURSE

24 September - Temora

Open to all Maintenance Authority holders. All Maintenance Authority holders must attend one of these courses by end of 2016. Contact Colin Veal.

Colin veal@bigpond.com

MINOR REPAIR FRP

5 - 30 September - Narromine Bookings - Arnie Hartley. arnie.hartley@gmail.com Accommodation - Beryl Hartley arnie.hartley@gmail.com

UPGRADE ROC TO AI AIRWORTHINESS

30 October to 2 November Bathurst

Accommodation available at the clubhouse. Bookings and accommodation.
Contact Graeme Cant graemecant@internode.on.net

FAI GLIDING BADGES 🔀

FAI

BERYL HARTLEY
FAI CERTIFICATES

faicertificates@glidingaustralia.org

TO 29 JUNE 2016

A BADGE

STYLES EWAN J 12159 301 AAFC NSW **DEDONG CLAY S** 12160 NARROGIN GC GOODE ANDREWS 12165 301 AAFC NSW THOMAS DAVID L 112168 **GEELONG GC** MATHER NICHOLAS G D. 12170 SOUTHERN CROSS GC BRASSIER DOMINIQUE 12172 BATHURST SC

GEELONG GC

301 AAFC NSW

301 AAFC NSW

301 AAFC NSW

DARLING DOWNS SC

A & B BADGE

GUNASINGHE ISHARAKA

MONTROY MATTHEW R 12126 HUNTER VALLEY GC MONTROY BRADLEY K 12127 HUNTER VALLEY GC

12161

B BADGEWINSLETT WYNONA

SO MATHIAS

C BADGE
GRAHAM ALAN F 11805 CABOOLTURE GC
GATES DAMIEN R 12136 DARLING DOWNS SC

12133

12142

12133

11952

BROWN RYANT

WINSLETT WYNONA

A, B, C BADGE BYRON BAY GC WATSON EBONY B 12162 BOYLE BENJAMIN G KINGAROY SC 12166 **SMITH-STUBBS** BENJAMIN G J. 12167 WARWICK GC DARLING DOWNS SC MALBON ISAAC J 12169 FORD IAN B RAAF RICHMOND GC 12171 GRAVES JAMES D CANBERRA GC 12173 G.C.V. PARTOS ZERO 12174 LAKE KEEPIT SC MORTON MATTHEW 12175 BAKER STEPHEN L 12176 G.C.V. WALLACE BRUCE J 12177 DARLING DOWNS SC SILVA ANDREW 12178 301 AAFC NSW

SILVER C

DAVIES KYLE T 4910 CANBERRA GC WHITEHEAD GUY H 4911 BATHURST SC

GOLD C BADGE VAN DER MEULEN

DANIEL 1729 CANBERRA GC
DAVIES KYLE T 1730 CANBERRA GC
DOHERTY TERENCE N 1731 SOUTHERN CROSS GC
WHITEHEAD GUY H 1732 BATHURST SC

DIAMOND GOAL

VAN DER MEULEN DANIEL CANBERRA GC DAVIES KYLE T CANBERRA GC

DIAMOND C BADGE

MACNEALL DENIS P 7473 NARROGIN GC

BADGE CLAIMS

ALL BADGE FLIGHTS WITH THE EXCEPTION OF HEIGHT CLAIMS MUST BE PREDECLARED AND OVERSEEN BY AN OFFICIAL OBSERVER PRIOR TO THE COMMENCEMENT OF FLIGHT. ALL BADGE FLIGHTS MUST BE FLOWN SOLO (NO PASSENGER, NO SAFETY PILOT). ALL BADGE FLIGHTS CLAIMS MUST BE SUPPORTED BY AN IGC FILE FROM THE FLIGHT.



The World Gliding Championships in Club, Standard and Two-seat 20m Classes will be held in Lithuania 30 July to 13 August 2016. The Australian Gliding team will consist of six flying members with Catherine Conway as Team Captain.

Current Junior World Gliding Champion, Matthew Scutter, will fly in the Two-seat Class with Dylan Lampard as co-pilot. Matthew won the Junior World Gliding Championships held in Narromine in December 2015. He then went on to win the Australian National Championships in January and is now bound for Lithuania. Matthew has also been selected to the Australian Team for the Multiclass World Gliding Championships in Benalla next January.

Club Class will be flown by Tobias Geiger and Allan Barnes. Both pilots have represented Australia in several previous world gliding championships. Tobi has been a contender four times – in 1998 in the Czech Republic, 2002 in Germany, 2010 in Slovakia and 2013 in Argentina. Allan has competed five times - in Norway in 2004, Italy in 2008, Slovakia in 2010, Argentina in 2013 and Finland in 2014.

Standard Class will be flown by John Buchanan and Adam Woolley. John is the most experienced member of the team, flying his first world championship in France in 1978. Since then he has flown for Australia in the USA in 1983 where he gained a podium place, coming third and winning the Bronze medal. He competed again at world level in Germany in 1999 and 2008.

This is Adam Woolley's second senior world championships, having flown in Finland in 2014. He also flew in the Junior World Championships in the UK in 2005.

Both my parents were into gliding and dad was one of my instructors when I started gliding at the age of 15. Before that I had my first flight when I was about 18 months old on mum's lap and spent most of my childhood weekends in summer on a lush green gliding field in Southern Germany. Dad took me up in gliders, motor gliders and tugs throughout that period and I was on the controls for the first time before I was 10. I guess gliding has always been in my genes.

By the time I turned 20 in 1986 I was already a gliding instructor back in my home club in Germany. I kept instructing very regularly and also acted as a coach in my club and the state junior gliding squad until I left Germany. When I got to Australia I quickly discovered that there always seemed to be plenty of instructors around yet very few pilots who inspired newer pilots to go cross country. While I got my Level 2 instructor's rating in Australia, I haven't been an active instructor for some time and instead I try to inspire new pilots to take up cross country flying.

Many of my most interesting and memorable flights were in the mountains, either in the French or in the Australian Alps. I still remember the flight when I managed to get to diamond height in Southern France. I spent about an hour in rotors and it was as rough as it can get. Just before I got completely airsick and was about to give up I finally managed to get into wave and climbed to over 18,000ft. The views over the snow

covered mountain tops and the dark blue sky above the clouds were breathtaking. Unfortunately, my barogram got lost in the mail on the way to the German Aeroclub and ever since I have lost faith in the postal system.

My first world championships were in 1998 in the Czech Republic with the German national team. Due to an administrative error they couldn't call those championships the first world championships in Club Class and had to call them international European championships instead. That was the year I met the Aussies for the first time and we had a great time together.

My second world championships in Club Class were in 2002 flying for the Australian team in Musbach, Germany, a site some 40km away from my former home club. I did reasonably well and came 17th out of some 67 pilots. In 2010 I flew my first World comps in Standard Class in the mountains of Slovakia. These were probably my scariest World comps with very tricky conditions - too much poor airmanship for my liking and cloud bases often well below ridge top. But in terms of scenery Slovakia was outstanding.

In 2012/13 I flew my last World Championships in Argentina in Club Class. This was a very tough contest with strong winds almost every day, half the country it seemed was either flooded or soaking wet and thermals that were more akin to Europe than a site at the same longitude as Benalla. But we had the best national team that I had ever experienced and we all had a ball. In the end I came second, my best result at a World Championship ever.

After flying the pre worlds in Lithuania last year I must say that the country very positively surprised me. The gliding there is pretty good and the landscape very European. Lots of forests, green meadows, plenty of good paddocks and nice little towns and cities. I really want to enjoy myself flying there again, be part of an awesome team and, all going well, get a place among the top 10, which I find much harder to achieve as an Australian in Europe than in other parts of the world.

Lithuania could well be my last World Championship as I would like to focus more on long distance flying. I enjoy exploring new areas and routes and maximising what's possible on any given day, things that you rarely get to do in competitions in Australia. But then again, the comradery at gliding competitions is great and I'm sure I don't want to miss that. So I guess I will be around comps for some time to come but probably not as regularly as in the past. "





ALLAN BARNES

A few years ago Allan moved to Manilla NSW in some of the best soaring country in Australia near Lake Keepit Soaring Club, at the foot the famous hang and paragliding gliding site at Mount Borah.

"I started gliding in the UK in 2002 after a serious hanggliding accident that left me with a hip replacement. I decided that landing on a wheel would be a more sensible approach from then on

I have three Diamonds, a 1,000km diploma, and have been coaching cross country for about five years.

At WGC Lithuania I would like to work with Tobi to get us both on the podium. If I can at least improve on my previous best at a Worlds - 6th place - then I would be happy.

MOST MEMORABLE FLIGHTS

My first 1,000km in the LS8 was very satisfying because I spent the first two hours below release height, and dumped all my water before clawing away from base leg into a paddock and completing the remaining 850km dry. About 160km out, as the sun was very low, I hit 2kt of lift, with no suggestion of any further possible climbs. I calculated that to get to final glide using 2kt would get me home after last light, so I had to leave it and hope for something better even though I didn't expect it. Fortunately I found about 4kt and that got me home before last light!

FUTURE GOALS

My goal is to fly competitively and for pleasure as long as I possibly can. $^{\prime\prime}$





TOBIAS GEIGER

If am an aerospace engineer with a long history in gliding. After leaving Germany and moving to Australia for good in 1999 I had to re-establish my professional career as there are very few exciting jobs in cutting edge engineering of high performance fibre reinforced composites for aeroplanes or wind turbines in Australia. But I managed to establish my own business and nowadays run a renewable energy business for one of my former clients in regional Victoria.



JOHN BUCHANAN

"I went solo at 15 and now have 9,500 hours. Some notable achievements include coming 3rd in WGC Standard Class, Hobbs, USA; 4th in Open Class Bayreuth, Germany; and ninth in Open Class Uvalde, USA.

WGCs in the mountains of St Auban in France, Weiner Neustadt in Austria, and Omarama, New Zealand, provided some spectacular scenery as well as breathtaking exploits that confirmed I really wasn't a mountain racing glider pilot. I've done reasonably well in Australian Nationals and currently spend time helping Junior gliding pilots in Australia.

Otherwise, I spent 15 years in the RAAF as pilot, engineer, maintenance test pilot and Airworthiness Officer for Mirages, Macchis and CT4s.

This was followed by three years as lecturer in Aeronautics, RMIT, Melbourne before going into business in advanced composites designing and building parts for submarines, ferries, boats and the mining companies."



ADAM WOOLLEY

"I'm a B767 first officer for All Nippon Airways - based in Japan, now residing at airfields around the world, chasing the best competitions and conditions!

I was almost born on an airfield at Taroom Easter

Gliding Competition in 1984. As a third generation glider pilot in my family, you could say soaring is in my blood.

I have approximately 7,000hrs total aeronautical experience, of which 1,650hrs are in sailplanes.

I've always been a team player who supports my teammates to achieve total success. I have a different philosophy to most when it comes to representing Australia at World Championships. I'm there for my teammate, to see him or her become World Champion, with me a point behind in 2nd place.

This year I'm supporting fellow Kingaroy Soaring Club member, John Buchanan, one of my Australian soaring idols, to achieve the title of World Champion.

I have had some great and memorable flights, naturally all involving my best mates.

My first experience was sharing the silky smooth late afternoon conditions with three generations in the sky. Dad and I were in in a K13, while my Grandfather flew the family's LS4 (HDL) over Kingaroy!

My second experience was sharing six weeks in the skies over the UK in 2005 at the Junior World Gliding Championships with my best mate, David McManus. We flew with my above philosophy, achieving 15th out of 30 together.

The thrid experience, literally wingtip-to-wingtip over a 950km FAI triangle, was in a dry Cirrus with my best mate, James Dutschke. Sadly the day ended two hours before sunset, which stopped us from getting the 1,000 in Club Class gliders!

FUTURE GOALS

My goal will always be the same until it's achieved multiple times - support my teammate of the year to become World Champion!

Personal goals are to fly super long distances in team mode with great friends, or continental speed records.

COMPETITIONS

My competition life started late after I got my career on track. I won the first championships I entered, which was the inaugural JoeyGlide in 2004. I then flew the AUS CCN, followed by the UK JWGC 2005. From there, I set my sights on furthering and cementing my career until 2011. Then I reset my competition soaring goals once again, flying numerous Nationals to achieve my three year goal of flying Club Class at the Finnish World Championships, 2014.

I own a Ventus and I'm a member at Kingaroy Soaring Club, a tremendously active cross country club with very friendly members who are always willing to help. Everyone is always made to feel welcome and encouraged, no matter what their soaring goals or experience is. We have a spectacular social scene, which makes the soaring all so much more enjoyable. Partners on the ground have just as much fun as those in the skies."

MATTHEW SCUTTER & DYLAN LAMPARD

Current Junior World Gliding Champion, Matthew Scutter, will fly in the Two-Seat Class with Dylan Lampard as co-pilot. Matthew won the Junior World Gliding Championships held in Narromine in December 2015. He then went on to win the Australian National Championships in January.

Matthew was brought up on a farm in the Adelaide Hills. He discovered his passion for gliding seven years ago and has risen to become the top pilot in his age group. He now has the opportunity to take on the top senior pilots from around the world and is seen as a strong contender for another podium place.

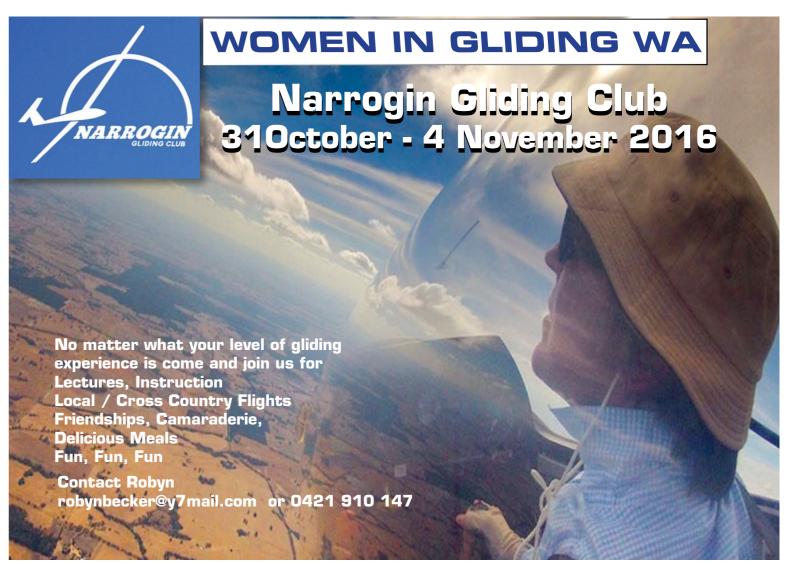
Dylan is from from Queensland, and also flew in the Junior World Championships, finishing 14th. Matthew was ahead of the competition for most of the championships but Dylan helped him clinch the world title through his self-sacrificing tactics in the air. Dylan forged ahead on his own, leading Matthew to better, rising air and victory.



Already 24 years old, Matthew is now too old to fly in future Junior contests, but Dylan is hoping to make the Aussie team for the next Junior World Championships in 2017. To help him, Matthew generously suggested they fly together in the two-seat competition to give Dylan more experience at the World level, preparing him to take the podium on his own next time

Follow the WGC action at www.wgc2016.lt

G/





The GFA Annual General Meeting and Soaring Seminar 2016 was held in Melbourne on 17 July, attended by a large crowd of members, GFA board members, RTOs and OSTIV representatives, including Gerard Robertson from New Zealand.

SOARING SEMINAR 2016

lan Grant, President of the VSA and GFA board member, introduced the Soaring Seminar, which featured speakers on several interesting topics.

ABOVE: Justin Couch talks about the research he has done into the use of gliding simulators around the world. Behind him, Tom Wilksch demonstrates his virtual reality (VR) simulator set-up to OSTIV member Gerard Robertson. His system uses the Oculus Rift and Microsoft Simulator.

VR is just one emerging technology that has interesting possibilities for gliding. Justin believes that for training purposes, a more standard approach such as the simulator installed at the Gliding Club of Victoria, using a real or mocked up cockpit with imagery projected onto a curved screen, is the way to go.

We will take an in-depth look at simulators in the next issue of GA.

SIMULATOR USE IN GLIDING

Justin Couch from Southern Cross GC prepared a report for the GFA board on flight simulators and how they are being used around the world for glider training.

Together with Tom Wilksch, he also held a workshop in the morning to cover the technical, administration and training issues involved in simulator use. Tom brought along an Oculus Rift virtual reality headset for attendees to try out a VR gliding experience. In the afternoon, Justin gave a talk for all attendees.

BEYOND 3000

John Styles, Chair of M&D, continued on from his articles in GA and talked about the challenges faced in growing club membership and particularly how the VSA is introducing processes to help clubs benefit from growth.

HORSHAM SAILPLANE GRAND PRIX

Competition Director Tim Shirley talked about the SGP scheduled for early December 2016. See page 5 of this magazine for full details.



Dylan Jones from Aviation Insurance Australia gave an update on their cooperation with the GFA on insurance. See the article from Treasurer Dave Shorter in this issue.

SKYSIGHT

skysight.io is a new soaring forecasting service based on an advanced weather modelling algorithm developed by pilot Matthew Scutter of New South Wales. Because Matthew was in Europe preparing to fly in the 20m Two-Seat World Gliding Championships in Lithunia at the time of the AGM, Eric Stauss gave a demonstration of this new service on his behalf.

Using himself as a guinea pig, Matthew used skysight.io while competing in the Junior WGC last December and is now Junior World Champion. The service is now ready for the world to use – although some in the audience wondered if he might have done better to keep it under wraps until after he competes in the WGC Benalla next January. It will be interesting to see how well skysight.io performs as the Australian season gets underway.

RAAUS - A TIME OF CHANGE

Guest speaker Michael Link, CEO of RAAus, explained the major organisational changes at RAAus and talked about future plans for the continuing development of the recreational aviation sector.

CASA - A VIEW FROM INSIDE

Past GFA President Anita Taylor gave a fascinating talk about the developments being made at CASA with particular reference to sport and aviation generally, and gliding in particular.

GEOFF BROWN AO

Everyone enjoyed a friendly meal and time to catch up with friends, along with the presentation of GFA awards and Trophies. The guest speaker was Canberra Gliding Club member Geoff Brown AO, recently retired Chief of the Air Force. Geoff shared anecdotes from his time in the Air Force including tales of high speed flights and meeting a Maharaja.

Geoff learned to glide in his early teens and went solo at age 15. During his time in the military, he lamented the decline of gliding as a tool for schooling young pilots. He said he became determined to remedy that situation, if he was ever in a



position to do so. While Chief of the Air Force he lead the initiative to increase the ACF glider fleet with the purchase of 20 new training gliders. The gliding movement is now beginning to see the results of his efforts as young ACF pilots are currently flying at gliding clubs around the country.

After dinner, Geoff presented the GFA Awards to recipients.

LEFT: RAAus CRO Michael Link

ABOVE: Geoff Brown recounts his 802kt flight in an F-111.

RIGHT: Anita Taylor talks about developments at CASA

BELOW: Eric Stauss explains the principles behind skysight.io.





continued over page
 GLIDING AUSTRALIA www.glidingaustralia.org 17





Hoinville Award for Services to Operations

JOHN CLARKE

The Operations Panel has honoured John Clarke with the Hoinville Award for his work in producing the new BGK for GFA. This is a monumental achievement worthy of the Board's recognition.

Iggulden Award for services to the GFA as a volunteer

HARRY MEDLICOTT

Harry has been flying for 35 years now. He, with others, established the Central Coast Gliding Club, built the hangar, carved out the strip with farm tractors and so on. He was President of the club, instructor and general dog's body for many years after the club was established. He has been a life member of the club for many years.

After the fire at Lake Keepit that destroyed the tug, four gliders, the hangar and clubhouse, Michael Shirley and others rebuilt the club. The current clubhouse was moved from the dam to the airfield, new hangars were built and cabins and caravans approved and installed. Harry joined



ABOVE LEFT: John Clark receives the Hoinville Award for Services to GFA in Operations for his work on producing the new GFA Basic Gliding Knowledge book.

the club during this process and had a lot to do with the re-building of the membership as it had fallen to less than 45 during this hard time. He became president of this club and managed to reinvigorate the membership back to 100 members. He organised a full-time Manager to enable 7-day operation and encouraged many overseas pilots. He also built a winch for the club in recent years to keep costs down for juniors, at no cost to the club. Some years ago, he was made a Life Member of this club.

He has put together many safety initiatives over the years. With Miles Gore-Browne he established the notes to be handed to every pilot before competitions, but his major initiative was to introduce FLARM into gliding. After many fatal accidents die to mid-air collisions, he investigated bringing in FLARM from overseas but realised it would be too expensive and would probably not be taken up. He then asked Nigel Andrews if he could build them under license in Australia and sell them at a much reduced price. He financed the original manufacture and distribution at cost. Harry then convinced the clubs and GFA to make FLARM mandatory for all competitions and clubs, and also took up the challenge to have all gliders and tugs equipped.

Award	Purpose	Recipient	Achievement	
JR Iggulden Award	Services to GFA as a volunteer	Harry Medlicott	Citation above	
Ryan Award	Services to GFA in Airworthiness	John Viney	Citation above	
Hoinville Award	Services to GFA in Operations	John Clark	Citation Above	
Martin Warner Trophy	Best height gain of the season	Rick Agnew	24,811ft, gain of height 19856ft	
Wally Woods Trophy	Longest Flight of the season	Gerrit Kurstgens	1058.4km (ASH31M)	
Bob Irvine Trophy	Longest handicapped flight	Attilla Bartok	891km in a Standard Cirrus (ZR)	
Decentralised	Top 50 pilots	Terry Bellair	Bendigo GC	
Decentralised	• 200 hrs	Grant Johnson	Temora GC	
Decentralised	< 200 hrs	David Holmes	Lake Keepit SC	



Ryan Award for Services to Airworthiness

JOHN VINEY

John Viney was a dedicated member of the AW Department for decades. He died in November 2015.

John was an employee of the GFA for over seven years as the STOA until 2011, in which time he did a great job and volunteered more hours than he was paid for. However, the Airworthiness Department nominated him for his volunteer efforts both before and after he was retrenched.

He also served in several roles in Ops and AW as a volunteer both before and after his employment and even after retiring he still gave us all advice and stepped in to help out as requested by the AW department. He assisted writing



ABOVE LEFT. John Viney's two daughters receive the Ryan Award on his behalf.

ABOVE: Tim Carr receives the Unsung Hero Award for Long service to the GFA Board, NSWGA and Lake Keepit.

and editing the BSE Engines over five years and he worked hard on every engine course. He also volunteered to help with difficult jobs of accident investigations and audits of clubs. Over the years he has helped a multitude of people with all manner of AW problems, usually training them as he worked and passing on his extensive experience.

The AW department would like to take this chance to acknowledge his long and dedicated service to the Airworthiness Department. We all miss him and I continually bump into Airworthiness Inspectors with a good word for John and how he always helped them.

WOMEN IN GLIDING WESTERN AUSTRALIA

31 OCT - 4 NOV 2016

Following a very successful inaugural Women In Gliding WA week in 2015, we are very pleased to announce that Narrogin Gliding Club will be hosting the 2016 WIG WA event from 31October to 4 November.

In no way do we want to compete with the exciting WIG event already planned for Mount Beauty later in December but we would be delighted to welcome any women from anywhere in Australia who would like to join us. I am thrilled to announce that we have already had some interest from pilots from over East! We look forward to gaining some valuable hints and tips for the development of WIG here in WA.

Last year we attracted six of the dozen or so lady pilots in WA to the camp. We all had a wonderful week of flying, friendship and learning. The meals Margaret prepared for us were delicious and wholesome and we all agreed that they were four days well spent.

It is also exciting that this year a very

experienced competition and cross country pilot, Ailsa McMillan will be coming from Geelong Gliding Club to coach us for the week and Jenny Thompson will travel from Queensland to join us. We also have our own John Kenny and a few other coaches and instructors standing by to assist during the week. All of the club's 2-seat and, if required, single-seat gliders will be available, and you are also welcome to bring your own or your club's gliders.

Accommodation is available at the airfield in club bunk houses or members' caravans, and also in hotels in nearby Narrogin. Camping at the airfield is also a very inexpensive option. The event will be fully catered, or may be self-catered if preferred. Partners are welcome to come along, though, be warned - the women will rule the roost here! Please address all enquiries, registrations, accommodation and catering requirements to Robyn at robynbecker@y7mail.com.

Please come and join us for a week of flying and camaraderie, discover your potential and add a few fun filled hours to your log books.





All in One Flight Computer

Comes with all accessories to go soaring straight out the box





GFA seek Sponsors

The Organisation Scientific et Technique Internationale du Vol à Voile (OSTIV) Congress is held simultaneously with the World Gliding Championships at the same site and addresses all scientific and technical aspects of soaring flight including motorgliding, hanggliding, paragliding, ultralight sailplanes and aeromodeling

Opportunity for presentation and discussion of papers is given in the following categories:

- Scientific Sessions: Meteorology, Climatology and Atmospheric Physics as related to soaring
- Technical Sessions: Aerodynamics, Structures, Materials, Design, Maintenance and Sailplane development.
- Training and Safety Sessions: Training and Safety, Coaching, Health and Physiology. Joint Sessions: Scientific and technical topics, reviews or news, presented in an informative and entertaining way for the broader interest of the World Gliding Championships and OSTIV. Topics on instrumentation, electronics, safety, statistics and other system technologies will be included in the sessions for which the application of the technology is most relevant.

GFA is hosting the next OSTIV conference at Benalla in January 2017. We are seeking a sponsor for the event. Minor sponsorship is available at the \$500 level and a naming sponsor at the \$3000 level. Please send EOI to Chair of Marketing and Development John Styles CMD@glidingaustralia.org



Sweden's Team Captain Mika Saväng said, "Team Sweden will participate in Benalla with pilots in the Open and the 18m Classes. All members of the team are looking forward to competing in Australia."

Mika started gliding in 1980 and has about 1,250 hours. He has flown in Swedish Nationals several times and has twice taken the role of Competition Director for the Nationals. He was also the Swedish Team Captain in Uvalde 2012, 2014 in Räyskälä, 2014 in Leszno and is serving as Captain again for WGC Lithuania 2016.



Owe Engström will be flying an ASH25 EB28 with Bengt Frid. Owe lives in Eskilstuna west of Stockholm, Sweden, and has flown in Swedish Nationals since 1976. He has been holder of numerous Swedish records including the first 1,000km FAI triangle, flown in 1997.

More recently he flew in WGC Leszno 2014, the European Championships in Ocseny, Hungary 2015, Hahnweide Segelflugwettbewerb 2014, 2015 and 2016 and the Pre-Worlds at Benalla in January 2016.

Pilot Jim Acketoft and co-pilot Wilhelm Wendt will also be flying an ASH25 EB28. Jim is currently ranked at No 66.

Jim flew WGC Poland 2014 and the European Championships in 2015. He also flew in the Swedish National Championships in 2015 and 2016, and won Hahnweide in Open Class in both 2015 and 2016 as well. Jim is the Swedish record holder for the 500km triangle out-





and-return, 750km outand-return, 1,000km out-and-return and others, all flown in Sweden.

18M CLASS MARKUS GANEV AND BÖRJE ERIKSSON

Markus Ganev fell in love with the art of gliding on his first flight

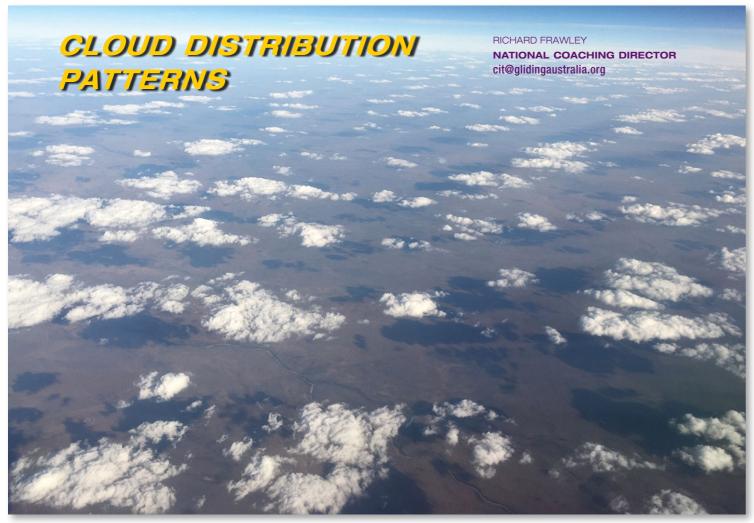
in 1988. After an active phase during his younger years, Markus left gliding for a long period and returned to what he calls his 'life passion' in 2009. He kick-started his second round by entering competitions like Norglide, Swedish CENTRE; Börie Eriksson Nationals, Klix, Hahnweide and WGC in Leszno 2014 and other competitions. He has visited Australia several times. flying from Corowa just 50km north of Benalla. This will be

Börje Eriksson has flown several WGCs starting with Bayreuth 1999 and then 2003 in Leszno, Sweden 2006, Germany 2008, Hungary 2010, USA 2012 and Poland 2014. His best result was taking the bronze medal in Eskilstuna Sweden 2006. All his WGCs were flown in 15m Class and. from Uvalde, in 18m. Börje flew the pre-worlds in Benalla this year and has visited Australia several years for gliding during the northern winter. Keep looking on **wgc2017.com** and facebook.com/WGCBenalla for updates, as the championships are fast approaching.

TOP: Owe Engström

ABOVE: Bengt Frid

LEFT: Pilot Jim Acketoft (right) and co-pilot Wilhelm Wendt (left)



Have you ever wondered on a day that should show a sky full of clouds, why there are blue holes? Or situations where recently there were good clouds, but now a blue hole or blue lane has suddenly opened up. Or conversely, an area that was blue has now become nicely scattered with cloud. The last, of course, is generally seen just as you complete a diversion to clouds that are now thinning. I am sure we have all been there.

BELOW: A laboratory example of Rayleigh-

IT STARTED ME WONDERING WHY

As many of you may have read, the atmosphere is governed by the laws of fluid and thermodynamics. It is said



that thermals on homogeneous days space themselves out horizontally and vertically in response to those laws. Horizontally they organize in hexagonal cell like patterns. These cells are driven by laws that can be best expressed in math which is well beyond me, but can be nicely seen in the picture above.

The image left is also known as Rayleigh–Bénard convection and can be produced in laboratory conditions by heating fluids from below. I suspect that the cells in the atmosphere are more like this one in the lab than some nicely organized bee hive-like structures I have seen elsewhere. The basis here is that if one thermal forms in an area that has consistent atmospheric and ground conditions, then there are definitely going to be more of them around. A little bit of knowledge always helps overcome the gentle worry that besets me whenever I set out on a blue day!

When we look at Cu's forming on a light wind day from the ground, the timing cycle for that cloud formation can easily be observed. They pop, they grow and then die, time then passes and the cycle repeats. Is can also be seen that, depending on the time of day, the ratio of useful thermal activity to the overall cycle time also increases as the day goes on. See image on far right.

At the beginning of the thermic period of the day, the active thermal time (vs the passive thermal time) can be short - a wisp of cloud and then it's gone. Later on, the cloud will be present for much longer along with the thermal 'feed in' time time also extending.

So let's get back to the situation of holes. The temptation is to believe that these are areas to be best avoided. But are

they? Perhaps this blue situation is just a temporary state. Perhaps they are just a part of bigger cycle at play.

To have near perfect cloud dispersal patterns would require a situation where the active parts of the cycle are all synchronized. If things were perfectly in sync, the whole sky would go from blue to cloud and back again. We don't see that, but we do see many days with holes and lanes of blue. What drives that?

As you can see below, the sky will look very different depending on the phase of the thermals. These ratios will vary as things move in and out of sync across the task area and as time progresses, which is what we would see if a time lapse camera was used.

As you can see from the above, it is very possible that the blue holes don't mean the thermals are not there, it just means at that at that particular time in the cycle, they are not producing cloud but soon will be. Conversely, the longer it has been blue, the more likely there will be cloud when you get there.

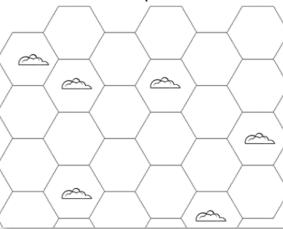
What this means is that sometimes heading into a blue hole, and not diverting, might just be the right path to take.

TO HAVE THE CONFIDENCE TO GO ONTO THAT BLUE HOLE

- \bullet Have a thorough understanding of the forecast in the task area.
- Boundary Layer

1 in 2 cells have a thermal in Cloud phase

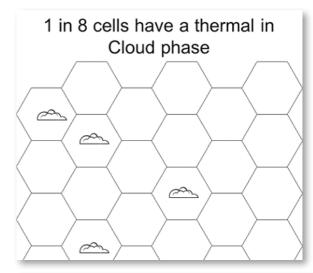
1 in 4 cells have a thermal in Cloud phase

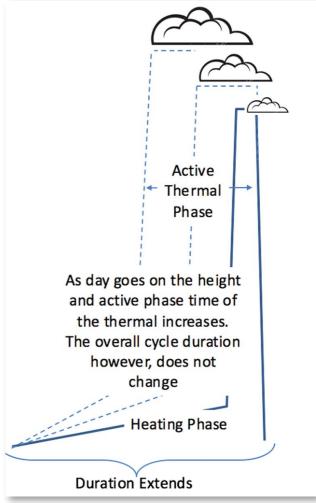


- Troposphere
- Know what happened in the task area over the last couple of days, especially rain wise.
- Know of any areas where the ground temperature might be lower
- Later on look for areas that may have been subject to overdevelopment (cooler).
- Keep your head out of the cockpit and keep studying the sky ahead.
- Now (0 2mins)
- What's next (+10 mins)
- Then what (+20 mins)

I just love gliding!

GA







Have you recently started your training to fly gliders and are you eager to get past your first solo?

Your progress depends on how much time you can commit, the weather, the ability of the club to provide you with three to five flights per day and your own learning style and ability.

The more regularly you fly, the faster you will progress. Ideally you should attend your club every week or second week.

While this may be difficult for you to arrange, there is another way you can accelerate your learning - take an intensive training course.

INTENSIVE TRAINING COURSES

A number of clubs offer courses, usually for five to seven days with 20 to 30 flights. Flying every day will help you learn quickly due to the regular theory and practical training with a small number of instructors - typically one or two - and focussed support.

Here are details of some intensive training options offered by clubs around the country. You don't need to be a member of the club holding the coures to take part. By visiting another club, you will also meet other fellow trainees and instructors and get a wider view of the gliding opportunities available for new pilots.

Even if you have already made good progress, a course can accelerate your learning and take your training to another level. Once you have completed your course, you can return to your club to consolidate your learning and continue to progress in your own environment.

To investigate the options available, contact the clubs listed and chat about your goals and needs.

NSW BATHURST SOARING CLUB

bathurstsoaring.org.au

CONTACT ARMIN KRUGER 0477 945 387

kruisa@ozemail.com.au

The club offers courses for beginner pilots, running for six days, Sunday to Friday. Two courses are held per year, in March and October.

The training course includes:

- All course materials, log books, 'Basic Gliding Knowledge' textbook, lectures
- Launches 20 launches to 2,000ft, or equivalent tows to a total of 40,000ft
- Glider hire
- Instruction (maximum three students per instructor)
- Three months membership to the Bathurst Soaring Club and Gliding Federation of Australia
- Bunkhouse accommodation and use of club facilities. Includes the use of kitchen, BBQ, TV, etc.

This course is for ab Initio (beginners) or early glider pilots with limited hours.

Cost: BSC Members \$1,600 - Non Members \$1,900

LAKE KEEPIT SOARING CLUB

keepitsoaring.com

CONTACT CASEY LEWIS

bookings@keepitsoaring.com

Here at Lake Keepit we offer courses tailor made to the student. We offer the standard 5-day ab initio course during which a good proportion go solo. Those that don't are a good way towards this goal.

This course covers the GFA syllabus to solo standard plus post solo supervision. We offer training to those who have become frustrated with their slow progress and come to us for an intensive 'push' to solo.

The training week's activities are dictated by student assessment, and a progress plan is drawn up with the students to assist them in achieving their goals, such as flying solo.

We offer training/support to those who have gone solo and are working towards achieving their 'C' certificate and first 50km.

This training week concentrates on post solo development. Student assessment dictates the syllabus, such as thermal centring/selection, good practice to achieve safe landing in unfamiliar areas, plus the 'C' certificate syllabus.

We offer a 5-day 'C' certificate onwards cross country course. This course will cover subjects needed for supported transition from solo to cross country flying. The course will include briefings, flying both dual and solo, debrief and flight evaluation.

We operate 365 days per year. Due to weather conditions at Lake Keepit, autumn, winter and spring are ideal times for ab initio training.

Courses are available throughout the year. We have a range of accommodation options from basic club style to ensuite.

NSW/VICTORIA SPORTAVIATION - TOCUMWAL

sportaviation.com.au

TEL: 03 5874 2734. MOBILE 0427 534 122

SportAviation is situated in Tocumwal, New South Wales in Australia. We specialise in recreational aviation for both oliders and light sports aircraft.

We provide training for the beginner, and our friendly team will always make you feel welcome. We are open seven days a week, 364 days a year. We are closed Christmas Day. So visit us now and enjoy the thrill of flying.

With long summer days and world renowned gliding conditions, experience what pilots have known for about 35 years. We have packages for glider hire to suit beginners and experienced pilots alike. We also have highly experienced instructors and a management team that have been gliding in the Tocumwal region for over 28 years. Let us help you achieve your gliding goals.

Together with the relaxed Tocumwal atmosphere that pilots around the world have come to know and love, your stay will be an unforgettable experience.

Call us or make a booking through our web page.

VICTORIA BENALLA GLIDING CLUB OF VICTORIA

glidingclub.org.au

TEL 03 5762 1058

The Gliding Cub of Victoria (GCV) is the largest gliding club in Australia, attracting pilots from around the globe to experience the area's world renowned flying conditions.

GCV offers intensive residential and non residential 7-day gliding packages.

Gliding Intensive training courses are the most time and cost efficient way of starting in the sport of gliding. Many potential glider pilots who join a local club and fly only on weekends can



become frustrated with their slow progress due to the process of progression/regression - that is, their training progresses on the weekends and then regresses during the midweek lapse.

Priced at \$2,800 and held over seven days, the course provides 65,000ft of launch height, which translates to approximately 30 to 35 flights, depending on individual progress. While we recommend that it be done within a single week, we are able to offer a 'flexi-fly' option in which you would fly seven days within a month. On average, a third of your launches will be to 2,000ft or above and the remainder to 1,500ft or lower for circuit practice.

The course also includes a 12-month full flying membership of the Gliding Club of Victoria and 12-month membership of the Gliding Federation of Australia. Included in the course fees are all the necessary books and notes, log book and air and ground tuition. Approximately 40 to 50% of students go solo within the seven days and of the remainder, most go solo within the following few weeks. If you go solo before the 65,000ft of height has been used, the remaining height can be used on your solo flights.

Accommodation is available on the airfield at a cost of \$25/

A deposit of \$400 is required when booking a course, with the remaining due at the commencement. This enables us to send you the course package so that it can be read prior to the course commencing.

WESTERN AUSTRALIA NARROGIN GLIDING CLUB

narroginglidingclub.org.au
TEL 0407 088 314

contactsofficer@narroginglidingclub.org.au

We offer full 5-day, live-in instructional courses that will advance your flying skills They are generally limited to six students. At least two instructors and two training aircraft are used.

You can expect four or more flights each day and theory lectures at night.

You will learn quickly within this time, and some students even manage to go solo by the end of the course. Most others attain solo-status within the following few weeks during normal club operations depending on how often they come to fly.

If you already have some flying experience, we will tailor

continued over page

GLIDING AUSTRALIA guide to gliding www.glidingaustralia.org 25



flying instruction to your skill level.

We offer two courses every year:

- Easter Weekend 4 or 5 days, Friday to Monday or Tuesday
- October School Holidays 5 days Monday to Friday

OR, if you can find three friends we will arrange a personalised course with timing to suit, for example, over two weekends.

Ab Initio (Flying) Course - \$1,600 AUD

SOUTH AUSTRALIA ADELAIDE SOARING CLUB

adelaidesoaring.on.net

TEL 08 8522 1877

GAWLER AIRPORT

The Adelaide Soaring Club provides 5-day intensive ab initio gliding training courses at its Gawler airfield. Some scheduled courses will be advertised, but we can also arrange a course to suit your needs. Contact the club on 8522 1877 or adsoar@adsl.on.net for cost and availability.

AV8

av8.net.au

TEL - 0475 359 288 (0475 FLY AV8)

PARAFIELD AIRPORT, ADELAIDE

AV8 Flight Training is built on the belief that glider training should emphasise the manual.

Our Super Dimona is manufactured by Diamond Aircraft, one of the world's largest training aircraft manufacturers. Sailplanes capable of aerobatics and spins for further training are available.

If you are keen to enter the exciting world of flying sailplanes, we can help. The Super Dimona motorglider offers longer training flights, while only circuits are possible with pure gliders. This helps you progress faster. Pure glider training is also available with both winch and aerotow launching at one of our affiliated airfields.

Residential and non-residential courses are available with accommodation and meals included on the airport at Parafield, and pickup from Adelaide Airport, bus or train stations.

Casual gliding training and ratings such as touring motor glider, controlled airspace, outlanding checks etc are also available.

We can relocate to other airfields for groups wanting this training.

QUEENSLAND DARLING DOWNS SC

ddsc.org.au

BOWENVILLE, QUEENSLAND 4404

The Darling Downs Soaring Club runs weekend and midweek courses, which are tailored to meet a wide variety of individual needs and expectations, while providing a challenging new experience of learning to fly a sailplane. Six-day courses are designed to progress you towards achieving solo flight. The club also runs a variety of shorter courses to cater for pilots with previous experience in either gliding or powered flight and for those wishing to experience some early flight training and then continue training at a later stage. For further information on club operations or courses, please contact the course coordinator at courses@ddsc.org.au or visit our website.

Solo Quest - This course involves 32 flights or a maximum of 12 hours to cover the training syllabus, plus reference materials and six nights basic accommodation in the bunkhouse. Occasionally available as an intensive week-long course, it can otherwise be undertaken over a series of weekends. Course costs are shown below.

Includes 3 months club membership. Students (under 26): \$2,020; Adult: \$2,350; plus relevant GFA membership fee.



Following on from the articles in the last three issues which clearly demonstrate that the clubs need to change if they are to survive, here is a list of items that every club should work through before spring to get their club in good shape. So speak to your committee and make them come up with a plan to implement these items and, again, if they are reluctant to do the work remind them it's their duty. It's why they are there. Good luck and let me know how it all goes because this is just the beginning.

Answer the question truthfully and where required make a plan of action to achieve the desired result.

Does your club have a website that is easily found?

Does your website carry easy-to-find location and contact details? Is your club in the phone book? Is your club listed with the local tourism authority?

Does your club put material in all the local libraries?

Does your club have good signage? Have you made your club easy to find? Does your club have portable signage for away camps?

Does your club ensure a high profile with the local council?

Does your club participate in the local community – for example, raise money for a local school or hospital to enhance your standing?

Is your club regularly featured in the local paper?

Does your club do annual or more regular local area promotions?

Does your club hold open days?

Has your club established a reciprocal cooperation with other town social or sporting clubs?

Has your club connected with schools and other youth organizations? Has your club struck a cooperation with other local air users?

Does your club do AEFs?

Does your club have giveaway brochures
or other material?

Does your club put up banners for special events?

Is your club a good community citizen?

Does your club solicit actively outside its site for new members?

Does your club advertise?

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

JOHN STYLES



Does your club package targeted introductions to gliding?

Does your club cooperate with joint promotions by other town industries? Does your club support local charities? Does your club have brochures in local hotel/motel rooms?

Does your club have a high local profile? Does your club take gliding to the people?

Suggestions, great ideas and the odd complaint are always welcome. cmd@ glidingaustralia.org Phone **0419 001 769**.









Wintry weather has prompted an early and active start to the maintenance season as rain and cold conditions have restricted gliding in southern parts of Australia. So let's take a look at maintenance projects that are taking place around the country.

NEW SOUTH WALES

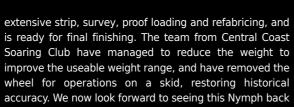
The prototype ES-56 'Nymph' saved from the Sydney furniture showroom ceiling just before it was bulldozed (see Gliding Australia issue 24 and 25) has undergone an is ready for final finishing. The team from Central Coast Soaring Club have managed to reduce the weight to improve the useable weight range, and have removed the wheel for operations on a skid, restoring historical accuracy. We now look forward to seeing this Nymph back in the skies where she belongs!



Beaufort Gliding Club members have been working on a survey and recover of the unique and famous Zephyrus

> two-seater which they designed and built many years ago. It is pleasing to see designer Doug Lyon still getting great pleasure working on the glider he initially conceived in 1949. The following is from Australian Gliding, January 1967:

> "The Zephyrus was first designed as a single seater, but following damage to the Beaufort Club's former two-seater in 1949, Zephyrus was re-designed as a two seater. General design work was started in 1953 and by 1955 most of the main structure was complete. During the five years to 1960 work progressed slowly. Then fine detail design work was started. The wing strength was recalculated in 1963 and the wings proof load tested at the Aeronautical Research Laboratories. The fuselage is welded steel tube with the centre section





externally braced so that the instructor's door can open. The first flight took place on 11th December, 1966."

WESTERN AUSTRALIA

Meanwhile, Owen Jones from the Beverley Soaring Society in Western Australia, has joined the vintage gliding movement, buying Schneider ES60B SuperArrow, VH-GGM. This glider used to be owned by the Stirlings Gliding Club. GGM last had a Form 2 on 14 March 2003. It was grounded in April 2004 waiting for a 30-year survey,

CALENDAR

Wood Repair and Fabric Courses

A minor wood repair course is to be held from Sunday 6 November to Tuesday 8 November 2016. Bob Wyatt is the co-ordinator, phone 03 9742 6828 or 0429 117864

A fabric course is to be held from Wednesday 9 November to Saturday 12 November 2016. The coordinator is Jim Barton, phone 03 93094412 or 0419 562213

MAIN PHOTO, OPPOSITE: The ES-56 Nymph looking good and ready for final painting.

LEFT: Zephyrus before shedding her attire. LOWER PHOTO, OPPOSITE: Zephyrus stripped down ready for inspection and recovering.

ABOVE: No longer covered in dust, Owen's Super Arrow VH-GGM.

BELOW: George Buzuleac prepares models for display.

BOTTOM: Cottage GB4 with posters and model gliders on display.







continued over page





ABOVE: Future pilots' first brush with the Flying Bug.

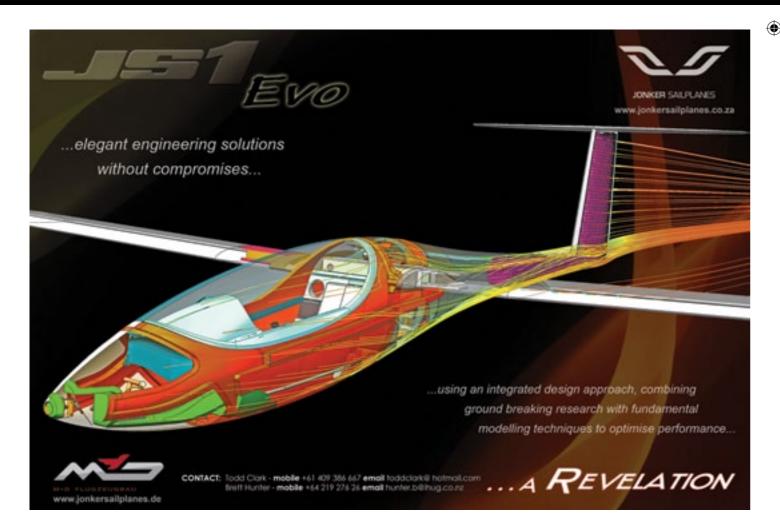
which was never completed. It now looks very good after having 12 years of dust wiped off it, and is safely installed in Owen's hangar at Beverley. He is keen to get the glider flying, arranging a 40-year survey, and hopes to attend future Vintage Gliders Australia rallies. Owen has also bought the Blanik VH-GAP from the Stirlings Gliding Club.

NATIONAL TRUST HERITAGE FESTIVAL 2016

During April the Australian Gliding Museum joined with the Blacksmith's Cottage and Forge Museum at Bacchus Marsh to put on a display as part of the National Trust Heritage Festival 2016.

The Museum provided and erected a series of colourful posters produced especially for the event by Archivist Bernie Duckworth, with a number of significant glider models, as well as gliding memorabillia. George Buzuleac also provided some impressive models. Jenne Goldsmith's diminutive vintage Hutter 17 was assembled outside to provide visitors with some hands-on experience, especially enjoyed by the younger potential pilots.

Gliding has been a part of Bacchus Marsh since the 1960s and the display is another part of the contribution gliding makes to the Bacchus Marsh Community. Gliding Museum and Cottage Museum staff were on hand on Heritage Day, Sunday 17 April, to assist visitors to celebrate the event and answer questions. By request of the Cottage Museum management, the inside display remained in place for the following month.





On 28 May 2016, we had an excellent rollup of 27 out of the 34 NSW Regional Ops Panel - 17 club CFIs and 17 Level 3 instructors - who converged on Camden Airport.

The meeting of the NSW Regional Ops Panel at the Southern Cross Gliding Clubhouse was held in preparation for the GFA Ops Panel meeting in Melbourne over the Queen's Birthday long weekend in June. There was no shortage of experience in the room, since we had over 750 combined years of gliding expertise. It was a productive day with a diverse agenda of safety, operational and training topics.

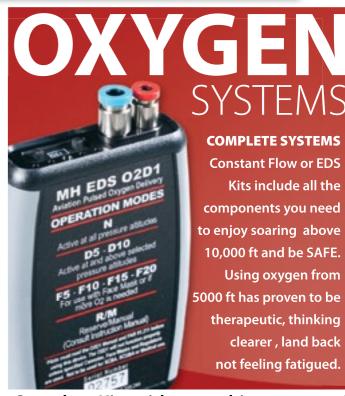
Ken McCracken handed over the reins after his second stint as NSW Regional Manager Operations and Patrick Barfield was anointed to the NSW RMO role before the GFA Operations Panel meeting.

Many volunteers have done a great deal of work to improve GFA manuals, documents and training materials. We reviewed John Clarke's very professional and polished update of the Basic Gliding Knowledge document and the Adelaide Soaring Club's Glider Pilot Training 'Blue Book', so hopefully both documents will soon be published as they are a huge improvement on the previous documents.

The NSW Region is also benefiting from its close partnership with the Australian Air Force Cadet gliding organization.

We are holding a GFA Safety Seminar for NSW at the Bathurst Air Force Facility on 16 July followed by an Airworthiness Refresher course on the 17th.

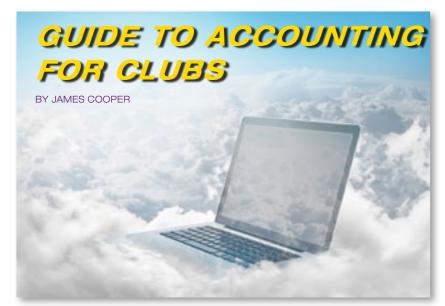
An AAFC project to modernize the gliding curriculum will be immediately applicable to the rest of the GFA. The NSW Regional Ops Panel continues to be an important conduit for two-way information exchange on safety, operations and training between glider pilots through their club Ops and Training panels, the Regional Ops Panel and the GFA Ops Panel.



Complete Kits with everything you need Local Support and Free Advice



30 MIDING AUSTRALIA www.soaring.org.ou 31



One thing we all suffer from is lack of time, and often the log keeper and treasurer bear the brunt of this. The need to do the accounts never stops. They need to be continually up to date, and thus those members of the committee are often burdened with multiple systems that do not integrate. I have seen the accounting system and the member's records held in separate databases. The two still have to be reconciled to each other, thus duplicating the workload for our poor committee members.

In this series of articles I will look at such things as different computer systems, how to set up your accounts, efficient managing of logs, simple reporting for the committee, and other interesting things like getting member retention reports and finding out how many flights you need to do each day to break even.

My first rule that I have been very strict with is that all your data needs to be held in one database. So, when a member wants to keep a list of members on their little spreadsheet on their lap top it has to be stopped. How are they to know if a new member has joined or an old member left? The only way of being sure of consistent data is to have one database, and any accounting package will allow this. So where are we going to keep this data? We are in the age when everyone is talking cloud computing, but few people are fully aware of what this means and the issues of cloud computing. So let's look at all the options we have and what a club needs. We have to consider that the club accounting database generally needs to be accessed by a number of members, so let's look at the options we have.

ACCOUNTING SYSTEMS

We all know desktop systems. This is where the accounting package is installed on a computer in the home, club or workplace. In theory, it can only be accessed by someone in that location but with the wonders of technology, we can gain access with a product in all computers called Remote Desktop Connection. First, we need to find the computer's IP address. This can be found by searching for *What is my ip* and you will be given four batches of numbers, for example, 123.42.159.52. If another member of the committee wants to gain access to the club's computer, they select on their computer, All Programs, Accessories, Remote Desktop Connection, type

in the IP address, enter the remote computer's user name and password and you're running the computer from a remote location.

REMOTE ACCESS TO YOUR ACCOUNTS

This is the system we use at GCWA. So what are the advantages and disadvantages of this system? Of course, you have to trust the owner of the computer. You need to be sure that you have a good backup system and, of course, you have to manage your hardware. Owning a computer totally in your control, you can have more than just your accounting program on the computer - you can have Microsoft Office, SeeYou and anything else. Emails will be sent from one location and can be sent by any member with access to the computer. Of course, you can store other documents like meeting minutes, photos and so much more.

The next option is one that is offered by an organisation called **Cassini Cloud**. This system allows you to install your club's accounting program, and any other programs like those mentioned above, on their server located in Sydney. This has all the advantages of desktop but with the security, and management of a professional organisation. Of course, the system will cost, but you don't have the worry of the owner of the computer getting the grumps and running off with the data. Finally, you don't have to own and manage the hardware.

HOSTED ACCOUNTS

This is where your accounting program and database sits on a server farm, like Amazon. You run your accounting system but access it through the web. Although Hosted systems only manage your club's accounting data, at least you own the data and you can make a decision to go back to desktop and you can back it up yourself and keep a copy of the backup. Keep a backup of your data at month and year ends so you can track changes in the data, since the month or quarter end is important. This is a must for any owner of accounting data. Again, hosted systems allow all members with rights to access the accounts data when they want.

Cloud is the buzz word at the moment but there are

limitations. From what I have seen, cloud computing systems are somewhat simplistic and can only be made to perform to what I would consider acceptable level by adding on packages, leaving your club vulnerable to multiple software suppliers while, of course, the price keeps adding up. Remember that new packages may not have had the time to be built to suit your environment.

The big issue that concerns me is that it is not possible to back up your data and use it elsewhere or take a copy at month or year end.

SETTING UP YOUR CHART OF ACCOUNTS

The Chart of Accounts is a list of all items transactions get posted to. So we have the Bank accounts, Income accounts like sales of glider time, tug time and membership. We have the

* Protects

* Notice Bus

* Plane | Plan

* Computers

* Deprecation Buildings Etc

* Publicity

* Adverting | Prometion

* Makes

* Authority

* Repairs

* Computer Repairs

* Equipment Repairs

* Equipment Repairs

* Equipment Repairs

* Protects

* Protec

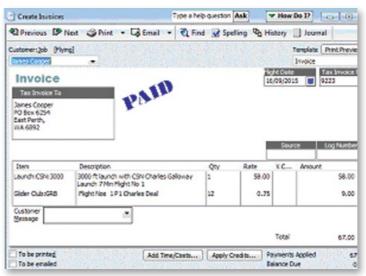
Expense accounts like glider and tug repair, telephone and computer costs. In addition, the Accounts Receivable or Debtors account is where all the members' accounts sit and show us how much each members owes the club. I will keep referring to the Chart of Accounts throughout this article as it is the backbone of the accounting system. Any reasonable accounting system will allow header and sub accounts. For example, we may have a header account called Computer Expenses and a sub account Software, Hardware and Support.

In a gliding club we have three areas of Income and Expense that need to be tracked specifically. These are Tug, Glider and General. Tug and Glider I think are self-explanatory, General would include Membership Income, Canteen income, Telephone and Rent Expense. Some years ago we wanted to get some idea as to the Fixed and Variable costs so we could see what we needed to earn to break even. So we set our accounts with an arrangement where each of the three header accounts also have a sub account of Fixed and Variable.

ITEMS

In addition to the Chart Of Accounts is an Item list. The Item list can be longer than the Chart of Accounts. Items are used in transactions and point to an account. An example of some items would be:

Launch 500Ft Launch 1000Ft Launch 1500Ft Launce 2000Ft

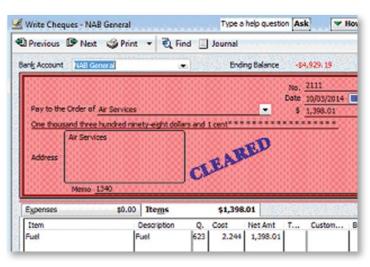


All of these Items will point to the Income account, Tug Income.

INVOICES

The fundamental transactions that we run at the gliding club are invoices for flights. These would consist of two lines, one being the fee for the launch and the other for the glider.

It is vital that we track both of these, so that we can ultimately find the profitability of the Tug and Glider. The example shows an invoice to James Cooper for a 3,000ft launch by the tug CSN for \$58 in addition to a 12 minute flight in the Club Glider GRB at 75c per minute for \$9.00 - totalling \$67.00 There is a detailed description of the flight



that has been brought in by SmartLogs and there is also a note that the invoice has been paid.

The transaction will post \$58 to the Tug Income account, \$9 to the Glider Income account, and \$67 to the Accounts Receivable account that has been settled.

PAYMENT OF BILLS

One thing that I find many of my clients do when paying suppliers is to make two transactions. The first being Enter Bills, the second Pay Bills. The bulk of the time it is only necessary to 'Write Cheque' or 'Spend Money' depending on the terminology of your accounting system. The example shows us taking out of the NAB General Account, paying Air Services \$1,398.01 for fuel - 623 litres at a unit cost of 2,244 dollars per litre.

The two accounts that will be driven will be the Bank account, NAB General Account and the expense account Tug:Variable:Fuel.

ENTERING THE DAY'S LOGS

When I first took the job in the club as Log Keeper I would be given a handwritten sheet with the flights. Generally the form would be nicely laid out, but far too often the sheet would have errors in the data and writing that was undecipherable. Each day's logs would generally take an hour to enter into the accounting system, and there was little certainty of its accuracy. In addition, for those without accounting knowledge, an unskilled log keeper may not know how to enter transactions like AEF, club glider test flights, retrieves and mutual flights. This I will detail later in this article.

This was the reason that I developed **SmartLogs**. Over the years it has been fine tuned to be operated by an unskilled operator. SmartLogs goes through a data check procedure for each logged flight making sure that all the information is entered correctly. SmartLogs is automatically updated with new members and items. It is emailed to the treasurer and imported into QuickBooks / Reckon within a couple of minutes. SmartLogs consistently processes the transactions correctly into the accounting system.

You can look at SmartLogs operation on my web page www.jamescooper.com.au. Click on Gliding, then Log Keeping.

Next issue I will look at tracking various non standard transactions.



Most cross-country soaring in Australia is done by gliding along tracks that are almost straight, and pausing to gain height by circling in thermals. The speed over the course depends mainly on the rate of climb in the thermals. Flying through lift or reduced sink while on track adds to the speed. However, it is rare to complete a course without stopping to circle.

Even that case shows that the pilot has judged that there were no thermals strong enough to repay the time to be spent in circling. Deciding when to stop and circle, and when to move on, are key actions in high speed soaring. Some top pilots rely on intuition: the rest of us can do better by using what is known about these decisions.

IN THE BEGINNING: 'MACCREADY THEORY'

Following Paul MacCready's World Championship win in 1956, pilots who fitted MacCready Rings to the circular dials of their mechanical variometers also won championships. The MacCready Ring advises the best speed to fly to maximise the crosscountry speed. It uses performance data, the rate of climb in thermals, the current airspeed, and the current sink-rate. Most people assumed (and still do) that pilots using the Ring did better because their glide speeds were better chosen. This is unlikely: the glide speed has little effect on the cross-country speed. That is shown by a graph in Anthony Edwards' (1963) paper 'A stochastic crosscountry...' (re-published here in the article 'Probability in Cross-country Flying'). The key to their success is not the airspeed values on the Ring, but the arrow that points to the thermal rate of climb. Once the arrow has been set against a number, the pilot's strategy is: "I will circle only if I find lift stronger than the number I have set." Unlike others, a pilot using a MacCready Ring never wastes time circling in weak lift, unless really low.

CRITICAL RATE OF CLIMB (CROC)

The pilot must judge what rate of climb should be set on the MacCready Ring. To set

the Ring near the average rate of climb for the day invites an outlanding. There are two reasons for this:

- (1.) These stronger thermals may be too far apart:
- (2.) The high speeds advised by the ring give a steep glide angle that makes the glide range shorter.

Anthony Edwards' (1963) 'Stochastic' graph shows how risky gliding at high speed can be.

It is prudent to set the MacCready Ring rather low. Again, Anthony Edwards (1964) has good advice, which he calls 'The Threshold Theorem':

"(In MacCready theory) the 'average rate of climb' is to be replaced by the chosen 'critical rate of climb'. The critical rate of climb (CROC) is simply the threshold rate at which the pilot decides to circle in a thermal."

Here Anthony is making it clear that the MacCready Ring should be set in a way that takes account of altitude and thermal spacing as well as thermal strength. Later (Edwards, 1983), Anthony showed that once a MacCready setting has been chosen, for whatever reason, the pilot should not circle in a thermal weaker than the ring setting, and should not fail to circle in a thermal stronger than the ring setting. He proved that either action makes the cross-country speed slower.

WHEN TO LEAVE A THERMAL

I devised a rule for when to leave a thermal (Speight, 1984). It is just like the Final Glide rule, so the two can be expressed together:

When thermalling, as soon as it becomes

almost certain that one can reach either a stronger thermal or the finish line by cruising towards it with a ring setting equal to the present rate of climb, leave the thermal and fly to that ring setting.

What is new here is the phrase 'almost certain'. I am insisting that the pilot should think about the odds of success.

KNOW WHAT LIFT YOU WILL ACCEPT!

It is not sensible to have a rule to use only at the moment when one is deciding to leave a thermal. The reasoning that applies to that moment applies to every moment in the flight. The humourist of 'Sailplane and Gliding' Mike Bird ('Platypus') showed what should be done: "Always set your speed-to-fly ring to the rate of climb that you would be happy to accept RIGHT NOW." He called this the Minimum Acceptable Instantaneous Rate Of Climb (MAIROC). The MacCready Ring should be re-set at leisure, as circumstances change. It should not be re-set at moments of urgent action.

I express Platypus's idea this way: At all times you must know what lift is the weakest that you will accept.

The weakest lift you will accept is Edwards' Critical Rate of Climb (CROC).

When you know your CROC, set it on the MacCready ring or speed-to-fly instrument.

With CROC set on the MacCready Ring or speed-to-fly instrument, decisions become automatic. The time to leave a thermal is simply the moment when the average rate of climb falls below the CROC and the time to accept a thermal is the moment when the rate of climb rises above the CROC. Your task is to adjust the CROC so that you can be almost certain of finding a thermal as strong as your chosen CROC at all times.

SENSIBLE ODDS

One must fly in such a way that there is not much risk of outlanding. In any case one should avoid getting low because it is hard to fly fast when you are low. I suggested in 'Rules for Leaving Thermals' that one should think of 'almost certain' as being around odds 200 to 1 on, that is, only 0.5% chance of outlanding. If each glide between thermals is flown with 0.5% chance of outlanding, a task using 20 thermals has roughly 10% chance of ending in an outlanding.

To calculate the MacCready setting that will keep the odds of outlanding down to 0.5% calls for a model of how thermals of different strengths are spread around the sky. I did some crude modelling of this sort that resulted in curves relating CROC to height above landing fields. I did not suggest that the strength of any one thermal changed with height, but simply that the chance of finding a strong one was better at a greater height. Models for soaring days with different heights of convection had curves that did not differ much, and I could not find factors other than height that had much effect. Finally, I settled on a very simple formula.

A SIMPLE FORMULA FOR CROC

The formula that I use to set the Critical Rate of Climb on a MacCready Ring or a speed-to-fly instrument is:

CROC in knots is height in thousands of feet minus two.

Late in the day, when thermals are more widely spaced, I use minus three, not minus two. This formula suits a Twin Astir or a Hornet, and a pilot at State Championship level. It implies that all soaring days are the same for the purpose of CROC. If convection goes only to 4,000ft, one would not expect many thermals stronger than 2 knots. If convection goes to 10,000 feet, but one is flying at 4,000ft, one should accept 2 knots to avoid getting lower. In fact, at a given height, one should be more cautious on high days than on low days.

AUTOMATIC ADJUSTMENT OF CROC

With the advent of cheap Ppcket personal computers, a pilot may have the Critical Rate Of Climb adjusted automatically by a computer during flight. The gliding computer program XCSoar has a routine that does that, using theory developed by John Cochrane (1999).

The use of this routine is described in the XCsoar Manual, Section 6.7 'Speed to fly with risk' - NOT Section 6.13 'Auto MacCready.'

The XCSoar 'Speed to fly with risk' uses a MacCready value chosen by the pilot for a height near the top of convection. It automatically reduces the MacCready value as height is lost, down to zero at zero height.

The pilot also chooses a speed-to-fly risk factor. Only the highest risk factor, 1.0, gives a linear reduction with height. My thousandsminus-two rule is linear, but has a 2,000ft zero-MacCready buffer. In XCSoar, a risk factor of 0.1 reduces the MacCready value very little until down to 2% of the height of convection (less than circuit height).

PRACTICAL USE OF CROC

Many audio speed-to-fly instruments, when in cruise mode, will signal 'fly faster' and 'fly slower' and will also signal, by 'beep', lift that is above the MacCready value.

It is common sense to use these audio signals to make cross-country soaring as efficient as it can be. I do not agree with pilots who simply fly a constant speed between thermals. Nor do I agree with those who use the MacCready setting in ways that conflict with well established theory, or fail to set up their instruments to read as they should. The following practical advice assumes that the pilot is making proper use instruments.

A cross country flight using thermals should have three distinct phases, repeated many times:

- 1 Glide towards a goal
- 2 Search for useful lift
- 3 Circle in useful lift

Phases 1 and 2 may merge into each other. Phases 2 and 3 must be distinct, and your decision to circle in the lift must be quite positive. The angle of bank when circling in lift in Phase 3 is more than three times steeper than it is when searching for lift in Phase 2.

Phase 1 It pays to fly more-or-less directly towards your next navigation point when you have left a thermal. This stops you from messing about. Having decided on the weakest lift that you will accept (CROC), set that number as the MacCready value in your variometer. Remember to reduce the value of the CROC as you get lower.

Fly a speed that will keep the speed-to-fly audio signal quiet, between the signals for fly faster and fly slower. Always respond promptly to the audio, but never raise or lower the nose more than a slight amount. Deviate somewhat to where there is a better chance of lift.

Phase 2 Begin an active search for lift when it seems like a good idea.

Search as you get close to a cumulus, and whenever you feel a burble of turbulence, or get persistent audio advice to fly slower. Weave from side to side at only five degrees of bank. Plan to explore the likely lift area thoroughly so that, if you find nothing, you can be sure there was nothing to be found. When sink increases, bank the other way. When lift increases, steepen up and be ready to circle. Never fly straight in lift: like a tennis player, don't be caught flat-footed.

I advise keeping the instrument in cruise mode while searching. Do not deviate much from your track, only deviating 50 or 60 degrees when the lift seems the most promising.

Also search for lift when you have planned a circuit for outlanding. In that case, search on every side of the field until you have to commit to a downwind leg. Then complete the FUST check and stop searching.

Phase 3 Commit positively to a tight thermalling circle when the lift is strong enough. That is, when the instrument signals steadily that the lift is above the CROC. Increase the bank to more than 40 degrees, and switch the instrument to climb mode. Have a bet with yourself: "I bet I can beat CROC for the whole of this circle!" If you lose that bet, it is likely that a more cautious pilot will catch you up. You need more practice!

In nearly every thermalling circle there will be a point of weakest lift, or strongest sink. Move away from it! Every time! When learning this, there is a trick taught by Bill Dinsmore of Camden. He said, "When the sink is worst, look out to the horizon over the wing that is down. Note some landmark there, and decide to fly towards it." To move the circle does not require flying straight: just smoothly reduce the bank ("Open out!") and increase it again ("Close in!"). Even in a crowded thermal, doing this carefully need not cause conflict. Most pilots want to re-centre in the same direction. Keep a mental record of the direction that you are moving, so you can recognise a shear.

Remember to raise the value of the CROC with every thousand feet. A five-knot thermal that was very welcome when met at 5,000ft becomes barely acceptable at 7,000ft.

If the average lift falls off to a level near the CROC value, do your best to find a stronger core. Leave the thermal the moment the average lift is below the CROC. Then switch the instrument to cruise mode, and track in the direction you have already decided upon, flying at the best speed

REFERENCES

Cochrane, J. H. (1999) 'MacCready Theory with Uncertain Lift and Limited Altitude', Technical Soaring 23 (3), 88-96. On internet: http:// canadianrockiessoaring.com/Portals/57ad7180- c5e7-49f5-b282-c6475cdb7ee7/Speed-to-Fly.pdf

Edwards, A. (1964): 'The Arm-Chair Pilot', Sailplane and Gliding, October 1964, p.364. Edwards, A. (1963): 'A stochastic crosscountry, or Festina Lente', Sailplane and Gliding, February 1963, p.12.

Edwards, A. (1963) (as 'The Armchair Pilot'): 'Proof of the Threshold Theorem', Sailplane and Gliding, August/September 1983. p.159.

Speight, G. (1984): 'Rules for Leaving Thermals', Sailplane and Gliding, August/ September 1984, p.176-7.

REPRINTED WITH KIND PERMISSIO OF GARRY'S SPEIGHT. THIS AND A VOLUME OF GARRY'S WRITING IS AVAILABLE AT HTTP://WWW.KEEPITSOARING.COM/

SERVICE DIFFICULTY REPORTS

In this article I am back to Service Difficulty Reports (SDRs) that you have reported through our online SOAR system. The system is working and improving as we gather useful data. I also mention Services and Suppliers and promote Australian Gliding – a great system! It gets better!

SOAR

This is the third public report on the new SDR in the SOAR (Safety, Operations and Airworthiness Reports System). The SDRs from 2016 are below and you can download a complete listing from Documents/ Airworthiness. I have analysed all the records to date to give preliminary statistics. It will be a while before we have meaningful statistics but the following already shows some interesting trends. To ensure that we can all learn from findings and continue to improve our maintenance programs it is important that we report all Service Difficulties. Because of the low relative numbers of minor SDRs I suspect only the major ones are being found out and reported. Please report anything that will help others.

For all the SOAR reports raised, our CTO Dennis Stacey will report all major defects to CASA on your behalf. The CTO will also report the findings to the manufacturer. Your RTO-A organizes follow up and investigation if required. So report to SOAR but follow up through your AAO or RTO-A. It is a no blame system if you report.

I summarize the types of SDRs out of the current 148 from the last 3 years:

- \bullet Criticality: 64 HIGH, 36 Medium, 37 Low. Remainder for information.
- Engines and props numbered 50. Controls 31. Electrical 6. Categories:
- Poor maintenance 15
- Manufacturers' defects on new gliders 12! All types!
- Daily Inspection shortcomings 11
- Poor handling 7
- Poor paperwork 5
- Modifications or bogus parts 4
- Carbon monoxide poisoning 4
- \bullet Other occasional types Missed ADs, corrosion, exhausts, and vibrations of engines

Let's not do airworthiness by luck, as shown above. Agents, please let the manufacturers know we are not impressed. Everyone be more thorough and careful. Help your mates avoid troubles. Ask and we will all help to be safer.

Forethought, thoroughness, correct procedures and care could have reduced the issues. How many were not reported? This collection is an eye opener and worries me. It shows we need to improve our inspections – new, annual and daily!

SUPPLIERS AND SERVICES

We try to maintain an up to date list of useful suppliers on the website. Fiona has just updated the whole list so refer to http://www.d.glidingaustralia.org/member-services/airworthiness/manufacturers-and-suppliers if you need anything. And if you come across useful suppliers, please let us know at returns@glidingaustralia.org.

PROMOTING THE GFA SYSTEM

I am a keen proponent of the Australian Gliding system. I have lived and owned gliders in South Africa and the USA –

Australia has always had a better system for airworthiness. People often say to me members don't realize why the GFA system is great - worth supporting and promoting. I also did not really realize until I got involved at regional and then at GFA level. So let me explain my view, incomplete but a starter:



ROB HANBURY

Airworthiness

Department Chair

cad@glidingaustralia.org

It is a multi-tier system that may seem cumbersome and over complicated. Why do we have clubs, regional associations and the GFA?

- It is largely to spread the workload among many volunteers and to have local people providing services. In this large country it costs much more in time and funds to centralize and send staff everywhere. Also, we can enlist from a bigger group of people.
- Succession is important in any organization. We try to keep a flow of volunteers moving through the system from club to GFA levels. This is a form of training, learning and experience. It is important for continuity. It happens in Airworthiness, Operations, Management etc.
- We only have a few staff to provide the services that need day to day essential attention. A lot of work is done by enthusiastic volunteers. Even our staff are enthusiasts. We estimate our staff cost is about 10% of what it would be without volunteers.
- The regions provide essential management in each region. Also, most states will only fund regional bodies, not national and not clubs. We can see that the states with good regional associations operate better they have more successful interclub events, more training events, more funds and support their clubs and regional GFA officers. Without the regions, GFA would have more costs, less local contact, areas would be even more isolated, and we would lose tens of thousands of dollars. They don't have to be massive or a lot of work but they are essential.
- GFA itself is largely a management and system provider. We interact with national bodies like CASA, the police, insurers, foreign agencies and manufacturers. We interpret and organize the regulations and provide them in a more manageable form the Manual of Standard Procedures and all of our handbooks. I can't imagine how this side would run otherwise.

So, in my view, we have a great, sensible and essential system. Please support everyone and join in where you can. It supports Airworthiness, Operations, Sports, Membership, Safety and funding – allowing us all to have fun flying and playing with gliders. It's also well run and managed to reduce wasted effort and costs.

Happy flying. By the time you read this we will be almost over the maintenance season and getting back to flying!

ROB - THE CAD

HIGHLY CRITICAL

COULD HAVE CAUSED AN ACCIDENT

DG-400 - ENGINE

Two stroke engines suffer from severe vibration. Constant vigilance is required to combat/ identify and rectify vibration and fatigue related failures.

H 36 DIMONA - ENGINE

CO monitor alarm. Cockpit sealing problem. Pilot did not monitor and influence occurred.

H 36 DIMONA - RECORDS

Lost maintenance release and poor records of maintenance.

H 36 DIMONA - TAIL SECTION

Rudder cut in two by rolling backwards into fence. Dangerous repair using duct tape.

HORNET - MR

Successive Daily Inspectors and Pilots failed to correctly complete their inspection responsibilities.

KA 6 CR - TAIL SECTION

Environmental and corrosion damage in the tailplane support structure requires a detailed replacement/repair.

SF 25 C FALKE - ENGINE

CO ingress. Cockpit sealing problem

SF 25 C FALKE - ENGINE

CO ingress. Cockpit sealing problem. Un-approved mods.

TAURUS 503 - ENGINE

Engine runs rough, holed piston, cracked manifolds. Returned for warrantee work.

MEDIUM CRITICAL

ASK 21 - RELEASE

Increased friction in the nose release control circuit (overtightened pivot bolt) prevented the hook fully closing. This contributed to the uncommanded release event. Issued AWA-2015-3

ASTIR CS - TAIL SECTION

Defect is aircraft age related. Identified and repaired.

ASTIR CS - BOGUS PARTS

Non approved component replacement.

DG-1000S - CONTROLS

Manufacturing tolerance error allowing rudder cable eyelet to rotate into wrong position over rudder bracket.

H 36 DIMONA - CONTROLS

Rear fuselage plywood bulkheads (elevator pushrod runners) glue deterioration. GFA AWA 2016-2 issued alerting operators of the condition. Two SDR's now submitted.

SF 25 C FALKE - CONTROLS

Elevator drive - too much freeplay. Bush worn. Inadequate maintenance.

SF 25 C FALKE - ENGINE

Air filter, foam. Poor maintenance practices.

SF 25 C FALKE - ENGINE

Fuel hoses very old and perished. Potential to cause serious accident or possibly death.

LOW CRITICAL

UNLIKELY TO CAUSE AN ACCIDENT

ASH 26 E - ENGINE

Oil level sensor failed

ASTIR CS - FUSELAGE

Broken bulkhead caused by heavy landing. Known failure point after heavy landing with Astir CS sailplanes.

ES 60/1 BOOMERANG - UNDERCARRIAGE

Spring tail skids snapped off due to metal fatigue. Many cases known.

H 36 DIMONA - ENGINE

Unapproved modification. Obtain approval for a good improvement before further flight. Dual ignition.

SF 25 C FALKE - ENGINE

Both cabin heat and cowl flap cables seized. Inadequate maintenance.

SF 25 C FALKE - FUSELAGE

Canopy detached from frame for 30cm. Loose screws. Deteriorating timber frame. DI should have identified the unserviceability.

SZD-51-1 JUNIOR - FUSELAGE

Fuselage rib debonded from the skin, about 30% of the length. Probably incomplete repair of major accident.

STANDARD CIRRUS - TAIL SECTION

Delamination in fin bulkhead

This is a selection of entries. Refer to the full report on the webpage for more cases. In future, once we have more reports, we will catagorize entries to make more sense.



HANGAR KEEPERS INSURANCE

DO YOU HAVE HANGAR KEEPERS LIABILITY INSURANCE?

NOT HAVING ADEQUATE INSURANCES CAN PUT YOUR CLUB IN PERIL.
IT WILL COST YOU LESS THAN \$700 PER YEAR TO JOIN THE GFA'S POLICY

YOU PROBABLY WON'T BE MAKING A CLAIM BUT WILL SLEEP BETTER.
CONTACT THE GFA'S SECRETARIAT FOR FURTHER DETAILS.

Secretary@glidingaustralia.org

ACCIDENT & INCIDENT REPORTING

The GFA's Occurrence Reporting System (SOAR) was introduced during July 2014 and built upon the foundations of the Aerosafe managed IRIS system that was first introduced in May 2011. Since inception and up to 30 June 2016 we have received and investigated 625 occurrence reports. Of all these occurrences, some are accidents, leading to damage and/or injury, some are incidents and some near misses.

The list below shows the number of occurrence reports by clubs over the past five years. If your club is not listed, or has very few reported occurrences in that period, then you may need to look internally at your reporting culture.

With a healthy reporting culture, the number of near misses and incidents should outnumber the number of accidents resulting in significant damage or injury. One of our strategic safety goals must be 'Zero Fatalities, Every Flight, Every Year'. Our reporting and fatality trends are improving but further improvement is needed.

The reason for GFA's occurrence reporting is to identify where and how risks arise, and what safety recommendations need to be made to prevent future accidents. All members have a statutory obligation to report certain categories of accidents and incidents to the ATSB and GFA, and these are described in Section 21 of the GFA Manual of Standard Procedues, Part 2 under the heading 'Accidents, Serious Incidents and Incidents'. However there are many other opertational occurrences that are not required to be reported to the ATSB but which should be reported to GFA.

CHRISTOPHER THORPE

Executive Manager, Operations emo@glidingaustralia.org

A simple rule of thumb for occurrence reporting is this: if an occurrence affects, or has the potential to affect, the safety of a flying operation it should be

reported so that appropriate remedial action or mitigation measures can be implemented to reduce the level of risk to as low as reasonably practical.



Remember, every occurrence is an opportunity to learn valuable safety lessons. Not submitting a safety report GUARANTEES that the lesson learned will probably be lost.

Club CFIs and Safety Officers would have recently received a report of all occurrences involving their members in the first half of this calendar year. It is proposed that this information will be provided routinely every six months. For those clubs that have not had an occurrence in the past six months, the report is blank. I would suggest that those clubs whose members have not reported an occurrence in this period are either not flying, have an impeccable safety record, or are not reporting to GFA.

A link to the 'Operational Accident and Incident Reporting Guidelines' follows:

tinyurl.com/zhwubdg

100 Squadron AAFC (7 records) 301 AVIATION TRAINING FLIGHT (301ATF) | DARLING DOWNS SOARING CLUB INC (47 (7 records) 600 SQUADRON AAFC (5 records) 716 FLIGHT GLIDING CLUB AAFC (3 records) ADELAIDE SOARING CLUB INC (27 records) ADELAIDE UNI GLIDING CLUB INC (5 records) AIR CADET ASSOCIATION INC (7 records) AIR CADETS SCHOOL OF AVIATION INC. (10 records) **BATHURST SOARING CLUB (20 records)** BEAUFORT GLIDING CLUB (20 records) BENDIGO GLIDING CLUB (9 records) BEVERLEY SOARING SOCIETY INC (30 records) **BOONAH GLIDING CLUB INC. (17 records)** BORDERTOWN-KEITH GLIDING CLUB INC (1 record) **BUNDABERG GLIDING INC (2 records)** BYRON GLIDING CLUB INC (5 records) CABOOLTURE GLIDING CLUB INC (16 records) CANBERRA GLIDING CLUB (13 records) CENTRAL COAST SOARING CLUB INC (2 records) CENTRAL QLD GLIDING CLUB LTD (1 records)

records) FLY DOWN UNDER PTY LTD (8 records) GEELONG GLIDING CLUB (30 records) GLIDING CLUB OF VICTORIA (30 records) GLIDING CLUB OF WA (18 records) GRAFTON GLIDING CLUB (1 record) GRAMPIANS SOARING CLUB INC (15 records) GYMPIE GLIDING CLUB (10 records) HORSHAM FLYING CLUB (5 records) HUNTER VALLEY GLIDING CLUB CO-OP LTD KINGAROY SOARING CLUB (25 records) LAKE KEEPIT SOARING CLUB INC (44 records) MELBOURNE GLIDING CLUB/VMFG (23 records) MELBOURNE MOTORGLIDING CLUB (1 record) MORAWA GLIDING CLUB (3 records) MOUNT BEAUTY GLIDING CLUB INC (19 records) MURRAY BRIDGE GLIDING CLUB (2 records) MURRAY VALLEY SOARING CLUB LTD (2 records)

NARROGIN GLIDING CLUB INC (16 records)

CUDGEGONG SOARING PTY LTD (1 record)

records) NORTHERN AUST GLIDING CLUB (1 record) NORTH QLD SOARING CENTRE (1 record) PACIFIC SOARING Pty Ltd (1 record) PACIFIC SOARING Ptv Ltd (1 record) RAAF RICHMOND GLIDING CLUB (7 records) RAAF WILLIAMTOWN GLIDING CLUB (1 records) SCOUT GLIDING CLUB INC (3 records) SOARING CLUB OF TASMANIA INC (5 SOAR NARROMINE PTY LTD (7 records) SOUTHERN CROSS GLIDING CLUB (7 records) SOUTHERN RIVERINA GLIDING CLUB INC (7 records) SOUTHERN TABLELANDS GLIDING CLUB (6 records) SPORTAVIATION PTY LTD (5 records) SYDNEY GLIDING INC (2 records) SYDNEY MOTOR GLIDER FLIGHT GROUP (2 records) TEMORA GLIDING CLUB (7 records) WAIKERIE GLIDING CLUB (7 records) WARWICK GLIDING CLUB (13 records)

NARROMINE GLIDING CLUB INC. (11

FLYING TRAINING DEVELOPMENT

The Chairman of the Operations Panel, Drew McKinnie, is managing the modernisation and development of gliding training in conjunction with the RAAF/AAFC. Some of the areas that he is working on include:

- Principles of Learning We train and coach young people, adults, men and women. GFA is looking at how instructors can better adapt to the different learning styles of our students to enhance their learning experience, applying the principles of adult learning.
- Psychological Issues We want to increase our understanding of how we function and interact with others to better enhance both our own teaching styles and the learning behaviours of our students. To this end we are developing guidance around the influence of stress and fatigue in the training environment, and the impact of psychological and communications concepts in training female pilots and juniors.
- Documentation We are reviewing and updating our guidelines, syllabi and pilot competency standards. We aim to produce lesson plans and support material to ensure a standardised and more streamlined approach to training across all regions.
- Instruction We have responsibilities towards ourselves, our members and our students. We are continuing to look at professional development via refresher training and improved instructional resources. Based on feedback from 'proof of concept' courses, we have agreed a national syllabus for Flight Instructor Refresher Courses.
- Simulators GFA and the AAFC are assessing the value of simulators for flight training.

OTHER ISSUES BEING ADRESSED BY THE GFA OPERATIONS PANEL

- Developing guidance on workload management for powered sailplane pilots;
- Improving guidance for auditors conducting operational

safety audits;

- Revising guidance for circuit patterns that allow pilots to better monitor the aiming point to reduce the risk of undershoot accidents.
- Reviewing and documenting the roles and responsibilities of Duty Pilots, Wing Runners and other key operational
- Increasing focus on VHF radio use for normal gliding operational calls, such as winch launch commands and some aerotow emergencies.
- Updating the Basic Gliding Knowledge and Powered Sailplane manuals.
- Writing an aerobatics manual and developing a competency based aerobatic training system and endorsements.

ADVOCACY

- GFA has a representative on the Australian Strategic Air Traffic Management Group (ASTRA) that is developing standards for ADS-B in VFR Aircraft.
- GFA met with the CASA Aerodromes section in March to discus changes to MOS Part 139 to make airfields more 'glider friendly', and is assisting clubs and aerodrome owners with CASA submissions.
- The GFA Airspace, Airfields and Avionics Officer is currently dealing with proposed frequency changes at Narromine and Benalla in response to the decommissioning of navaids and introduction of non-precision GPS approaches at Dubbo and Wangaratta. Responses have been sent to CASA from the affected gliding clubs. GFA has separately written to CASA and suggested that they conduct a proper risk assessment to determine whether the proposed changes will be workable and actually enhance situational awareness.
- CASA has commenced development of a Sector Risk Profile in relation to Airprox events outside controlled airspace. Regional Express and GFA are on the list of survey participants.

GFA APPROVED MAINTENANCE **ORGANISATIONS**



AEROSWIFT COMPOSITES	BALLARAT	JOE LUCIANI	0428 399 001	comcom2@bigpond.net.au
AOG SPECIALISTS	COFFS HARBOUR	SMCGOWAN	0430 138 719	shannon@aogspecialists.com.au
AVIATION COMPOSITE ENGINEERIN	NG TOCUMWAL	PETER CORKER	RY 0439 842 255	corkerys@bigpond.com.au
AVTEC AVIATION	BOONAH	ROGER BOND	0409 763 164	$avtecaviation @virgin broadband.com. \\ a$
CAMDEN SAILPLANES	CAMDEN	MIKE DUGAN	0418 681 145	camdensailplanes@bigpond.com
GCV WORKSHOP	BENALLA	GRAHAM GREE	D 0428 848 486	gcvworkshop@benalla.net.au
HOLMES HOLDINGS	BRISBANE	PETER HOLMES	07 5464 1506	holmbros@gmail.com
KEEPIT GLIDER TECH	LAKE KEEPIT	GRANT NELSON	N 0417 843 444	keepitglidertech@outlook.com
MADDOG COMPOSITES	BOONAH	MIKE MADDOCK	KS 0408 195 337	mike@maddogcomposites.com.au
MORGY'S GLIDER WORKS	WAIKERIE	MARK MORGAN	0427 860 992	morgans@sctelco.net.au
SL COMPOSITES	TEMORA	SCOTT LENNON	0438 773 717	scottl@internode.on.net
T & J SAILPLANES	TEMORA	TOM GILBERT	0427 557 079	tnjgilbert@internode.on.net
ULTIMATE AERO	BOONAH	NIGEL ARNOT	0437 767 800	nigel@ultimateaero.com.au
UNIVERSAL PLASTICS	PERTH	DARREL LONG	08 9361 8316	universalplastics@iinet.net.au
	AOG SPECIALISTS AVATION COMPOSITE ENGINEERIN AVTEC AVIATION CAMDEN SAILPLANES GCV WORKSHOP HOLMES HOLDINGS KEEPIT GLIDER TECH MADDOG COMPOSITES MORGY'S GLIDER WORKS SL COMPOSITES T & J SAILPLANES ULTIMATE AERO	AOG SPECIALISTS COFFS HARBOUR AVIATION COMPOSITE ENGINEERING TOCUMWAL AVTEC AVIATION BOONAH CAMDEN SAILPLANES CAMDEN GCV WORKSHOP BENALLA HOLMES HOLDINGS BRISBANE KEEPIT GLIDER TECH LAKE KEEPIT MADDOG COMPOSITES BOONAH MORGY'S GLIDER WORKS WAIKERIE SL COMPOSITES TEMORA T & J SAILPLANES TEMORA ULTIMATE AERO BOONAH	AOG SPECIALISTS COFFS HARBOUR S MCGOWAN AVATION COMPOSITE ENGINEERING TOCUMWAL AVTEC AVIATION BOONAH ROGER BOND CAMDEN SAILPLANES CAMDEN MIKE DUGAN GCV WORKSHOP BENALLA GRAHAM GREE HOLMES HOLDINGS BRISBANE PETER HOLMES KEEPIT GLIDER TECH LAKE KEEPIT GRANT NELSON MADDOG COMPOSITES BOONAH MIKE MADDOCH MORGY'S GLIDER WORKS WAIKERIE MARK MORGAN SL COMPOSITES TEMORA SCOTT LENNON T & J SAILPLANES TEMORA TOM GILBERT ULTIMATE AERO BOONAH NIGEL ARNOT	AOG SPECIALISTS COFFS HARBOUR S MCGOWAN 0430 138 719 AVATION COMPOSITE ENGINEERING TOCUMWAL PETER CORKERY 0439 842 255 AVTEC AVIATION BOONAH ROGER BOND 0409 763 164 CAMDEN SAILPLANES CAMDEN MIKE DUGAN 0418 681 145 GCV WORKSHOP BENALLA GRAHAM GREED 0428 848 486 HOLMES HOLDINGS BRISBANE PETER HOLMES 07 5464 1506 KEEPIT GLIDER TECH LAKE KEEPIT GRANT NELSON 0417 843 444 MADDOG COMPOSITES BOONAH MIKE MADDOCKS 0408 195 337 MORGY'S GLIDER WORKS WAIKERIE MARK MORGAN 0427 860 992 SL COMPOSITES TEMORA SCOTT LENNON 0438 773 717 T & J SAILPLANES TEMORA TOM GILBERT 0427 557 079 ULTIMATE AERO BOONAH NIGEL ARNOT 0437 767 800

38 GLIDING AUSTRALIA www.glidingaustralia.org GLIDING AUSTRALIA www.glidingaustralia.org 39

ACCIDENTS & INCIDENTS APRIL - MAY 2016

All clubs and 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.

Reports noted 'Under investigation' are based on preliminary information received and may contain errors. Any errors in this summary will be corrected when the final report has been completed.

SOAR Accident and Incident Occurrences

Gen	erai Statistics	
Date From:	01/04/2016	
Date to:	31/05/2016	

Damage						
	VSA	QSA	WAGA	SAGA	NSWGA	Total
Nil	2	9	1	1	4	17
Substantial	1		1			2
Minor		1		1		2
Total	3	10	2	2	4	21

Injury						
	VSA	QSA	WAGA	SAGA	NSWGA	Total
Nil	3	10	2	2	4	21
Total	3	10	2	2	4	21

Phases						
	VSA	QSA	WAGA	SAGA	NSWGA	Total
In-Flight	1	3				4
Thermalling		1				1
Launch	2	3	2	1	1	9
Ground Ops				1		1
Landing		3			3	6
Total	3	10	2	2	4	21

1-APR-2016 QSA AIRCRAFT LOADING ASK 21 MI

Under investigation. The pilot undertook his first solo and satisfactorily completed his flight. After landing it was discovered that the pilot was flying

GFA AIRWORTHINESS DIRECTIVE

ALLSTAR PZL GLIDER SP.Z O.O

Manufacturer(s) PZL Bielsko/Allstar PZL

Gliders Sp.z o.o. Types/Models Affected

All SZD-50-3 Puchacz gliders except S/N

Serial Numbers All serial numbers except S/N

Flight Controls - Control Stick Mounting

GFA AD 683 ISSUE 1

DATE: 28 JUNE 2016

- Inspection/ replacement

BACKGROUND

Implementation MANDATORY

The manufacturer advises through his

Mandatory Bulletin that there has been

breaking away from its mounting and further

occurrences where cracking has been found

reports of the Puchacz control column

B-1990

R-1990

SUBJECT

2kg below the minimum placarded cockpit weight. The pilot was reminded of the importance of checking ballast requirements prior to flight.

2-APR-2016 QSA AIRCRAFT SEPARATION TST-10M

A motor glider that had self-launched two hours earlier was thermalling to just below cloud base about 3 miles from the aerodrome. At the top of the climb the pilot levelled the glider's wings and checked for other aircraft. He observed a tow plane and glider combination climbing towards him about 300ft below and behind the starboard wing of his aircraft. The pilot of the motor glider manoeuvered away from the projected flight path of the tow plane/ glider combination. The tow pilot did not sight the motor glider until it was at the same height and about 500ft away, at which time he turned away from the motor glider to increase separation. The glider under tow released about three seconds later. The primary method for implementing 'see-andavoid' is lookout, which involves seeing potential hazards and assessing information prior to reacting. The primary source of information is vision. Pilots must maintain a good lookout at all times and adequately compensate for any aircraft blind spots. This means avoiding long periods at a constant heading and checking that the airspace is clear before turning. Pilots of gliders under tow should also keep a good lookout and use radio communications

develop. For further information, refer to OSB 02/14 'See-and-Avoid for Glider Pilots'

2-APR-2016 WAGA AIRFRAME SZD-48 'JANTAR STANDARD

The pilot completed his pre take-off checks

before launching for a cross country flight. The glider launched normally and lifted off to about 3m in height. About half way down the runway the canopy departed from the glider. The pilot immediately released and carried out an uneventful landing straight ahead, with the glider coming to rest well before the end of the runway. The pilot made a radio call to alert the ground crew of the occurrence and to warn that the canopy was likely to be obstructing the runway. The pilot recalled that as part of his pre take-off check he pushed up on the canopy to ensure it was secure but forgot to engage the locking levers on both sides of the canopy. The Standard lantar canopy is in two pieces with the front piece permanently fixed to the airframe, and the rear piece being secured with a pin at the rear and two locking mechanisms at the front. The pilot noted that it would have been difficult for the launch crew to notice that the canopy was unlocked during the hook-up procedures as there is little visible difference from the outside whether the canopy is locked or

2-APR-2016 SAGA FLIGHT PREPARATION/NAVIGATION GROB G 103 TWIN AND DG-500 ELAN ORION

The Daily Inspection of two gliders was completed using the wrong Maintenance Releases. The gliding club stores all Maintenance Releases in the clubhouse after flying. The next

is mandatory and compliance, including action taken pursuant to this Airworthiness Directive must be recorded in the aircraft log book, annually.

Effect on Weight and Balance No effect on W&R

Effective Date 1/07/201

of flight control due to foreign object damage (FOD).

Mandatory Bulletin No. BE-055/SZD-50-3/2004

to alert the tow pilot if a collision risk is likely to

in the mounting sockets. The GFA has

additionally received one such failure report.

loss of control and/or jamming or restriction

If not corrected, the failure may lead to a

Required Action(s)

Documentation

AIRWORTHINESS DIRECTIVES

Before further flight and at each annual inspection after the effective date of this Airworthiness Directive, inspect control column and attachments in accordance with Allstar PZL Glider Mandatory Bulletin No. BE-055/SZD-50-3/2004 'Puchacz'. Report any defects/ cracks to the GFA. Compliance, Compliance Time(s) and Frequency

Compliance with this Airworthiness Directive

GFA AIRWORTHINESS DIRECTIVE GFA AD 682 ISSUE 1 EFFECTIVE DATE 10/06/2016

Type Certificate Holder Aircraft Industries a.s. Manufacturer(s) Aircraft Industries a.s.; Strojirny prvni petiletky n.p.; Let n.p.; Let a.s. Types/Models Affected

L 13 and L13A 'Blanik' sailplanes, all variants (including Llewellyn modified L13 A1) Serial Numbers All serial numbers

SUBJECT

Flight Controls – Control Sticks and Bridge – Inspection/replacement Implementation MANDATORY flying day, two Daily Inspectors managed to inadvertently switch Maintenance Releases. The mistake was identified on the flight line before the first flight by the Duty Instructor, who was going through the pre-boarding checks with his student. As

the GFA Daily Inspector's Handbook states, Daily Inspectors must check, among other items, "Registration to correspond with glider registration, i.e. booklet is in the correct glider. The booklets are numbered and are specific to each glider registration. It is not permitted to swap booklets between gliders."

3-APR-2016 QSA AIRFRAME BLANIK L13 A1

Under investigation. During a winch launch the pilot had has left arm in position to activate cable release. As the aircraft rolled over rough ground during take-off the pilot's left arm bumped the canopy release. As the pilot transitioned into the climb the canopy opened fully. The pilot released the cable and safely completed a modified circuit. The canopy was closed during the downwind leg by PIC and a landing was completed without further incident.

4-APR-2016 QSA FLIGHT PREPARATION/NAVIGATION ASK 21 MI

While dealing with a minor technical problem, the fuselage inspection hatch had been opened and then replaced. The pilot did not check the security of the hatch during his pre-flight inspection, and upon engine start the ground crew observed the hatch to fall off the aircraft and signalled the pilot to shut down. The engine was immediately shut down and the hatch was replaced and secured. When completing the preboarding 'airframe' inspection, pilots must confirm all inspection

BACKGROUND

This Airworthiness Directive (AD) is prompted by the discovery of cracks on L13 BLANIK sailplanes in zones where the forward and aft control sticks are attached to the connecting rod, designated as 'control bridge' in the relevant Illustrated Parts Catalogue (IPC). If left uncorrected, cracks could propagate and lead to failure of the connecting rod with subsequent loss of control of the sailplane. For the reasons outlined above, this AD requires an inspection of the control bridge to detect cracks and replacement, if necessary.

Documentation Aircraft Industries a.s.

Mandatory Bulletin (MB) No. L13/105a initial issue or later approved versions.

Required Action(s)

Within the next three months or next annual inspection whichever comes first after the effective date of this GFA AD; then at each annual inspection; perform the requirements

hatches are properly secured and taped where required. Use of coloured tape can assist visually.

4-APR-2016 QSA AIRCRAFT CONTROL BLANIK L13 A1

Under investigation. The pilot, who was undertaking his first solo, forgot to complete his pre-landing checks and failed to lower the undercarriage. Fortunately the undercarriage does not fully retract and no damage was caused during the landing.

5-APR-2016 VSA AIRFRAME H 36 DIMONA



Under investigation. The pilot was operating from a private airstrip near Scone, NSW. The pilot taxied down the airstrip at a fast pace while periodically revving the engine to clear stock from the strip. During a 180 degree turn to line up for take-off the tail plane fell off the aircraft. The pilot opened the throttle and accelerated down the runway for about 500m before aborting the take-off, and then taxied to the end of the runway. A local farm worker witnessed the event and retrieved the tail plane. The witness was later surprised to see the pilot, having refitted the tail plane, take-off on a short flight. The pilot subsequently took the elevator, which was badly damaged in the incident, to a GFA approved

maintenance organisation for repair.

7-APR-2016 QSA AIRFRAME ASK 21 MI

Under investigation. On landing, the aircraft rolled to a stop with flat main tyre. The pilots were unable to ascertain if the tyre was flat at commencement of take-off roll.

13-APR-2016 NSWGA AIRCRAFT SEPARATION DG-1000S

Under investigation. A glider and Jabiru aircraft came into close proximity during the final approach.

14-APR-2016 NSWGAFLIGHT PREPARATION/NAVIGATION GROB G 103 TWIN II

Under investigation. Launch PIC Age 49. Rear canopy came open on solo flight.

16-APR-2016 WAGA MISCELLANEOUS ASK 21

The tow rope got caught on either the tailwheel of the tow plane or on a stake in the ground near the tow plane holding point. During launch the rope became abraded and failed while the glider was still on the ground. The CFI noted that this is the



continued over pag

as detailed in Mandatory Bulletin (MB)No. L13/105a.

Report any cracks to the GFA.
Compliance, Compliance Time(s) and
Frequency

Compliance with this Airworthiness Directive is mandatory and compliance, including action taken pursuant to this Airworthiness Directive must be recorded in the aircraft log book, annually.

Effect on Weight and Balance No effect on W&B.GFA Airworthiness Directive

EASA AIRWORTHINESS DIRECTIVE AD NO.: 2016-0121 ISSUED: 21 JUNE 2016 MDM-1 "FOX" SAILPLANES

Applicability:

MDM-1 "Fox" and MDM-1P "Fox-P" sailplanes, all serial numbers.

In 2011, during an aerobatic training flight on a single MDM-1 "Fox" sailplane, the tube of

the control stick at the front seat broke. As the sailplane could still be controlled from the rear seat, a safe landing was made. The initial investigation results, later confirmed by a laboratory test of the damaged part, indicated that the affected stick may have been damaged due to a large overload on the stick during a previous flight.

This condition, if not detected and corrected, could lead to failure of a control stick, possibly resulting in loss of control of the sailplane and consequent injury to the occupant(s).

To address this unsafe condition, ZLMM developed and published Service Bulletin (SB) No. BO-17/2011 MDM-1 FOX, which provided instructions to inspect the front seat control stick tube geometry and external surface condition and, consequently, EASA issued Emergency AD 2011-0210-E to require a one-time inspection of the front seat

third incident of this type with this tow plane. The club has placed a 300mm sheath over the rope at the tow plane end to prevent the rope getting further caught.

17-APR-2016 VSA AIRCRAFT SEPARATION PIPER PA-25 AND FAIRCHILD SA227-AC **METROLINER**

Under investigation. A Metroliner flew unannounced and at low level through the circuit area of an active gliding operation.

20-APR-2016 SAGA **GROUND OPERATIONS DG-1000S**



After a routine landing of the aircraft and while the aircraft was running on the main and nose wheels, a small rock was caught between the LHS side of the nose wheel fairing and the tyre. resulting in a portion of the fairing breaking away.

22-APR-2016 QSA **AIRCRAFT SEPARATION IS-30**

The glider pilot had been flying for about one hour and had returned to the airfield with the intention of landing. A circling descent was being conducted on the dead side of the common circuit about 1NM south of the airfield. At about 2,300ft AGL the glider pilot noticed a dark coloured helicopter approaching fast in a 'head-on' position. As the glider was turning away from the threat, its pilot continued the turn while monitoring the helicopter pass on the right about 200ft away. The glider pilot did not recall hearing any radio calls from the helicopter, nor did he attempt to contact its pilot. Subsequent attempts to identify the helicopter were unsuccessful. The most hazardous area for collisions is within a space bounded by a cylinder

control stick to detect any damage and, depending on findings, replacement of the control stick.

In 2015, an additional occurrence of in-flight failure of a front seat control stick was reported on

another MDM-1 "Fox" sailplane. The affected sailplane had successfully passed the one-

inspection required by EASA AD 2011-0210-E. Prompted by this occurrence, ZLMM issued Revision 1

(R1) of SB No. BO-17/2011 MDM-1 FOX, introducing an additional (dye penetrant) inspection and

of airspace 5 NM in diameter and up to 3.000 ft. above aerodrome elevation. This incident highlights the importance of pilots maintaining good situational awareness within this high-risk area. For further information, refer to Operational Safety Bulletin (OSB) 02/14 - "See-and-Avoid for Glider Pilots" and CAAP 166-1 - "Operations in the vicinity of non- controlled aerodromes".

24-APR-2016 QSA **FORCED / PRECAUTIONARY LANDING STANDARD LIBELLE 201 B**

Under investigation. Low-level uncommanded release form aerotow. Aircraft suffered minor damage in subsequent off-field landing.

8-MAY-2016 QSA AIRCRAFT SEPARATION JONKERS JS1-C

Under investigation. Glider on final glide to circuit area. Harvard in take-off and climb phase. Near miss occurred approx. 2 NM North of the airfield at 2,000ft QNH. drop.

17-MAY-2016 NSWGA LOW CIRCUIT **GROB G 103 TWIN II**

Under investigation, Following a briefed winch failure, the pilot elected not to land straight ahead off-field and conducted a 180 degree turn to the right onto a downwind leg for a modified circuit onto the operational runway. The pilot extended the downwind leg to a position abeam the runway threshold, at which point a 180 degree turn was completed at low level to align with the runway. A safe landing ensued.

18-MAY-2016 NSWGA **AIRCRAFT SEPARATION DG-1000M**

Under investigation. A glider flying a modified circuit turned inside of another glider established on final approach. The commend pilot of the following glider initiated a 360 degree turn to allow landing separation.

21-MAY-2016 SYSTEMS DG-500 M

Emergency AD

superseded, and

and, depending or

REQUIRED ACTIONS

During the take-off roll, the experienced command pilot noticed the ASI was indicating too slow an airspeed for the conditions and abandoned the launch. Post-flight inspection

instructions to measure control stick

EASA AD 2011-0210-E, which was

clearance. Consequently, EASA issued

required accomplishment of repetitive

inspections of the front seat control stick

findings, replacement of the affected control

Required as indicated, unless accomplished

Pre-SB BO-23/2016 MDM-1 FOX sailplanes:

2015-0182-E, retaining the requirements of

OSA 'PUCHACZ'

the turn onto downwind for runway 12 and the glider instantly entered a spin to the right. maintain an attitude/airspeed relationship and circuit joining area the student allowed the airspeed to decay. The instructor prompted the student to lower the nose and the student complied but immediately commenced a turn prior to achieving a safe airspeed. The glider recovery technique, and recovered to normal

0182-F1, and.

ZLMM SB BO-17/2011 MDM-1 FOX Revision 1

ZLMM SB BO-23/2016 MDM-1 FOX dated 16 February 2016.

disconnected during earlier maintenance to the navigational instruments. As the pitot tubing was aligned with the ASI connector stem, a reading was achieved during the DI. Investigation by the

revealed the ASI plumbing had been inadvertently

determined that the instrument plumbing became disconnected when the instrument panel cowling was removed, and that an independent check of the instruments was not undertaken post completion of the maintenance. It was also determined that during the Daily Inspection the pilots had to blow hard into the pitot to get the ASI to register and, while this was considered odd, the pilots saw what they expected to see and did not question this (confirmation bias). Neither pilot was under any time or environmental pressure. The CFI noted the importance of independent checks being carried out when an aircraft component has been taken apart and, if something appears unusual to stop and investigate further.

21-MAY-2016 **AIRCRAFT CONTROL SZD-50-3**

Under investigation. The student pilot mishandled Recovery was affected by the instructor at about 250ft AGL and a safe landing was completed on the reciprocal runway. The student had come to gliding following some powered aircraft training and was briefed by the instructor of the need to use coordinated rudder inputs. Approaching the departed controlled flight and commenced a turn to the right with a steep nose down attitude. The instructor took control, applied the standard spin GA

(1) Before next flight after 02 September 2015 [the effective date of EASA AD 2015-

thereafter, at intervals not to exceed 100 flight hours (FH), or during each scheduled annual inspection, whichever occurs first, inspect the front seat control stick in accordance with the instructions of R1 of ZLMM SB BO-17/2011 MDM-1 FOX Ref. Publications:

dated 05 August 2015.

GFA CLUB LIST

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

sean@glidingaustralia.org

716 FLIGHT GLIDING CLUB

Operations 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 aliders. 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

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, člubhouse, 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

42 **GLIDING** AUSTRALIA www.glidingaustralia.org

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

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. A 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

44 GLIDING AUSTRALIA www.glidingaustralia.org

Located at Ararat Airfield (Victoria) the club operates at weekends and public holidays with independent operator midweek 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

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 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

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.

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

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 5th 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 holidavs. 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. ngsoaring.org.au

RAAF RICHMOND GLIDING CLUB

We operate gliders mostly on the weekend using a tow plane (mainly Sunday), and our motor-glider flights are available 7 days a week. All our operations are subject to Air traffic control, weather and pilot availability.

Main Phone: 02 4587 7618 www. richmondgliding.com

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 Bern 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.

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 CLUBLocated 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 Goulbum - 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 airconditioning. Camp Kitchen self cooking, recreation room with TV and Laundry Facilities, www.soamarromine.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 Oueensland 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.

GLIDING AUSTRALIA www.glidingaustralia.org 45

5/13/2016 9:56:42 AM ClubListing-May-2016.indd 45 5/13/2016 9:56:42 AM ClubListing-May-2016.indd 44

CLASSIFIED ADVERTISING

glidingaustralia.org

For members' convenience, Classified Ads can be purchased from the Gliding Australia website at glidingaustralia. org Go to Classifieds then click on the link and complete the online form where you will need to provide the text for the ad and any photos, if required. The cost for the ad will be determined by the number of words and any photos you wish to add. You will then be taken to a secure payment area to process your payment. 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

LS4a VH-GOB 1984, 3950hrs, 1560 landings, Refinished in



P.U., totally refurbished cockpit. All in excellent condition. serviceable licensed trailer, LX8000F computer, with Vario and Flarm, Ground handling gear \$48,000 Neg. **Chris Runeckles 0407 427 793 or 08 9294 1084** email cmruneckles@gmail.com

VH-UKP , SZD-48-1 Jantar Standard 2, 1982.



Hinged canopy at rear. Reprofiled wings with removal of spare hump. Working water ballast for better performance. LX Nav7 with FLARM, plug in your Oudie and you're away. New Fusion 12v-10AH Lithium Battery, plus emergency backup power supply for radio and V7. Trailer fully enclosed and recently modified and registered for Qld with tow out gear. TT 2312hours as of January 16' with 945 landings and form 2 valid to 23 Oct 2016. Last form 2 by Roger Bond Avtec Aviation Boonah Qld. Aircraft hangered in Kingaroy Queensland. \$13,500 Contact: Paul Halloran 0405 7661 05 or email pawh@me.com

Ventus A, VH-UKM Australia's fastest glider of the 2015/2016



season, 158kph raw speed! 4300hrs, nil accident history, great condition, new green tinted canopy, finished in PU. Full ClearNav system, Maughmer winglets, half-clamshell trailer, suitable for tall pilots & sold with fresh form2. \$55,000; Email: go_soaring@hotmail.com

VH-IZX Jantar Std2 Good condition, standard instruments , enclosed trailer, parachute. \$15 000.- located Gulgong NSW Hans 0400 253 164

VH-VWP, ASG 29 E. Virtually a new aircraft that left the factory in July 2015. Comes with Cobra trailer and the usual bits. Less than 70 hrs on the airframe and less than 3 hrs on the sustainer engine. Price: \$225,000 Contact: wspaddon@iinet.net.au for further details

VH-GOJ Nimbus 2 Nimbus 2, 800 landings, TT 2600. Refinished



in PU. Big water tanks, Latest spec B800 with GCD, Brand new B700, Brand new Odyssey battery. FLARM set up for Oudie and external display. Refinished in PU fibreglass pilfer trailer, Single man rigger. Multilayer Confour, sheepskin seat cushion. Eye ball vent in panel. All new cockpit decals from SH. Two year old harnesses, brand new main tyre, wheel bearings. Dual wing walkers that double as tie downs. Roller skate wing tip skids and tail wheel. Comes with \$2500 worth of spares, brass bushes, bearings and pins. Price from \$25,000to \$29,000k depending on spec. I am very negotiable and need to move ASAP. Lots of Photos here http://members.optusnet.com.au/~jjsinclair/gallery.html Contact Justin Sinclair Mob 0421 061 811 or Email jjsinclair@optusnet.com.au

LS4 VH-GYF with Cobra Trailer. Wings professionally refinished



(gelcoat) in 2000, the rest in 2007 (2K Acrylic). 2560 hours 1530 landings. Competition ready with B700, Swissflarm flarm/logger, Avier PNA running XC Soar (flarm GPS source). Sold with good chute (2007), tow out gear and many extras. Located Sydney metro. \$58,000 Enquiries and for further info contact **John Trezise 0411 597 955**, jtrezise.gyf@gmail.com

LAK-12 VH GFH 1995. Open Class. TT 504 hrs. 20 yearly



inspection completed. Beautiful glider. Genuine 50:1 (see Richard Johnston test). 1000 km capable. \$28,000. See pics at www.flickr. com/photos/100805789@N07 **Chris Hamilton 0418 234 000**

2 SEATERS

Twin Astir VH-IKV 3900 hours and in excellent condition.



Refinished in Polyurethane in 2006, refurbished cockpit. Modified wheel configuration improves rear seating position and ground handling. Always well maintained. Basic instruments including radio. Trailer manufactured in 2012 included. Form 2 valid until March 2017. Price has been reduced to \$42.5k. **David Nugent 0427 275**

171 dnugent@bigpond.com
MOTOR GLIDERS

VH-GUD Grob G109 TT AF 1624. TT Eng & Prop 283.



Excellent proven Motor Glider may be used for Soaring in Wave, Thermals and the Morning Glory or for Training and Touring. Undercarriage faring's available, New Canopy, Transponder fitted, two speed prop and 90kt cruise. \$45,000 ONO. Contact Rob Moore 0412 055 888 robcoll@adam.com.au or Noel H 08 8522 1423 M 0402 219 708 roediger@internode.on.net

VH-GUE DG500M 1/5 SHARE. Based at Boonah. New Solo engine factory fitted in Germany by Binder 2014. Dual Mountain High oxygen system. Flarm and Mode C Transponder for safety and CTA transit. Full avionics panel, flight and engine controls both cockpits. Low utilization. \$37000. Jim 07 3821 1246 hjrgrant@iprimus.com.au



continued over page



The Southern Tablelands Gliding Club is a winch club which operates on Saturdays from Carrick near Goulburn. We have potential for additional hangar space. Parties interested in hangar space and flying at Carrick please contact Robert Howdin – secretary@stgc.org.au
For further information see our website – www.stgc.org.au

ZK GOM is a DG 400, self-launching glider

that first flew December 1984 and has completed 1,793 hours and 247 hours engine time. Comes with 15 and 17m tips, tow out gear, hanger covers, 2 canopy covers, EDS and A8A oxygen with quick connect refill. Cambridge nav and Winter mechanical varios. Dittel FSG60M radio and Terra transponder. Trailer has cobra fittings and ability to charge batteries via an external socket while glider is in the trailer. Located Christchurch, New Zealand – can be hangered at Omarama if required. Price AUD \$74,000. Contact Mark Aldridge 0274 508 505 or mda@308.kiwi.nz

VH-GOA. The Jet Powered ASH-25 The Jet Powered ASH-



25. Very good condition; approx. 3800 airframe hours (3000 hourly done by T&J Sailplanes), low engine hours, approved winglets plus factory winglets and installation kit in a box. Cobra trailer. Tow out gear. Sundry spares. All flying instruments, Winter vario, Zander SR940 vario and Flarm with Voice. Self launching capability, as shown in this video: https://www.youtube.com/watch?v=mpCAGpWzLpQ. Certified sustainer, experimental category. Simple and reliable system. \$175,000 Neg. **Paul Mander 0417 447 974**, paul@mander.net.au.

VH-ZAR Discus bM self launcher (Rotax 463), 1995, hangared all



its life. Pristine condition; approx. 890 airframe hours, 49 engine hours, factory winglets, polyurethane upper surfaces, all-over dust covers, nil damage history. Comes with good Australian built trailer which tows well, rigs well and is weather proof. Tow out gear. Sundry spares. Very good take-off performance. Priced at \$87,500. Paul Mander 0417 447 974, paul@mander.net.au.

DG500M VH-XQK two seat, self launching motor glider, 60HP



Rotax 535C. Has been syndicate owned since being imported new in 1992. Being sold with a recent Form 2 inspection. Always hangered. \$120,000 negotiable. youtu.be/UFNKtUg2rSE For more details contact **Bob Ph02 6332 9235** bobjmcdo@gmail.com

VH-GXG, HK36R Super Dimona tail dragger, 80HP Rotax.



TTAF 2329, TTENG 980. In excellent condition, professionally maintained, always hangared, fully instrumented. \$110,000. **Ph 0412 145 144.**

INSTRUMENTS AND EQUIPMENT

2013 Cobra Trailer, fibreglass top, ASG29 fittings for 15m



and 18m, always hangared, condition like brand new, registered in SA, based in Waikerie. Price \$21,500. marta. najfeld@gmail.com and **0459 124 596.**

VHF RADIO – SALE ICOM – ICA210 \$600, BECKER – AR3201 \$400, BECKER –AR4201 \$700, FILSER – ATR600 \$600, MICROAIR – 760 \$400 Removed serviceable. Call Arnie 0418 270 182









EuroFox

Certified to tow up to a 750Kg glider

Folding Wings 3 Blade Propeller Rotax 912 ULS Engine **Tricycle or Tail Dragger** Stall 36Kts Cruise up to 110Kts Oversize tyre options available Stunning performance for Glider Towing and a docile, safe Trainer **Exceptional Short Take-off and Landing Chrome Moly Fuselage Frame (all sealed)**

Glider Tow variants operating in Australia since 2008 and recently in New Zealand Two new Glider Tow variants on the way (one sold, one available)

Horsham Aviation Services

Australian agents for EuroFox aircraft and Dynon Avionics

www.horshamaviation.com.au

Ph 03 5381 1727 info@horshamaviation.com.au

