

Issue 32 October - November 2016

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FROM PRESIDENT MANDY

THE NANNY STATE

I think we have all heard the term 'The Nanny State' in relation to the overuse of rules and bureaucracy to "protect us from ourselves". I have to say that I hadn't realised how far Australia had gone down that path, until I travelled overseas in August. It is quite clear to me that we have lost our way.

Overseas it was so refreshing to approach roadworks and read a sign saying "Roadworks ahead - drive with care". Everyone did and no one crashed. Close to my home in Humbug Scrub they are installing a roundabout on a road that usually has a 100km speed limit. I have counted NINE different speed limit signs in the 1.5km section of road works.

They are so close together you would need to be driving an F1 car to achieve the signed speed increases!

I do sense some pushback from Australians against all of the rules and regulations that have emerged in recent years. I see the widespread adoption of AirBNB and Uber as a sign that people are voting with their feet and saying, "I'm happy to use my own judgement and use these unregulated services at my own risk." I'm not hearing of too many problems and I know that the registered accommodation and taxi services are complaining bitterly about the extra costs of complying with

regulations, making them uncompetitive. Let's hope people power and common sense prevails and we can move back to a more sensible situation with individuals taking responsibility for their own actions.

In our gliding world we suffer from the same ill. When I last met with Mark Skidmore of CASA, I pointed out that the Rules of the Road has 300 pages and lots of pictures and that is enough for all of us to drive safely.

CASA are currently embarking on a program to educate their staff on how to interpret their regulations. If only they would write them in plain English you would not need to be a lawyer to understand them! People generally want to do the right thing but we cannot expect pilots to comply with rules that they cannot understand.

I hope that members do understand that in all of my dealings with CASA I always push for a reduction in regulation, an increase in trust and the application of common sense. It is my hope that with the adoption of Part 149 late this year, or early next year, we will be in a position to simplify several of the current requirements. However, whatever we do, we cannot go back to the way things were in the 1940s and '50s, no matter how much some may wish for it.

As always, I urge members who feel



that a current regulation is unreasonable or overly burdensome to contact me so that I am aware of it and can investigate.

I have just received an email - thanks, Jo - with statistics published by AOPA showing a decline of 34% in GA members since 2000, and a 53% reduction in initial aircraft registrations since 2007. Many believe the decline is due to overregulation. This is disputed by CASA. However, at the last meeting I had with CASA they disputed that GA was in decline, so we shall see.

MANDY TEMPLE

PRESIDENT

President@glidingaustralia.org

PROJECT DEFIB

Every year an alarming number of Sudden Cardiac Arrests occur in our sporting clubs. What is even more alarming is the vast majority of clubs that have not taken measures to safeguard their sporting community with the use of a defibrillator.

Project Defib is a national program brought to you by Red Cross College – the national training arm of Australian Red Cross. This program will enable every sporting club in Australia access to the latest Lifeline VIEW Defibrillator to assist in reducing the number of fatalities resulting from Cardiac Arrest.

The program will enable every club to receive a grant which will provide a comprehensive Defibrillator package at a subsidised cost. We believe that forming a partnership with the individual sporting clubs is crucial and this includes ongoing national support and mentoring from our state and regional offices

throughout Australia. We have combined resources of over 500 personnel in Australia.

DEFIBRILLATOR SUBSIDY FOR YOUR CLUB

Every sporting club in Australia will have access to a \$1600 subsidy. This will enable sporting clubs to safeguard their players, spectators and coaches with a comprehensive defibrillator program.

Program Cost to clubs- \$2600 Cost of program without subsidy –

grantsandfunding.com.au/grants/project-defib

VICTORIA

DEFIBRILLATORS FOR SPORTING CLUBS AND FACILITIES PROGRAM

The Defibrillators for Sporting Clubs and Facilities Program provides Victorian sporting clubs with the opportunity to acquire an automated external



defibrillator, also known as an 'AED', for their club or sports facility.

Successful applicants receive an 'Automated External Defibrillator Package' The package includes a high quality defibrillator, some basic training and a minimum of five years of essential maintenance. This package will be provided by a qualified contractor engaged by the Department of Health and Human Services. Short URL tinyurl. com/jzezh2j

AUSTRALIAN AIR FORCE CADETS AVIATE THEIR WAY TO THE FUTURE



Australian Air Force Cadets (AAFC) 100 Aviation Squadron ran their second gliding camp for the year at Charters Towers, open to cadets who held scholarships as part of the ever expanding aviation program.

As a Cadet Warrant Officer, I was fortunate enough to apply and be one of the six cadets selected throughout 1 Wing to receive a scholarship from the AAFC. Prior to receiving my scholarship and attending my first camp this April, I had never seen or been in a glider before in my life! I will always remember my first flight in a glider. It is a surreal experience to be up in the air without the ungodly racket of an engine.

Over the duration of the week-long camp, the gliders accumulated a total of 105 flights. Twenty were selflaunches and 85 of them were winch launches. There were complications with one of the motor gliders guite early on in the camp, which left us with two gliders to share among all of us. Considering the circumstances and the number of total flights for the week, it can be seen that the hard work and cooperation of the ground crew went a long way and contributed to making the camp a success. Speaking of success, there were quite a few cadets and staff members that progressed in their gliding qualifications with: 3 first solo flights, 2 A certificates and 1 B

Certificate and being achieved over the duration of the camp.

This was my second camp at Charters Towers and with the masterful and enlightening instruction of Graham Levitt, Grant Harper and Mark Bland, I was able to achieve my first solo flight and also become the first student Graham Levitt sent solo. To say I was nervous is a major understatement; especially when the Mayor of Charters Towers decided to show up and watch my take-off and landing... After a nervous toilet break and a cable break on the ground, I was ready to rock and roll. It is certainly a different feeling not having an instructor in the back seat for takeoff and soaring. However, with little to no lift in the area, I decided to suppress my 'thermal hound' for my first solo, and complete a circuit and land with plenty of height up my sleeve. It's great to have been able to have soloed by the end of this

With this ignited passion for gliding, Mark has suggested attending the Women in Gliding Week down at Mount Beauty in December. It will be awesome to further refine my skills and also be among like-minded women who have a passion for this sport as well. I can't thank the AAFC enough for providing me with this great opportunity and introducing me to the world of gliding, and also the countless hours the instructors spend teaching young people such as myself, and sharing their vast knowledge of flying with us.

MADELIENE KING



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.

- tralight 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
 Technical Sessions: Aerodynamics, Structures, Materials, Design, Maintenance and Sailplane
 Technical Sessions: Aerodynamics, Structures, Materials, Design, Maintenance and Sailplane
- 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

CLUB HEALTH CHECK SURVEY

The regions have been offering clubs the opportunity to get some feedback from their members to give an overview as to how the club is performing in a range of different areas – membership, planning, management, facilities, instructing, excursions, etc. The national survey will enable clubs to compare their progress in these important areas with similar clubs across the country.

So far, nine clubs (13%) have had members responding to the survey and we have sent the results, minus the names of the respondents, to the club management.

South Australia and NSW clubs have been a little slower in responding, but we have responses from the clubs listed below from the other states.

Victoria: Beaufort, Bendigo, Mount Beauty, South Gippsland

Western Australia: Beverley, Narrogin Queensland: Caboolture, DDSC, Kingarov

The next step will be for clubs to identify two to four aspects revealed in the survey as areas for improvement. The GFA can assist with some of these improvements where invited.

If your club is not listed here, ask your club leadership what their plans are for participating in this national process. The survey takes approx 10 minutes to complete and you can ignore questions if you are not sure of some of the data.

WIG - WOMEN IN GLIDING

Women make up approximately 6% of GFA membership, which is both a problem and an opportunity. It is a problem because it indicates that most of our clubs have trouble attracting women and keeping them, although we do have some excellent examples of high female participation, such as at Darling Downs GC in Queensland. Many reports indicate that a culture that is not respectful of women in our clubs is one of the main reasons that women vote with their feet and leave the sport. Clubs that do have a higher female participation benefit from a more diverse approach to the sport, with many women taking on leadership and instructing roles in the club.

As all clubs are focusing now on growing their membership, attracting and retaining women pilots is a major

opportunity.

WIG week is being held at Mount Beauty in the Victorian highlands during the first week of December – women from all over Australia are invited and welcome. A week is also planned in WA but I haven't seen the dates as yet. See the GFA Calendar on the web page for details.

Women pilots are encouraged to make contact with Wendy Medlicott (wendymedlicott@optusnet.com.au) who can provide details of support available through grants and scholarships.

Grants and scholarships are, of course, available for all members and clubs.
Contact your Regional Association for details.

SIMULATOR

The development of simulators and the corresponding training syllabus and resources is progressing well under the direction of Peter Cesco and Justin Sinclair.

Justin says, "The first goal is to have regular ab initio teaching, probably with one or two new simulators constructed or purchased to the new specifications by April next year. I think this is pretty easily achievable. Many of my future emails will be about looking for people to help out with a specific topic and generating conversations on those areas."

I spent a few weeks in France and went flying at Issoudun, south of Paris. It is a large club of approximately 100 or more members and a glider fleet to dream of. (The joys of a socialist government!) They have one of the French Federation-issued simulators, so I asked to have a look.

It is a 2-seat fuselage model, brand new, probably an ASK21 or similar, with dual controls and even manual rudder controls for disabled pilots. It has a simple computer and computer screen for the person operating it, a data projector and the wall of the room is painted white for projecting the scenery no curved screen at all. Scenery is based on the local area.

Talking to the young guys showing me around, I learned they use it for aerotow training and for airspace orientation. It gets a bit of use in winter but it didn't sound like there was any set syllabus or objective for use of the simulator. A bit disappointing really! I guess it shows that simply putting a simulator into a club is



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

nowhere near enough - it needs a lot of work on 'How to use it'.

WORLD COMPS - BENALLA JANUARY 2017

We have held four world championships previously in Australia.

- 1974 in Waikerie, (Open Class and Standard Class) where the top ships were the Nimbus 2 and Cirrus/LS2.
- 1987 Benalla, which saw the introduction of 15m Class, won by an LS6, together with Open and Standard Classes.
- 2001 at Gawler, which was the first world championships in Club Class and introduced the Sailplane Grand Prix to the world.
- 2015 Junior World Championships at Narromine last December, where our Australian team did a wonderful job and Mathew Scutter became Junior World Champion in Standard Class.

The 2017 World Championships at Benalla will be the biggest we have held, with 112 entries from 28 countries - 35 entrants in Open Class, 43 in 18m Class and 34 in 15m Class.

There will also be some exciting gliders not previously seen in Australia.

CONCORDIA

In open class the 28m wingspan Concordia from the USA, to be flown by its designer/builder Dick Butler, will surely impress with its glide angle of 70+. The new EB29 two-seat glider will replace the EB28. World champion Michael Sommer, who is very experienced at flying around Benalla, has not yet announced what glider he will be flying, although he previously flew the single seat EB29 to victory.

In 18m Class, we await the introduction of the new Ventus 3.

In 15m Class, the highest performing glider will be the Diana 2.

There are rumours of other new gliders but we have no knowledge of what these may be at the time of writing, and possibly won't have more details until they arrive in the country.

112 gliders means approximately 400+ visitors to the Benalla community, so the airfield will be an exciting place for three weeks from 2 January onwards. Even from Christmas it will be very busy and the best place for a New Year's Eve party.

There are still many opportunities for you to become part of this history.

- Do you have a competitive Open, 18m or 15m glider that you are prepared to hire to an international pilot? Many are shipping gliders and some have hired local gliders already, but we still have a few who are keen to get a local glider.
- Do you have a glider trailer that can take one of these competitive aircraft? Most gliders are being shipped in a container and so do not have a trailer. We would like to have a number of glider trailers to form a pool in case of outlandings, or you could hire your trailer to an individual team.
- Do you have a car with a towbar that you are prepared to loan or hire? Or could you swap your car for a small hire

car for the period of the competition?

- Would you like to crew for one of the international pilots and become part of their team for the competition?
- Are you available for a week or more to help with the launch of 112 gliders – retrieving ropes, retrieving gliders that re-alight, crowd control.
- Are you available for a few days to just help out with one of the miriad of jobs that has to happen every day?
- If you are able to help, please email info@wqc2017.com.
- It is worth looking at the competition web site, which gives a full list of entered pilots from the 28 countries who will contest the championships.

AAFC TRAINING FLIGHTS

The GFA has come to an arrangement with the AAFC in which they have paid for 2,000 AEF flights up front and we have combined our paperwork so that cadets can now have their first flight or course without needing to pay up front for GFA membership and without needing to complete extra forms.

GFA MEMBERSHIP FORMS - NO PAPER!

Clubs can pre-purchase paper AEF forms, a slightly different form for each

state to accommodate different liability legislation. When the visitor completes the form, they also record the name of the club providing the flight, becoming a member of the claub and providing increased liability protection for the club. The club should retain these forms and should not return them to the GFA office. Advice says to keep the forms for 7 years. If an incident occurs on the flight, then it becomes very important to retain the form for 7 years.

Very few clubs now use paper membership forms for flying membership, which is best done by using the on-line memebrship form on the GFA web page. If a member does use the paper form, then the club officer has to copy the information onto the on-line form. It's much easier to get the member to do this.

The only exception is for members who are under 18 years, where the parent/guardian needs to sign the approval and medical declaration. This has to be done on paper and the form can then be scanned or photographed and submitted with the on-line membership application.

The aim is to have no paper membership forms processed by our office, so that clubs only need to keep the signed AEF forms.

07 5499 4636

G







In the last issue of Australian Gliding, you will have read about the GFA deciding to enable the use of simulators as part of our training regime. How did we get to this point, and what is happening from here on out?

When gliding-specific flight simulators Condor and Silent Wings were released over 10 years ago, it was inevitable that at some point they would migrate from the desktop to something bigger. Gliding attracts many quite technically oriented people for whom the occasional wreck or permanently grounded aircraft creates plenty of fertile ground for the development of simulators. This experience has not been limited to Australia, as a quick search of the web will reveal. The same basic process has repeated itself over and over around the world. In all but one case, these have developed organically at the personal or club level, with no support from the national gliding body in their country.

Recognising this situation, and looking at the challenges to attract, as well as retain members, the GFA has looked around and decided to step into the pool. The first step was to survey the field to see what sort of challenges formally adopting simulators would present. A report was commissioned and presented to the board at the most recent AGM, which outlined the effective state of gliding simulator usage around the world. While you can read the full report from the GFA website, the following is a summary of what was presented to give you a feel for the situation.

CHOICES IN SIMULATORS

As the cliche goes, we left no stone unturned when looking at the use of simulators around the world, as well as Australia. First, we looked at the physical simulators and software. It turns out, that, despite many individual efforts, everyone has converged on a single design of a glider-look-alike, two-seat cockpit with a wrap-around screen. For simulators that are used primarily for marketing, a single seat cockpit is used with a simple projector and screen in front of the pilot. Software used by the simulators is one of four options, though all have rather large limitations in one form or another that precludes an obvious standout candidate.

PEOPLE ISSUES

As a largely volunteer movement, gliding is significantly affected by the willingness of the volunteers to partake in any initiatives. While many are very keen to adopt simulators - particularly those with previous or current experience in other areas of aviation - a significant portion of our membership do not believe they are useful. We can't please everyone, but several important issues need to be addressed with the membership in order to help promote the use of simulators in training.

Technical issues can be easily overcome with a bit of careful

consideration. People issues are much more tricky. As an example of the issues raised, previous issues of Gliding Australia have talked about our aging demographics. By far the majority of our members are at or around the retirement age - particularly the instructor corp that would be expected to train others using simulators. Members in this category are relatively limited in available funds, so instructing becomes the main method that they can stay in the air. By asking them to spend time teaching on the ground, one of their primary motivators to attend the gliding field would be removed. One option of addressing this is to keep these instructors flying and look at alternate instructor groups. Naturally, such thoughts also lead to lots of vigorously expressed opinions!

RED TAPE

Once we start contemplating formal adoption of simulators, a whole slew of paperwork issues arise. How does one track time spent in a simulator? Can we track it in a log book? If so, how does that relate to currency? CASA have their own set of requirements in simulators in Part 60 - can or should we look at interacting with that system?

These questions and more all need to be addressed before mass adoption of simulators happens at the club level. While several areas have already been identified, now the GFA has to really dig through all our own rules and regulations to ensure that there are no unexpected catches. At a minimum, tweaks of MOSP Part 2 will be needed, not to mention a possible reorganisation of our training syllabus.

SUPPORT

It is all well and good to build a bunch of simulators for clubs and tweak some rules, while making pronouncements about how simulators will save our world, but all of that falls flat if there is nothing to back it up at the national level. Several initiatives will be needed to ensure we don't leave a pile of white elephants sitting in clubs. Simulators have many moving parts that can all develop problems - sensors failing, software glitches and so on. While many clubs have a resident techie or two, they won't be always available, so national support in various forms will be needed to keep everything running.

After some basic familiarity training, simulators can be used in several ways to train both new and experienced pilots. However, support for the syllabus will be necessary. When training, instructors

should not have to come up with their own lesson plans. The instructor shouldn't need to do anything apart from start the computer up, load a scenario appropriate to the student and start teaching. Using simulators for instructor revalidation is also an interesting potential use. In order to save a lot of duplicated work, a group will need to work on designing various training scenarios.

OVERSEAS TRENDS

Looking around at other countries, almost everyone is at a similar level to where we are in Australia. Individual clubs have constructed and used simulators for various levels of training and marketing. However, there has been no move at the national level of the type the GFA have recently initiated. Anecdotal evidence suggests that quite a few of the European nations are looking to formalise their approach in a way similar to our efforts in Australia. Some countries are not too far behind, some ahead of us and others are looking to follow our lead.

The one standout in the field is France. Several years ago they adopted simulators and pushed out a standard build to all their clubs, along with the support to go with it. There is much in their work for us to learn. and probably re-use.

LOOKING FORWARD

A general plan for the various parts of GFA has been outlined in Peter Cesco's item on the opposite page. For my part, I will be investigating the physical aspects of the simulators by first establishing formal discussions with the French and seeing if we can share some ideas and technology. Our other major challenge is the software, as none of the options are close to good enough for training situations at this time. We'll be looking into what can and cannot be modified with the various software vendors, potentially even asking for Open Source versions, paying for modifications to make them more suitable for our training needs, or other options.

One key item that came out of the initial research was a realisation that several groups around the world are working on simulators, but none of them are talking with each other in a substantive way. To bring the community together within Australia, and eventually the rest of the world, we have started a separate discussion forum under GFA Google Groups. Anyone is free to join up, GFA member or not. Feel free to ask questions and offer your advice.

JUSTIN COUCH

SIMULATOR SUPPORT

After receiving Justin Couch's simulator report at the recent Annual General meeting, the GFA Board agreed to support the development of a standard GFA simulator design using a 'flat pack' concept, aiming to make a prototype display available at the 2017 AGM.

In order to achieve this target completion date, a number of aspects need to be developed, concurrently and individually. With this in mind, several volunteer task leaders have each been assigned smaller, specific tasks so that activities can proceed concurrently.

Because these volunteers may want assistance, if requested, please give your wholehearted support. This is a big and important project. If you feel you have a positive contribution to make, feel free to contact the particular person who is conducting the area you may be able to assist with.

The following list of leaders and their tasks gives you a general overview of the various sub projects, but be aware that the descriptions are not complete and are given here as a guide to assist readers' understanding of the depth of the project:

JUSTIN COUCH

Justin will identify the availability, suitability and cost, if applicable, of the French simulator. He will also define the requirements for both training and PR simulators and develop the methodology for the building process as well as selecting the site for the first build. As part of this aspect, the manufacture costs need to be identified.

Justin will also order the parts for whatever number of simulators are approved, and build the first simulator after board approval and funding agreements are complete. The plan is to complete the project with plans, video and written build support documents so that ongoing production can be conducted at other sites with ease. He will organise distribution to approved and agreed sites. At the same time, it is envisaged that the first simulator will be used as a test bed for ongoing improvements, using a

team of interested persons who will ensure a standardised approach for ongoing improvements and integration of new methodologies and technologies as they become commercially available.

DREW MCKINNIE

Drew will undertake and develop suitable training concepts for both ab initio and instructor training. He will also undertake trialling practical aspects using existing simulators. His work includes developing manuals, and will initiate a pilot plan to start discussions with CASA about appropriate simulator standards and potential recognition of simulated flight time.

IAN GRANT

Ian will initially identify the first five sites. He will develop the reasoning, site requirements, building fit-out needs, as well as ownership and maintenance considerations. He will also develop estimated building costs. After approval and production starts, he will approach, negotiate and organise facilities for the production simulators, and manage ongoing support needs including ownership contracts and details.

JOHN STYLES

John will identify funding models for manufacturing of simulators, buildings and ongoing maintenance, as well as identify funding opportunities for new sites.

PETER CESCO

Peter will oversee the project and maintain communication with the GFA Board and Executive with a view to minimising any administrative delays as the project progresses.

There is much to do and it has to be done well, but with the team mentioned above and the good will and support of our members, I am sure we can meet our aims and aspirations on this project.

PETER CESCO

VICE PRESIDENT

VPt@glidingaustralia.org

FRED WEINHOLTZ

It is sad when a man who had a big influence on our sport over many decades dies, and more so when that man was a lovely person. One of the first gliding books I read as a new solo glider pilot at age 15 was Fred Weinholtz's 'Theory of Modern Cross Country Gliding', which was not surpassed until Reichmann's book was produced.

It was some 28 years later when I first attended the International Gliding Commission (IGC) meeting in Paris in 1997 with Roger Woods that I got to meet Fred Weinholtz, who was ending his involvement as secretary of IGC. As I said, he was a lovely man, easy to talk to and a very clear thinker about the future of gliding. Fred had instigated Club Class as an approved championship class, and in 1999 Roger and I were successful in getting approval to host the first ever World Championship in this class at Gawler in 2001, together with the first ever Grand Prix event. Fred was thrilled that his Club Class had finally received approval.

As the Obituary attests, Fred was a very influential person in international gliding.

TERRY CUBLEY

Gliding was more than a hobby for him - it was his passion. Fred Weinholtz was one of the most competent and engaged officials of gliding. On Sunday, the 21st of August, he died at the age of 90.

Fred Weinholtz was born in the German town of Genthin on 3 lune 1926. His love for aviation awoke in his childhood. As a seven-yearold boy he committed himself to model flying, and at the age of 14 he sat in a sailplane for the first time. The Second World War broke out – flying was no longer innocent. Weinholtz had to join the army where he was trained in motor flight. While the air force did not make use of his skills towards the end of WW2, the infantry did. In the last days of the war the

OPINION

AT ALL

IT'S A WONDER WE FLY

I was reading Moss Potter's book 'On

Top of the World' the other day, and

later the same day I came across an

Instructors panel discussing the

definition of a student.

email blog from one of the local club's

The two documents could not be

more different, one vibrant, exciting

distracting, distant and restricting. The

and fun. The other seemed to be

difference was mind boggling. So I

thought I would look at what I think I

want in gliding and compare with what

Moss's book was about an era that

eschewed personal responsibility, in a

young man was taken into captivity by US troops. He escaped in 1946. His flight led him to Potsdam and finally to Herford where he became a teacher.

Weinholtz did not forget his enthusiasm for gliding at that time, although the sport was still forbidden. When it was allowed again, the go-getting man rushed into his old passion. In 1950 the 'Interessen Gemeinschaft Segelflug' (Herford Gliding Club) was founded in Herford. Later on it became the 'Herforder Verein für Luftfahrt' (Herford Association for Aviation) and Weinholtz became the chairman of the club. In 1955 he began to teach his knowledge about gliding to club members.

From 1965 onward, the pilot, teacher and official held his office



as the chairman of the gliding school of Oerlinghausen. This job lasted for two decades. In the 1960s he tried to establish the Club Class as a new competitive class in gliding. Although the Gliding Commission initially disapproved of his efforts, he succeeded in doing so. Another landmark in those times was a book written by Weinholtz titled 'Grundtheorie des modernen Streckenflugs', which became an international bestseller for the theory of cross country flying.

In 1967 Weinholtz also joined the gliding commission of the DAeC. From 1973, for nine years, he worked as its chairman. In this time, he accompanied five World

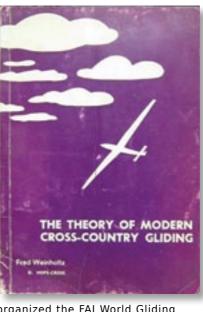
directed and 'slightly' controlled environment, one that encouraged pilots to try things within their limits, an arena that encouraged but held firm if there was reason, a time of excitement, excellence and authority. The fact that it was well written probably helped my feelings here.

The blog seemed to restrict a member to a place that inhibited excitement, controlled to the nth degree and did not seem to allow personal responsibility, even from an instructor. The blog seemed to boast of the risk management of knowing exactly what a word means without really understanding the effects and implications resulting from that approach. Perhaps the fear of litigation is driving us away from real life I thought.

Championships. In 1981 he While no one wants to be placed

unnecessarily at physical risk or have their assets taken, or perhaps even their future ruined, but it seemed we are fast becoming a sport that is so risk averse that we can do nothing. We need to change this evolving aspect of our sport. Are we building so many 'safeguards' into our sport at every level, that we are stifling it?

Back to the blog, this blog was started (apparently) because an instructor thought it would be a good idea if a current student flew with a pilot who was already a 'B' or 'C' certificate pilot. Fantastic, great idea, encourages the student and the solo pilot, allows them to fly with someone at least within 10 years of their agebut, after the instructors panel finished considering it, this was, in fact



organized the FAI World Gliding Championships in Paderborn and acted as the Championship Director of this event.

Meanwhile, Weinholtz was not only involved in the theory and practice of gliding - he also fought for political ideals. He put himself out for the women in gliding movement, bringing a women's class to life and organizing the first women's gliding competition in Germany in Kassel-Calden. He also committed himself heavily in negotiations with the ministry of transport to achieve special airspace regulations for the benefit of gliding.

In 1972, Fred Weinholtz entered international circles. In the beginning, he served as a member of the FAI International Gliding

allowed. Apparently a couple of instructors took some time and effort to try and find out if it was allowed because it might contravene one of our many, many rules. Did it? NO. But it didn't stop there, now the task is to see if a student is still a student until they have a GPC: that may require some new club rules. Really all it will do is restrict others from flying together.....and on it goes.

The guestion we should be asking is simply: is it specifically ruled against? If not, it's OK, do it,

I know I will be criticised by people who say I don't know what I am talking about, it will be said I don't understand. Perhaps they are right. Over my 40+ years in the sport I have seen many changes, many positive, many disruptive, and perhaps I am one

Commission (IGC), six vears later as its vice president and from 1987 onward as secretary of the IGC. After his resignation in 1997, Weinholtz was appointed 'honorary secretary'. He also remained politically active at the national level. When a parliamentarian group for aviation was brought to life in 1985, Weinholtz was among its founders. The group became an important political voice for pilots and General Aviation.

Later on, Weinholtz was involved in the traditional community of the Alte Adler, or

Old Eagles. In 2004 he moved up in the board, in 2009 he became an honorary member. He also committed voluntarily for the Deutsches Segelflugmuseum (German Gliding Museum at the Wasserkuppe) and acted as a board member for many years.

The gliding enthusiast worked for the International Gliding Commission of FAI at a total of 14 world championships and European championships. Weinholtz, bearer of the Federal Cross of Merit and the Lilienthal medallion of the FAI, remained active for the issues of

of those grumpy old men in terry towelling hats that our President keeps talking about. If that's the case, so be it.

I don't mean we should be silly about this, but let's get back to reality, every hindrance we place in the way of our pilots is really saying "yes it is too hard, go away and fly where it's easier, or don't fly at all".

In Moss's book they were cloud flying. We don't do that now, and I don't suggest we do, but in many ways we are so much better than those days, computers in cockpits, moving maps, glide angles that we could only dream of. Yet in so many ways we are so much worse. I would guess it takes triple the number of flights to go solo compared to 40 years ago. To become an instructor is almost impossible, and is so selective. How to get an



gliding until his death. The list of honours still continues.

Fred Weinholtz was known as a modest and likeable person. Former DAeC president Wolfgang Weinreich said about his friend, "He was a tremendously great companion who sacrificed himself for the sport of glider flying. We all, the whole glider flying community, are very sad about the loss of this wonderful and great man."

WOLFGANG WEINREICH. PREVIOUS FAI PRESIDENT

airworthiness approval is unclear and courses are almost unavailable, even when you get a rating, you can't do anything much, until you can do another course or get special extra training.

Let's make things easier, think about that extra rule you want to put in. Ask why? Is it a real risk, should the instructor be able to make a decision. can I start to learn about airworthiness at my club on a weekend course run by someone local?

And don't get me started about police checks that are just another hindrance to my flying and helping my club and its members.

IF IT ISNT SPECIFICALLY AGAINST THE RULES, IT IS OK.

A. GOMIATTH Name witheld on request

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I saw that day.

LEARNING STYLES IN PILOT TRAINING

The term 'learning styles' recognises that every student learns differently. Technically, an individual's learning style refers to the preferential way in which the student absorbs, processes, comprehends and retains information. In practice all of us use all of the different styles but we have a preferred style which makes the learning easier and more effective. It is important for instructors to understand the differences in their students' learning styles, so that

It is generally accepted that there are four core styles [Reference Neil Fleming's VARK model of Student Learning] - Reading/Writing learners, Visual Learners, Auditory Learners and Kinesthetic Learners.

they can implement best practice approaches.

The ideal approach is to change your training method to suit each individual student, but given that instructors don't always know who will getting into the glider next, this is not very practical.

The alternative then is to make sure you include each learning style as a normal part of your instructing technique.

READ & WRITE STYLE

Encourage your students to read the relevant text book or notes. Ideally they should review Basic Gliding Knowledge before they come flying with you, and certainly afterwards. Those who prefer this style will know their checks very early. If the training record refers them to specific sections of the book they will keenly study before their next visit. Don't be surprised when those whose preferred method is not 'read/write' have not done this reading.

VISUAL LEARNERS

Visual learners like to see drawings, photographs, maps, models and so on. Using a model glider to demonstrate effects of controls, a diagram of the circuit drawn in the dirt at the launch point, or a map of the airspace boundaries are all useful tools. Some will really engage with this, others will be staring into space while you do this. But do it anyway.

AURAL LEARNERS

Aural learners are the ones who will be listening keenly, asking lots of questions and discussing topics with other students. When you explain the theory behind the next topic and ask them questions to check their understanding, they will be strong participants. Getting them to explain the circuit, the stall or other subject, to you or to other students, will engage them quite well.

KINESTHETIC LEARNERS

Kinesthetic learners learn best by just doing it - a hands-on approach. They really enjoy getting in the glider and having a go, watching you demonstrate and then trying themselves. They believe in the approach 'when all else fails, read the instructions'. They are more prone to just have a go even if they don't have the skill, which comes with commensurate risk, and could feel frustrated when they have to do the study first.

PROBLEMS

On a busy weekend with a number of students, many instructors only have time' to quickly brief the student and then get into the sky. The aural and kinesthetic learners do fairly well

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



with this procedure and will progress relatively easily. The other learners just won't get it as quickly and may struggle. If this happens each time they go flying, they may feel that gliding is just too hard to learn.

In practice, all learners benefit from all teaching styles, and so instructors do need to include all four in their normal instructing approach so that a full understanding is achieved. This may mean structuring the flight line to enable training time prior to flight.

Consider each training syllabus item, such as introduction to stalls.

Read & Write Refer them to BGK pages 55-58

Visual Refer to diagrams from BGK above. Show angle of attack on an aircraft on the ground so they can see what this means. Draw a picture of a stalling wing, and ask them to draw a picture.

Aural Describe the feelings and noise associated with stalling - low noise, buffet, nose attitude may be slightly higher but not overly so. Describe how moving the stick forward removes the problem. Ask them to explain it back to you

Kinesthetic Demonstration in the air. Explain the feeling and the noise and nose attitude signals. Get them to follow you through and move the stick forward for recovery and the impact this has. Get them to practice two or three stalls – let them try and experiment.

Visual learners prefer the use of images, maps, and graphic organizers to access and understand new information.

Auditory learners best understand new content through listening and speaking in situations such as lectures and group discussions. Aural learners use repetition as a study technique and benefit from the use of mnemonic devices.

Read & Write

Students with a strong reading/writing preference learn best through words. These students may present themselve as copious note takers or avid readers, and are able to translate abstract concepts into words and essays.

Kinesthetic

 Students who are kinesthetic learners best understand information through tactile representations of information. These students are hands-on learners and learn best through figureing thing out by hand (i.e. understanding how a clock works by putting one together.)

FAI RECORDS 2015-2016 SEASON

There were three Triangle speed record flights and one Free 3 TP Distance record this season.

Harry and Wendy Medlicott achieved 948.50 km 'Free Distance via up to 3 TPs' in their Arcus M on 18/1/2016 from Corowa, establishing a new Australian record in the 20m 2-seater class.

Akemi Ichikawa claimed records from two flights.

Her 100km triangle at 145.53 kph on 24/10/2015 from Narromine in her LS8 is a Japanese feminine 15m record, and the FAI has ratified this as a Continental Record in the Oceania Region.

Her 500 km triangle at 116.11 kph on 14/12/2015 from Tocumwal in her LS8 is a Japanese feminine 15m record.

Borje Eriksson claimed a Swedish record for his 750km triangle at 134.54 kph from Corowa on 18/1/2016, in an ASG29E.

AN INSIGHT INTO THE RULES: MAKING THE MOST OF THE DAY

Harry and Wendy declared a 1,000km out and return flight, but due to the weather they abandoned the declared task. They followed the good weather and claimed a FREE 3 turning point distance record instead. This type of record uses fixes selected post flight for the start, finish, and up to three turning points. The original waypoint declaration is not used in the claim.

If you declare an out-and-return (O/R) flight, you are only permitted to declare one TP. After completing the declared O/R, there is nothing to stop you from continuing the flight, going via a third FREE TP to claim a free 3 TP distance flight as well as the successful O/R. However, if you start the day by planning to declare an O/R and also DECLARE an extra TP with the intention of extending the flight for a declared 3 TP distance claim, you can no

longer claim the O/R. That is because you have more than one TP in the declaration.

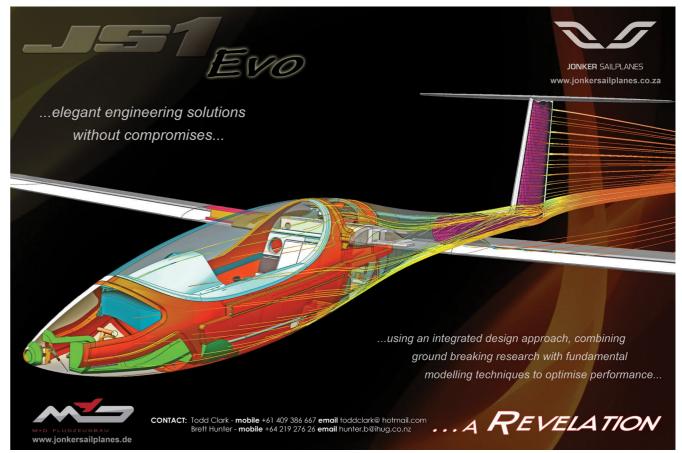
For a triangle speed record flight, the declared task must be flown. The start and finish is represented by a line 1km long, centred on the start/finish point. The turning points can be achieved in two ways - by passing through the sector, a quadrant with its apex at the turning point and orientated symmetrical to and remote from the bisector of the inbound and outbound legs, or by entering a cylinder of 500m radius centred on the TP. Using the cylinder, you can turn inside the TP and therefore fly a shorter distance than the declared task, so whenever the cylinder is used at a TP, there is a distance penalty of 1km. Thus a declared 301 km triangle could end up with a scoring distance of only 299 km, if a cylinder is used at two turning points.

For an FAI Triangle flown for a speed record, a loss of height between start and finish of more than 1,000m invalidates the performance, but when the triangle is flown for a distance record or a badge, it only leads to a distance penalty. For example, a pilot declares a 750km triangle. If the height lost is 1,250m, there can be no claim for speed. The distance claim is reduced by 250m x 100 = 25km, so the scoring distance for the triangle is 725km. Similarly, if a pilot declares a 349km triangle for a Diamond Distance badge, a height loss of 1,500m would reduce the scoring distance to 299km.

The Sporting Code, Section 3, gliders, is updated every year on 1 October. You can download the latest version from the IGC website. Pilots and Observers are strongly advised to read the code before the season, so that you know where to find the answers to the many questions that arise when planning a task for a badge or record flight.

PAM KURSTJENS

FAI RECORDS OFFICER



GFA CALENDAR

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

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.

NSV

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

OI I

29 and 30 October Brisbane seminar,1 - 4 November Coaching atKingaroy contact Miles Gore-Brown

mgb7773@gmail.com

SA

6 - 10 November South Australia contact Peter Temple

WA

12 and 13 November Perth seminar, 14 - 18 November coaching contact Greg Beecroft

greg.beecroft@bigpond.com

pete.temple@internode.on.net

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.

MELBOURNE CUP LONG WEEKEND BENDIGO

29 October - 1 November 2016 Our annual XC coaching camp is on

again at Bendigo. The Central Victorian Cu's are waiting for you - come and join us for a bit of XC fun and frivolity. For further details check out: www. bendigogliding.org.au or contact: secretary@bendigogliding.org.au mobile **0417 005 98**6

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@ gmail.com

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

VSA STATE COMPETITION GRAMPIANS SOARING CLUB

22 November - 4 December 2016 Contact Ian Grant, ian.grant.gliding@gmail.

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

Marshall 08 8733 441

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

VSA COACHING WEEK HORSHAM

28 January - 3 February 2017 Contact David Meredith jantardave@gmail.

AUSTRALIAN NATIONAL 20 METRE CHAMPIONSHIPS NARROMINE

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

VSA ALPINE REGATTA MOUNT BEAUTY

19 - 25 February 2017

Contact Philip Volk pvolk@ffgconsulting.

AIRWORTHINESS & MAINTENANCE COURSES

AW REFRESHER COURSE

22 October 2016

Caboolture Gliding Club

Open to all Maintenance Authority holders. All Maintenance Authority holders must attend one of these courses by the end of 2016. Contact Laurie Simpkins on lahina2@ hotmail.com to confirm your attendance.

UPGRADE ROC TO AI

30 October - 2 November Bathurst

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

WOOD REPAIR AND FABRIC COURSES

Wood Repair and Fabric Courses

6 - 8 November 2016

A **minor wood repair course i**s to be held from Sunday through Tuesday. Bob Wyatt is the co-ordinator, phone 03 9742 6828 or 0429 117864

9 - 12 November 2016

A **fabric course** is to be held from Wednesday through Saturday. The coordinator is Jim Barton, phone 03 9309 4412 or 0419 562213

AW REFRESHER COURSE

19 November 2016 Warwick Gliding Club

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

Contact Laurie Simpkins on lahina2@ hotmail.com to confirm your attendance.

FAI GLIDING BADGES 🔀

TO 28 AUGUST 2016

A BADGE

CHAN YAM KIT 12180 LAKE KEEPIT SC LYNCH JARED G 12181 301 NSW AFFC CHAN CHUN YIN 12183 GYMPIE SC

FAI BERYL HARTLEY FAI CERTIFICATES

FAI CERTIFICATES
OFFICER
faicertificates@glidingaustralia.org

A & B BADGE

TING MING NGAI 12182 GYMPIE SC

C BADGE

MOLNAR ANDREY 11941 NARROGIN GC

A, B, C BADGE

MURPHY JOSIAH J 12179 ALICE SPRINGS GC
PENDLETON BYRON 12184 ALICE SPRINGS GC
DRACIC DAMIR 12185 RICHMOND GC
JOHNSON ANDREA L 12187 ALICE SPRINGS GC
EDWARDS SHANE C 12188 100 QLD AAFC

SILVER C

RUSSELL MARK 4912 LAKE KEEPIT SC
COLLINS JAKE J 4913 LAKE KEEPIT SC
EASTWOOD MARK R M 4914 BATHURST SC

GOLD C BADGE

O'DONNELL PETER J 1733 CANBERRA GC RENCKENS REINIER 1734 SOUTHERN CROSS GC

DIAMOND GOAL

RENCKENS REINIER SOUTHERN CROSS GC

EASY PEASY SILVER C

The Silver C distance flight is well placed to be the first exercise in gliding to test the basic skills of flight planning and navigation. The training for this first adventure in crosscountry flying is planned to be a task for the club coaches. I hope this short message is of assistance both to the aspiring new Silver C pilot and to club coaches.

For Badge flights: The pilot must be alone in the aircraft.

The pilot may not be provided with any in-flight assistance or coaching during the flight. Find an Official Observer for your flight. I encourage clubs to place a list of Official Observers on club notice boards and club websites.

Make your flight plan and place the declaration of your flight in the logger to be carried on board. If the logger does not have the capacity for declaration, use the declaration page on the GFA web site. http://www.admin.glidingaustralia.org/index.php?option=com_chronoform=Badge_Declaration

Make sure you declare: Pilot name, Glider type, Task details.

Make sure you declare: Pilot name, Gilder type, Task details.

Enjoy your flight – The distance must be more than 50kms straight distance from the start.

Download the IGC file from the logger in the company of the Official Observer.

Complete claim form, available on the GFA website under Sport Forms, and have it signed by

Send the file and claim form to: Beryl Hartley, PO Box 275, Narromine NSW 2821 Or, if more convenient, email the file to: arnie.hartley@gmail.com

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.

GLIDING AUSTRALIA www.glidingaustralia.org 13

In this issue you will find a sticker for you to display and advertise Women in Gliding Australia. It is not easy encouraging more women into our sport but maybe we can help those that see our sticker, friends and family included, to understand our passion for our sport and let them know that you do not need to be a superwoman to fly. Live the dream. It is not 'just for the

Some women feel anxious about joining a club where they do not have other women to help them feel comfortable, so we have started a mentoring group of women in each state you can turn to if you have problems or just want to know you are not alone and you have someone to talk to if needed.

All these very experienced women are listed on the enclosed flyer. If you need help, email any one of them and they will give you their mobile numbers if you need to talk to them when an email just won't do the job.

Women in Sport is finally coming alive. Look at the Olympics where, for the first time, there are more women attending than men. We do not intend to dominate the sport but clubs must realize that if they do not encourage women into their ranks they are losing membership from half the population. At just 6% or less in most states we have a lot of room for more.

We hear of the aging membership and the great inroads juniors have made into the membership. Let's try and do the same as the juniors have done.

Communications with the key people at the forefront of promoting Women in Gliding from the United States, England, France and Italy highlight above all the fact that we all share the same concerns -

- How do we increase our female membership?
- How do we retain our female membership?
- How do we encourage women to progress in gliding and become role models?

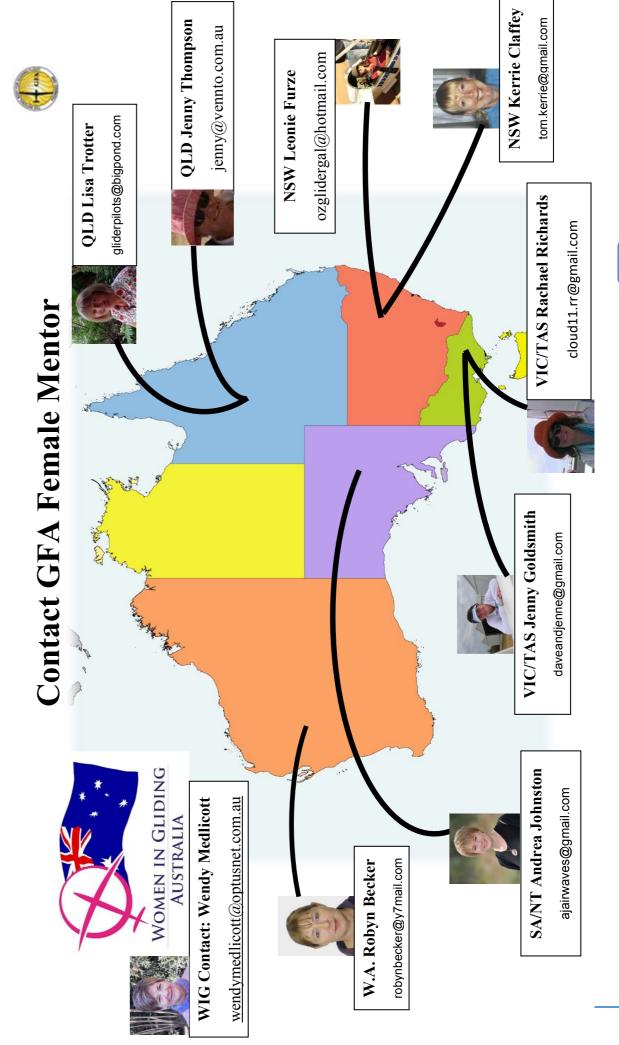
There is not one magic solution to these concerns, however, to develop Women in Gliding in Australia we believe all the ideas

gathered from around the world by Leonie Furze offer potential -

- 1. Success depends on sharing the load as with anything to do with alidina.
- 2. We are on the right track with our Women in Gliding Week.
- 3. Regular communication is imperative.
- 4. Sponsorships encourage all levels of female glider pilots, not only directly but also by creating role models. This is something that the young Polish female pilots have done well with Glamour magazine.
- 5. Survey female GFA members.
- 6. Incorporate 'Instructing the Female Student' into the standard instructor training syllabus.
- 7. Focus on Juniors.
- 8. Encourage upgrades to club facilities.
- 9. Encourage women to take management roles.
- 10. Start a Women in Gliding Australia Facebook page (done).
- 11. Set up a WIG committee to share the load.
- 12. Encourage individual clubs to hold a Ladies Weekend Event.
- 13. Develop a WIG clothing range with a catchy logo like the
- UK's 'I fly like a girl', ie 'Aussie Soaring birds', 'Chicks with Wings'.
- 14. Encourage more activity on Facebook.
- 15. Get a representative on the European Gliding Union.
- **16.** Lobby for more government funding for general
- 17. Endorse free Instructor training for women.
- 18. Create equivalent Discovery, View from the Sky and Hope for the Future programs.
- 19. National day of Gliding for Women.
- 20. Recreate the Women in Gliding link on the GFA website and
- 21. Assist the Australian National Gliding Teams to use the Aero Club Adele Orsi and the AIS facility in Varese to improve performance and promote our team members as role models.

The GFA needs all clubs to help to grow membership. What better way than to encourage more women into our sport?



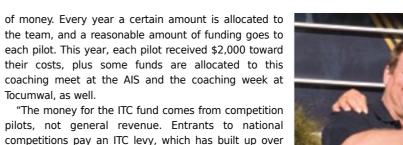


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GFA Approved Female Mentors V1 July 2016

Women in Gliding Australia





come from " About her involvement with WGC Benalla, Mandy said, "I am sort of on the fringe. I leave that to people who are directly involved. Terry Cubley is the Contest Director and is the GFA Executive Officer as well, so there is a certain amount of crossover. If someone comes to me with a problem, I pass that to Terry or try and sort the problem out. For example, when the international pilots wanted to bring experimental gliders to Australia, we sorted that out with CASA. But I am trying to concentrate on my role as Team Captain."



LEFT: Team mates in Open Class Andrew Georgeson and Bruce

in the Bronze room at

"I'm one of two coaches with Ingo Renner, doing preparation work for WGC Benalla," Peter Trotter said. "I've been to a couple of World Championships in Bayreuth in Germany 1999 and Uvalde 2014, and I used to be a member of GVC at Benalla.

"Here at the AIS, we have had a three-day program aimed at maximising the possibilities for the team to do the best they can both for individual and team scores at Benalla. The AIS is Australia's premier coaching and sports training facility. So we have made good use of the facilities here and have done for a number of years now. It's been a great opportunity for the team members to work out their strategies and how they are going to work together and make sure that when we get to Benalla we are well prepared.

we are faced with each day.

including training, selection, pre-worlds then the worlds. A lot of dedication is required from the pilots and their crew. They have individual training, which will include flying several competitions in the lead-up to the Worlds. They coordinate that with each other, so that they will get to know the flying style of the pilot they will be flying with in their class and the strategies they will use.

"I think the team have gelled well together and they will be representing their country with pride. They will do a good job."

INGO THE SECRET WEAPON

over 40 years. He said, "I've seen the area

in flood, in drought and in all different conditions. It can be very changeable from year to year. The conditions for soaring are excellent. We can fly 1,000km triangles that don't even overlap each other. It is lovely countryside and very safe for outlandings. Sometimes we get tremendous conditions with cloud bases up to 18,000ft and strong thermals of more that 1,000ft per minute. Those are conditions every glider pilot dreams about."

BRUCE TAYLOR AND ANDREW GEORGESON

Bruce and Andrew will be flying in Open Class. This will BELOW: The team had be Bruce's thirteenth WGC. Bruce said, "All my three days of sessions international competition flying at that level has been the AIS. overseas in conditions that I'm not completely familiar with. It will be a new experience for me. We always like the idea of flying at home in conditions we know, so this will be a great opportunity.

"I had the chance to go to Utah in June and fly the US Open Class Nationals. It was a great experience with fantastic conditions, and I met a few guys who will be coming to Benalla in January.

continued over page



"As we will also have the coaching week at Tocumwal with Ingo, this weekend was for talking about how to fly well together, and also about how to maximise the home town advantage, the best parts of the task area to fly, and what the likely weather conditions will be. Ingo will also be at the Championships every day and advising on whatever

"Anyone who has been selected for a World Comp will have put in a long campaign over a number of years

Ingo has been flying from Tocumwal for

ABOVE: Coaches Ingo Renner and Peter Trotter with Team Captain Mandy Temple and the Australian pilots for WGC Benalla.



Championships.

TEAM BUILDING

maps and procedures as well.

December.

Mandy Temple, the Team Captain, told me that this will

be the seventh time she has captained the Australian

WGC team. "The first time was at Vinon-sur-Verdon in

France 2004," she said. "Then Rieti in Italy, Slovakia, the

Junior Worlds in Musbach Germany, then Uvalde USA and

more recently, the Junior Worlds at Narromine last

"This is the first time the whole team has got together

since the team was announced early this year after the

Pre-Worlds at Benalla. We are here to iron out some of the

nitty gritty and more difficult problems that the team

faces. Pilots normally fly as individuals in Australia, but in

the World Championships they have to form into a team

and fly co-operatively. This calls for quite a different skill

set compared to what they are normally used to. So we

are working on those aspects, and looking at strategy,

"The weekend is the beginning of the team group

preparation. The Open Class pilots have flown at state

comps and an Easter regatta together. Matthew Scutter is

just back from flying in the 20m Two-Seat World

Championships in Lithuania. We are in the off-season at

the moment, but from here onward, there will be some

serious flying. We have the Nationals at Kingaroy, Waikerie

Nationals and NSW State Comp. We will have a Squad

TEAM_AUSTRALIA AT THE AIS

The Australian Team for WGC Benalla met at the Australian Institute of Sport (AIS) at the end of

August. I went to Canberra to catch up with them and see how they are preparing for the World

December."

Week at Tocumwal with Ingo Renner, our secret weapon.

Then we have the Sailplane Grand Prix at Horsham in

"Flying at home is a double edged sword, because

general expectations are much higher. You see that at the

Olympics, where the home team is expected to do well.

Historically, we have not done well at home, so we are

trying to work hard to manage expectations, but at the

same time proceed in an orderly way and do things as

"Logistically, of course, it is a lot easier. We don't have

to pack suitcases full of instruments and loggers and

batteries, which is always a nightmare when going

overseas. We are quietly confident, I would say. Many of

the team have won nationals at Benalla, several times, so

"Benalla is a complex site. We often have wave

influences and sea breezes coming up through the

Nillahcootie gap. I think that does favour the pilots who

are familiar with the terrain there, and we are also

"The GFA holds money in trust in the ITC fund, which

currently stands at about \$350,000 - a substantial amount

confident that Ingo Renner will add to the team."

COMPETITION FUNDING

HOME TEAM ADVANTAGE

we have that local knowledge.





ABOVE: Peter Temple and Tim Claffey will be flving in 18m Class

BELOW: Steve O'Donnell is one of only two pilots to fly at both Benalla World Championships in 1987 and 2017. He and Matthew Scutter will fly together in 15m Class.

"Benalla is a very particular site. We will almost definitely have some challenging, lower blue weather. I think the people who do well will be the people that cope with that type of weather the best. It is also likely that we will have a couple of high, strong, fast days as well."

I asked him how Australian conditions compare to flying in Europe. He said, "Conditions here are much more reliable. One challenge for Australians flying overseas is that we have to spend a lot of time sitting on the ground waiting for poor weather to pass.

"In Australia, you can generally develop a good rhythm during the day. You don't tend to have to stop. You certainly never go backwards, which you do have to do in Europe. There, you have to be very patient and take time sitting in one place waiting for the weather to develop in front of you.

QUIET CONFIDENCE

"I'm trying to keep as current as I can. I will fly as many comps as I can in the next few months. Andrew and I are doing a lot of preparation together."



Andrew will be flying a IS1 C. This will be his first World Championship, "I'm excited that my first Worlds will be in Australia." he said. "My home club is Kingarov, but I've probably flown more comps out of Benalla than anywhere else."

Discussing the possibility of blue weather with Bruce. he said, "Generally, in Europe, if there are no clouds there is no lift. But that is not so true here, so we are more used to it and more optimistic. The Europeans tend to slow down in the blue "

Bruce said, "We have more confidence in our blue weather, but the Europeans learn very quickly. They'll figure out who's going fast in the blue, and they'll be right there. The advantage should be there, but in reality it may only be for a couple of days."

PETER TEMPLE

Preparing to fly in 18m Class, Peter said, "I have flown many competitions at Benalla. I have won four national championships there. I am really familiar with the area and we think we've got a good chance and can do very well in that environment. It is an inland site with a lot of blue conditions, as well as strong conditions and some tricky days.

"Benalla will be my fourth World Championship. The first one at Vinon in France was a bit of an eve opener for me. It was my first time flying in the Alps. I finished mid-field. which I was happy with. My best result was at Reiti 2008 where I got a bronze medal. I also flew in Slovakia in 2010.

"I am really looking forward to this competition. I have the right skills and the right team mate."

Tom and Peter have not flown much together in the past because, as Tom said, "We've generally been flying in different classes."

Talking with Tom Claffey, Peter said, "We've both team flown before with varying degrees of success, but it is one of the things we need to work on for the competition."

Tom said, "Over the next couple of months we do hope to do some flying together. We've both been Australian champions a number of times, but Pete is a bit of a blue weather specialist. I am more of a big weather cumulus guy, so hopefully we will complement each other."

TOM CLAFFEY

"I'll be flying an ASG29, my own glider. This will be my fifth world championships and I've also flown a couple of World Grand Prix qualifiers. I am glad that this is finally a chance to fly my own glider in my own country. I think that will be something of an advantage. It is always difficult flying other pilots' gliders, as good as they are.

I've flown at Benalla a fair few times and won at least one nationals there. It is a great place to go flying and the conditions are quite good. Blue conditions are expected. which the Europeans might not be guite so used to, but we do also have cumulus days. In my first competition there with the ASG29, I did 168kph on a cumulus day. So we can have some good weather.

"I've always thought that the best preparation for a competition is more competitions. So I've flown pretty heavily the last few years. Coming into the championships we have the state and nationals, so we'll be well practised by the time we get to Benalla.

"This weekend at the AIS we're getting all the little details sorted out so we can turn up in January with everything well organised for us.



MATTHEW SCUTTER

"I learned to fly at Gawler, mostly in the blue. Benalla is guite close to home for me," Matthew said. "Nowadays I fly from Bathurst. I've done guite a bit of flying all around southeastern Australia. I've flown a couple of 1,000km distances, including one 1,250km.

"Over the last year I've flown at three or four significant competitions in Australia including the Junior Worlds, and I flew the senior Worlds in Lithuania in 20m Class.

"Conditions were very difficult in Lithuania, nothing like Australia. There were much lower cloud bases and clouds everyday. It was quite different but it was good to practise the tactics. We ended up in 7th place, an OK result.

"I've got a bit more practice lined up. I'm going to South Africa to fly the nationals and get ready for Benalla."

I asked Matthew and Steve O'Donnell, who will also be flying 15m Class, if they had flown together before. Matthew said, "No, but we've flown against each other lots of times. We're not going to get as much flying together as we would like. We'll go to the squad week and that will probably be about it."

STEVE O'DONNELL

"I've been a glider pilot since I was 12 years old," Steve said, describing his background. "I come from a bit of a gliding family. My brothers and one of my boys, loe, flew in the Junior Worlds. This will be my second Worlds - I flew in the 1987 worlds at Benalla.

"While I was raising my family I gave competition flying away. Since I started flying again, I have flown in about ten nationals. I was lucky enough to make the team. I flew in the Pre-Worlds at Benalla in January and had a good result. The conditions weren't as good as we normally get, but hopefully we'll get some bigger days there next January.

ABOVE: The six pilots. Steve O'Donnell, Tom Claffey, Bruce Taylor. Peter Temple, Matthew Scutter, Andrew Georgeson,

"I'm flying the Kingaroy Nationals in October. Then I hope to fly the whole of December out of Tocumwal in preparation. I'll have some solid hours under my belt by the time the competition comes around.

"I have almost no international experience. I grew up in Mildura, where we get a lot of blue days. I'm also a bit of a blue day specialist. Low, windy and blue is my cup of tea. I love it."

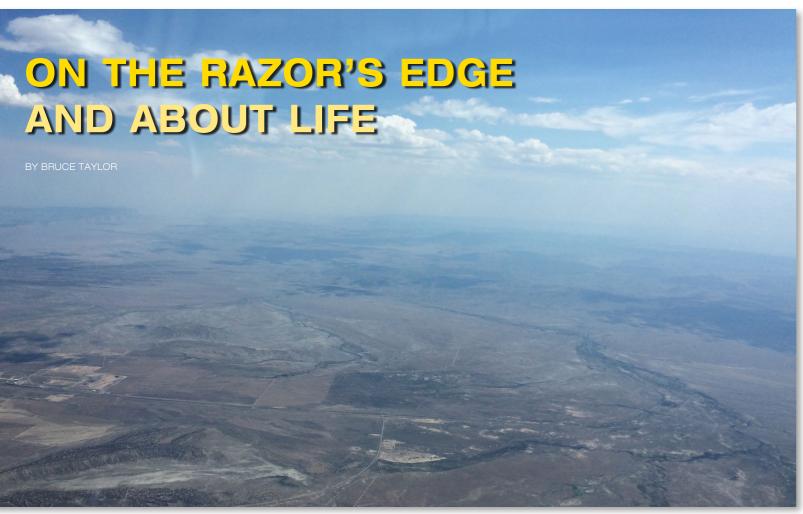
BENALLA 1987

Steve is the only Australian pilot to fly in both Benalla WGCs, although both Ingo Renner and Championship Director Terry Cubley were on the Australian team. The only other entrant to have flown at Benalla '87 is Giorgio Galetto from Italy.

Steve said. "At Benalla in 1987 I flew a Ventus B prototype. There were three of us in 15m Class. I had a good competition and won one of the days. I fell in heap in the second week because it was a very long, fatiguing comp. Some of the bigger tasks were about 750 km, and there were some mass outlandings as well. It was a big comp, where we flew 12 days with lots of tasks over

"I like long tasks, they suit me. Having said that, the day I won in 1987 was a fairly short task, but I picked it and left earlier than everyone else."

We will have regular updates with news and interviews and more in the lead up to and during the Championships at wgc2017.com and facebook.com/ WGCBenalla where you can also see the videos of the team from the AIS meet.



With almost everything we do in life, we tread the thin white line between risk and reward. Sometimes the reward is performance or achievement, and sometimes it is safety. Each and every one of us has our own special comfort level with regard to exactly where that line is and how close we want to travel to it. The more we lean over the line on the side of risk, the higher the reward may be, but the greater the consequences. But if we never take any risk at all, then our life may become rather dull, and we may never gain any sense of achievement.

ABOVE: On task in the USA Open Class Nationals, Nephi, Utah. The view down the second leg, just before I turned. Nice, safe-looking cu! Sometimes society decides just where the line should be. I am late for a meeting and it is raining, but I know the road well. Should I travel faster than the speed limit? Then there is the game our minds play to reassure us that we are very capable, experienced and current, and we can handle any situation thrown at us. This same decision-making process in gliding is what I want to discuss, as well as delve into the entire process that occurs before an accident takes place - as we say, lining up the holes in the Swiss cheese.

GOING WEST

Recently, I was in the US for some holiday time and to fly in the US Open Class nationals in Nephi, Utah. I had lent my glider to US friend Jim Staniforth while he flew at Lake Keepit a couple of years back, and he was keen to reciprocate. So I planned to fly his ASG29 in Nephi, and Jim kindly offered his car and crewing services to go with it. I have always wanted to spend some time in the western US, with Minden, Nevada definitely on my bucket list, and the high deserts of Utah sounded like they would also provide some stunning weather.

We arrived a few days before the start, and I had time to begin to get a feel for the site and the weather. The sky felt enormous - big thermals, big mountains, big altitude, big distances and big speeds. At some moments I felt quite small and insignificant among all of this. However, my mind had already begun to help out, telling me that I have close to 6,000 gliding hours, I have flown at a variety of sites all over the world, I have never had an accident, right now I am very current with about 250 hours in the past 12 months, and - the most dangerous thought of all - I can fly my way out of pretty much anything that comes my way. Then I won the first official practice day, reinforcing all of the above points.

As it happened, Jim had to disappear to work for some days, so when Day 1 arrived I was crewing for myself. The weather looked promising with a small chance of some light, spread-out showers, but nice cu and strong climbs well above our altitude limit of 17,500ft. We were set a 4 hour AAT - out to the east, down south and home. I noticed that the available distance was shortish, and it would be prudent to use as much distance as possible in each of the turnpoint sectors, so as to avoid running out of distance to fill the time available.

EARLY START

Most days I flew at Nephi had cloudbase somewhere above 18,000ft through the afternoon, to a top of more than 22,000ft on a couple of days. Our altitude for the competition was limited to 17,500ft. With the airfield at 5,000ft, this often gave us around 14,000ft of convection to play in, which was spectacular fun. To ensure a safe and fair start, we were also limited to 12,000ft before exiting the start circle.

After launch I climbed quickly to about 15,000ft, but as I had been towards the back of the launch I left that climb and began to position myself for a reasonably early start, keeping in mind the chance of overdevelopment through the afternoon. The gate opened, and after the required time below 12K I headed off, just a couple of minutes behind almost all of the Open Class, who had the same idea.

The first glide took me under a couple of small clouds, which didn't provide any lift, and I slid slightly nervously down to 8,500ft before I centred the first good climb. With such deep convection, anything below about 9 or 10K is uncomfortably low. However, most of the class were nearby at the same height, so I had company. From there we charged along at a good pace together, climbing to more than 16K in strong lift, and cruising at well over 100kts.

As we arrived in the first sector I was a little surprised to see most of the pack heading for the centre of the circle. It was my intention to maximise the distance, so I was aiming at the far corner. However, one of the other pilots was thinking the same way, so we continued along together, still high and fast. The good conditions were giving me confidence that this was going to be a pretty fast day, and so the first piece of the Swiss cheese clicked into place.

out. Still happy, I continued on, content that I was plenty high enough to be in contact with the clouds, as they still looked quite active. I came in underneath the first of them, and started to find some lines of good air, despite not connecting with anything I could stop and climb in. I had it in my mind that there were some fields that were landable out to the west, to my right, that I had seen on a previous flight. In reality, they were also now far behind me, and I had not paid enough attention to their exact location – the next piece of cheese fell into place.

The clouds were now growing quickly, with some virga appearing out the bottom, but I was still getting quite good air. I threw some turns under a couple of the best

ABOVE: Some of Utah's spectacular scenery. Bryce Canyon, a couple of hours south of Nephi, is a favourite tourist destination.

BELOW: Parts of Utah are really quite green. This photo was taken on one of the practice days that was low, blue and difficult.

continued over page

ACROSS A MOONSCAPE

Looking at the sky down my projected second leg, I could see that there was going to be a nice line of clouds setting up on track after I turned. That was comforting, as the ground we were flying over was a complete moonscape - the worst valley of Utah desert you could imagine. Huge vertical gullies, miles of sharp, eroded landscape, almost no vegetation, and no sign of habitation except the village and airfield at the centre of our turn area, which was now far behind. At ground level it was more than 100° F. Another climb to 15K, and I turned for the second area, now alone. Ahead I had some nice cu. I relaxed and took a few photos. This wasn't going too badly.

As I cruised towards the clouds, I noticed they were beginning to grow and show some early signs of spreading







areas, but couldn't get anything that was really going up, so I moved on. In hindsight, I had just passed up my last chance to make a serious change in direction and head for somewhere that I could land safely, but at this stage I still thought I had a landing option to the west, and most of all, I still thought that I could find a climb under the western edge of the cloudmass above me, which looked very active. The third slice of Swiss cheese was in place, and my fate was almost sealed.

NOWHERE TO LAND

I was descending through about 12K, and starting to get slightly concerned. There was a solid line of virga straight ahead with signs of bright sunshine on the ground behind it. If I could deviate around the rain, which would almost certainly be associated with some very heavy sink, I imagined that there might be better, clearer conditions behind it. The deviation worked, missing the sink nicely,

but the sky ahead looked much the same as before, with more areas of virga, overdevelopment covering a big area, and still the western side of the cloud looked like the best option

Despite reasonable air, and some exploratory turns, I couldn't get a climb. I flew on, steadily downward, over this hideous, harsh landscape. Nine thousand feet came and went, and with a sinking feeling in my stomach I realised that I was now in serious trouble. I was fully aware that I had nowhere to land, I could make no sense of the clouds above, and I was now well down into the super-adiabatic laver. where the air becomes broken and messy. After another

thousand feet or so, it became obvious that I needed to broadcast my predicament.

That sort of call is not easy to make. Basically you are telling the world what a total mess you have made of your situation, but you would like them to listen in, just in case the worst should happen. The previous chatter on the frequency stopped, and my cockpit felt pretty lonely, despite knowing that I had the attention of the whole competition. My situation was dire. There was nowhere below me where I could land without breaking the glider. The glider was not mine. There were no roads. There were certainly no people within 100km. It was baking hot, both in the cockpit and on the ground. My predicament had my full attention.

ZERO SINK

Later, the locals said I sounded calm and in control on the radio, and in hindsight, for the next hour or so, I did

everything right - at least as right as it could be considering the myriad of mistakes I had made over the previous hour. After some considerable pain I identified where I could possibly crash and walk away from the wreck. There was a slightly uphill area with low scrubby bushes, but no rocks or gullies. Once I had made that decision, I almost put that option out of my mind so I could concentrate on climbing – I HAD to get up. So long as I could stay within range of that little area, I would do anything I could to avoid it.

There was a slight breeze. Could I ridge soar that rocky outcrop over there? Too dangerous if it didn't work. I had sun on the ground below, but with solid cloud shadow coming towards me. Twice I found little broken bubbles that disappeared after a few turns. Then I found some zero sink that felt like it might stay - and it did. Slowly it turned into half a knot, and then a knot. Just to stop the descent was fabulous! I flew as accurately and carefully as I have ever done.



My low point was about 600ft above the ground. After an eternity, probably at about 1,000ft, I had to move again as my little thermal had finished. It was scary to leave, but I found another bubble nearby, up a bit more, moved again, then up some more. The clouds above still looked active. Carefully I moved some more to get over some big, sharp gullies sitting in the sun that I had

previously been too low to consider, and found a glorious, solid surge.

Two turns later I had a steady 7kts, and I finally breathed again. I was away at last, and the final portion of Swiss cheese failed to line up! I have painted my low point

and climb out into just a few words, but in reality it took

DANGEROUS CONFIDENCE

about 50 minutes, which felt like an eternity.

An hour or more later I finally outlanded at Richfield, on a beautiful, long paved runway. The whole sky was overdeveloped. I had been low again, this time over miles of flat, open fields that appeared very friendly, and I was completely exhausted, both physically and mentally. While I waited for the tug to come and get me I sat quietly in the shade and considered my day.

In my mind I actually crashed Jim's glider that day. I had relied heavily on my infallibility, my skill and my experience, and I had stepped over the edge into the realm of unacceptable risk. Yes, I had also made a mistake in not being more aware of the outlanding options and yes, the weather had caught me out. These three things had enabled the holes in the cheese to line up, and it was purely because of a small miracle that I avoided a disaster.

LEFT BOTTOM and ABOVE: The area where I was low, taken a few days later at a far more comfortable 17,000ft!

Nevertheless, it was my total confidence in my own ability that ultimately got me into such serious trouble. Since this day I have thought long and hard about various accidents that have happened to some highly experienced pilots, and I believe that I fell into the same trap. Overconfidence can be a killer.

15 PERCENT

The Americans hold a safety talk every day during the briefing, and I asked to be allowed to give this talk the next morning. I felt that this would help me to deal with what had happened, and I thought that I had a message to convey that may provoke some thought and discussion. This step was also difficult, as the film crew that had arrived wanted me to wear a microphone and to keep a camera running on me for the duration. It was not easy.

Afterwards I had a huge number of people come to thank me for having the strength to give this talk. They were all very supportive, and thankful that it had ended happily. I thought that Doug Jacobs made the most telling observation, "You know, Bruce, I think you were actually talking to the most experienced 15 percent of the pilots in the room. They are the ones who need to hear this."

2016 US NATIONAL CHAMPIONSHIPS NEPHI, UTAH 21-28 JUNE - OPEN CLASS

6 BRUCE TAYLOR ASG-29-18 TINYURL.COM/H86TRKX

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Lithuania means 'Land of Rain', and that just about sums it up. I doubt there was a 24 hour period that we didn't have rain. It rained on the grid at least once and was imminent over the airfield on a couple of other occaisions.

So, with spreading shadows on the wet ground, large beautiful lakes, rivers and forests, I had no idea where the lift was coming from. Just like Oz, with wet ground the were given 77 points each. thermals seem to start weak, like wet steam, then bubble up, increasing from 0.5kt to 1.0, 1.5, sometimes 2.5 and 3.5kts on a really good, sunny day. Oops! Sunny patch! Nevertheless, the pilots still raced at 100kts with full rained at some time, every water in Standard Class gliders under a soggy 3,500ft cloud base and large patches of middle level spreadout.

NEW COUNTRY

However, one day I was gliding low into a couple of grey cu under spread-out, middle level cloud – knowing a group of pilots had got there higher and into good lift before the cu rapidly started to die. I worked 0.5 to 1.0kts for maybe 10 to 15 minutes without much water left. A couple of other stragglers joined me. I climbed to a height where I thought I could slowly glide the 20kms into and out of the turnpoint over unlandable forest and heavier overcast.

As I headed off, a couple of Discus 2a's rapidly buzzed me, cruising near 90kts and full of water. I followed them, but instead of heading off at about 60° from track to the closest cu, they went straight on track from a low level to much more distant cu. However, they ignored them and went for a sun spot in the midst of the rivers, forests and

> very wet, undulating terrain that held very little prospect for outlanding, straight into 4kts or more to the top of convection where a newly forming cu joined us.

STAYING WITH **THE GAGGLE**

With 111 gliders and three start lines in close proximity, the sky at cloud base was a bit crowded. However, after a few days we learned that we had to stay with the crowd and try to start with the gaggle. The gaggle was

paramount. It found the energy in the glide, and when a climb was required. it undertook large, knowing deviations and rolled inexorably on. One blink, and it was gone, however. When you dropped off because the bubble had gone below them, or the lift was weakening slightly lower down, or even because you didn't see which way they went, you lost a little bit. From there, the margin rapidly increased.

It was a strange situation. If you slowed down for any reason, you simply got slower and slower because the weather behind the gaggle would be dying. You could imagine the gaggle ahead - still racing in the stronger conditions while the conditions deteriorated behind them. This necessitated larger deviations

due to large, spreading layers of middle level cloud. Hence, continually weaker climbs put you further behind the task curve.



Eventually, we seemed to be in survival mode while we knew damn well the class was still racing in better conditions and getting further ahead. The results and traces confirmed this fact, and it seemed to me that it occurred on most days. Even the hot shots came to grief now and then, and moved about in their scores.

Survival mode must have taught Adam and me something, though. One day we launched into another hopeless looking sky with no signs of lift in the task direction. Everyone started straightaway because the front was getting closer and the task was straight into the front. The biggest gaggle immediately went 60° to 70° off track - in other words, sideways. Some pilots went out and came back to land, probably thinking the day would be cancelled. We were patient and hung in zero to 0.5 kts at times, and watched the way ahead.

Initially, there were a few gliders to help but soon we

were alone and looking for the lighter overcast, flying slowly but recognizing that we had to generally go towards the area of the first turn point. Things improved there for a couple of climbs and we were able to touch the second area and head for home. That looked hopeless, as the front had now passed us and was now near the airfield, where it was raining. So we just climbed slowly and then glided it out. We managed to reach the checkpoint before landing - in crops, since harvesting hadn't started - and covered the greatest distance of all the classes for the day.

ELUSIVE POINTS

The scoring seemed anomalous. The flight had taken us 3 hours usually a 1,000 point day on an AAT -





TOP: Matthew and Dylan, smiling as ever, waiting to launch

ABOVE: John on takeoff in his German glider - aren't they all German? No, some are Polish.

BELOW: Marching to the opening ceremony in the town of Pociunai.



continued over page

ABOVE: John and Adam

Woolley won a day, and

BELOW: Typical weather

view from the grid. It

enjoy a beer.

FAR RIGHT: Some local help

RIGHT: John and Adam

sanding the wings of John's LS8.

and it was hard work. Initially that earned us 77 points! But then we earned zero points, as the day was cancelled because more than 25 percent of the pilots in the class had not achieved 100kms. Mmmmm! It didn't matter if you were Club or Open Class, the 100km is the same. By contrast, one day, only one pilot in our class got home and he was given 250 points more than everyone else - attributed to speed points.

Perhaps 25 percent or more of the class should have to get home before speed points are awarded? Other ways

34TH FAI WORLD GLIDING CHAMPIONSHIPS POCUNAI LITHUANIA

31 JULY 2016 - 13 AUGUST 2016

CLUB

1 JAN ROTHHARDT	GERMANY	LS 1-D	5,696
2 ERIC BERNARD	FRANCE	STD. CIRRUS	5,606
3 RICCARDO BRIGLIADORI	ITALY	STD. CIRRUS	5,479
29 TOBIAS GEIGER	AUSTRALIA	LS1F	4,491
35 ALLAN BARNES	AUSTRALIA	LS1F	4,362
STANDARD			
1 PLOUIS BOUDERLIQUE	FRANCE	DISCUS 2A	5,972
2 FELIPE LEVIN	GERMANY	DISCUS 2A	5,901
3 GUILLAUME GIRARD	FRANCE	DISCUS 2A	5,882
30 JOHN BUCHANAN	AUSTRALIA	LS 8	4,447
35 ADAM WOOLLEY	AUSTRALIA	LS 8	3,909
20 METRE MULTI	-SEAT		
1 DUBOC & ABOULIN	FRANCE	ARCUS T	6,068
2 GHIORZO & MANGANO	ITALY	ARCUS M	5,925
3 JONES & JONES	QLD	GREAT BRITAIN	5,919
7 SCUTTER & LAMPARD	AUSTRALIA	ARCUS T	5,3145

FULL RESULTS AT

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of looking at the scores on this and some of the other days reveal that some review of the current scoring system could be undertaken. Anyway, Adam and I were chuffed. Our effort was recognized – though not with points.

Adam was a great team partner. He is honest, trustworthy and a lot of fun. We thoroughly enjoyed what we did in the air and on the ground and I am sure we will fly together again, given the opportunity - preferably where the sun shines and the gliding is more predictable. Although we had no real practice, we made a great effort to stay together. My glider let us down a bit and even after four days of sanding wings and other maintainence, it still wasn't good. I was using the stick on Nexus, telephone and logger with cables everywhere from a power source.

TEAM BUILDING

The Australian team worked really well together, making for a very enjoyable time. I was also fortunate to have Brett crew for me and I think he helped out generally as well. My only disappointment was losing 10 places on the last day. Such is gliding.

In summary, I think that if Australia wants to do well in Europe we will have to send pilots to some of the training camps that are held by some of the Nationals. We could also have them compete in several comps in the region - perhaps starting with our junior pilots.

Additionally, we need to set our Nationals so that we have a lot more gaggle flying. This could be achieved by joining Open and 18m tasks and start times together, although not necessarily combining their scores. No doubt this idea, like the proposals to team fly in our Nationals, are contentious topics. It is likely that the debate will favour protecting the Australian Nationals as they are and leaving our overseas representatives to make the best of it. That is OK, too.



Come and celebrate this awesome sailplane design with fellow pilots and owners.

- IF YOU HAVE A LIBELLE OF ANY VARIETY WE WANT TO SEE YOU!-

WHERE: Bendigo Gliding Club's airstrip at Raywood, Victoria.

WHEN: Wednesday December 28 to Friday December 30, 2016 (and stay for the weekend if you want!)

COST: Registration fee of \$25 (mainly to cover advertising, printing and other costs).

ON AIRFIELD CAMPING: Camping area available for \$10/night.

Clubhouse has all usual toilet/shower/kitchen amenities.

MEALS: Sandwiches available for lunch at minimal cost. Barbecues and local pub for dinner.

The Gathering will feature discussions, friendly tasks, prizes, group photos and lots of tall, tall stories.

Bookings esssential so we can predict attendance and keep in touch.

Contact Mark Kerr secretary@bendigogliding.org.au (0417 005 986) or Phil Organ libelle@impulse.net.au (0407 315 511)

For more details check out **www.bendigogliding.org.au**



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Rayskala, a very small village about 100km North-West of Helsinki, has a large airfield with two runways, the 08-26 and the 12-30. It was built in 1940 for the Finnish Airforce. It has hosted World Gliding Championships in 1976 and 2014, and is now the National Gliding Centre.

This year, from 25 July to 4 August, Rayskala hosted the 44th Vintage Glider Club International Rally, with 45 pilots coming from 10 European countries, and 27 sailplanes. Many gliders were from the host country, among them three PIK-5, three PIK-16 Vasama and one PIK-3 Kajava, all designed by the Polytecnic Aviation Club, similar to the German Akaflieges. Some other sailplanes were from Germany, Nederland, Czech Republic, England and Italy.

Two parallel runways operated from 08-26, one for aero

tow with two Pawnees and one for winch with two cables, resulting in very short waiting times. During the Rally 104 aero-tows and 156 winch launches were completed.

The weather was good during first part of the rally and variable toward the end.

The International evening with food and drink from 10 different European countries was very enjoyable. Very successful also was the National evening of the host country, providing as main course a complete 40kg baked pig on the spit.

The rally was greatly enjoyed by participants and organizers. See you next year in Hungary for the 45th VGC International Rally!

ABOVE: The Schleicher Ka-4 Rohnlerche from the Netherlands.

LEFT: Bird's eye view of the Bocian

OPPOSITE, TOP LEFT: TPik 5c lifts off.

OPPOSITE, TOP RIGHT: Pik 5c with an L:D of 18 at 60 km/h.

OPPOSITE LEFT: The Scheibe Bergfalke III climbs away.

OPPOSITE RIGHT: Skylark 4

OPPOSITE BOTTOM: This beautiful PIK 16c Vasama was built in 1963



















The Bocian

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The Soaring **Engine**

by G Dale

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A gliding handbook for beginners and seasoned pilot's alike. With everyday language and clear diagrams, G's 30+ years of experience flies off the page



WERKSTATTPRAXIS

FUR DEN BAU VON GLEIT-

UND SECELFLUGZEUGEN

Workshop Practice for building Werkstattmanis für den Bau

Building and Repairing Wooden Gliders and Sailplanes', The English Translation of the German classic, Werkstattpraxis für den Bau von Gleitund Segelflugzeugen by Hans Jacobs and Herbert Lück.

Editors: Neal Pfeiffer and Simine Short

SYNOPSIS:

How do you build, maintain and repair wooden gliders? Hans Jacobs - designer of Weihe, Meise, Kranich, Habicht, and many more famous sailplanes of the 1930s and 1940s - wrote the book, called Werkstattpraxis, to aid the growing sport of gliding in Germany in the early 1930s. Its effect on pre-World War II glider building was electrifying. He updated it several times up through the 1950s, always in German.

Today the book is as applicable as ever for those maintaining and restoring wooden vintage sailplanes or aiming to build new wooden gliders or vintage replicas. For those interested in the history and development of soaring it is a must-read. The Vintage Sailplane Association has now finished its translation, a 25-year volunteer project, for English-speaking readers and is making it available this summer.

Published by the Vintage Sailplane Association, this translated edition includes an Addendum of up-to-date information prepared by Neal Pfeiffer, Ph.D. for those wanting to produce or repair wooden sailplanes in today's world, with a valuable addition for safety and convenience.

It has a hard, full-color cover, 384 pages, 338 black and white figures and gray scale photos. The Appendix highlights 13 vintage German glider types from the 1930s and '40s each with photo and 3-view drawing.

The book was introduced and made available for sale during the International Night of the International Vintage Sailplane Meet in July in New York. Distributors worldwide offered the book starting in August 2016. For information, visit Vintage Sailplane Association at www.v org or email Jim Short simajim121@gmail.com.

REVIEW BY DAVID GOLDSMITH

In 1932 the renowned German sailplane designer Hans Jacobs first published the book 'Werkstattpraxis', which became the standard reference for wooden sailplane construction and repair.

Over the years, many updated editions were produced, and in July 2016 after much work by many authorities, including a number in Australia, it was translated into English,

updated and published by the Vintage Sailplane Association (VSA) in the United States.

The first batch to come to Australia has been sold out, and a second batch is contemplated. Cost is \$AU63.00 plus postage from USA. Orders can be made from the Australian Gliding Museum on 03 9802 1098 or Vintage Gliders Australia on 03 9399 2317.

Chapters are 'The workshop and its equipment', 'Construction of a Test Rig and Strength Testing', 'Materials and their Testing' including timber, glue, steel, light metal alloys, bronze, brass, plastics, covering, coating and corrosion protection, 'Working with materials', 'Production Documents', 'Parts Construction', 'Assembly', etc, plus an addendum to the English translation edition.

I found the book to be a wonderful reference and a high quality production, authoritative, methodical in its presentation and very easy to read - in fact, the sort of book that is difficult to put down. Extensive use of well explained photographs, diagrams and reference tables ensure the reader obtains an excellent understanding of the material. Containing over 370 pages, 'Workshop Practice' is convenient, easy to use and deserving of a place in every workshop.

CALENDAR

Wood Repair and Fabric Courses

Australian Gliding Museum at Bacchus Marsh Airfield 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

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It is no longer a secret that the electric revolution is in full swing in the car industry. Electric cars have come of age and inquisitive glider pilots – myself included – are keen to know whether this also applies to light aircraft and to gliders in particular. Coincidently the spectacular 'Solar Impulse' completed its successful flight around the world during my recent trip to Germany - another good reason for putting this investigation on my to-do-list.

Even at last year's AERO trade fair a trend towards electrically powered light aircraft was clearly evident and by all accounts it has gathered more momentum since. And for good reasons! Such aircraft are environmentally friendly, unbelievably quiet, low on maintenance and often even less costly to operate. Recent advances in battery technology are nothing short of breathtaking although the energy density of even the most efficient batteries just cannot be compared to petrol. Still, electric propulsion systems are ideal for applications with short duty cycles, such as basic training or aerobatic flying, and are therefore conquering an ever-increasing share of the market. But doesn't exactly the same apply to gliding? We

ABOVE: The new ASG 32 El

is ready for a test flight on

the factory airstrip.

BELOW: The engine

relevant information.

instrument displays all



also require power for only a short period of time, either to avoid an outlanding or to get airborne in the first place and it is therefore no wonder that most manufacturers are working hard to add an electric powered version to their fleet of motorized gliders.

CONTENTIOUS ELECTRICS

Much to my astonishment I was in for a bit of a surprise to start with! While discussing the issue with European gliding insiders it became apparent that the initial enthusiasm for electrically powered self-launchers is clearly diminishing. Their high power requirements necessitate a big and heavy electric motor plus heavy, large-capacity batteries. The combined weight penalty not only causes handling issues on the ground and in the air, but also restricts the range of available wing loadings. After a typical self-launch the battery capacity is often reduced to a point where a self-retrieve becomes questionable and where a powered flight home, in case thermals collapse earlier than expected, is no longer possible.

But the situation is fundamentally different if selflaunching isn't a requirement and the motor is only used to get home or out of trouble. In this case the entire battery capacity is still available for a self-retrieve and the drive system can be kept lighter, smaller and simpler.

This is exactly what the engineering team of the ASG 32 El has focused on and what Schleicher is now



introducing. Needless to say that I jumped at the chance to test-fly this new glider and see how the system performs in practice. However, when the big day finally arrived the weather was anything but ideal and, to make matters worse, I was told that Mac Ichikawa was waiting to take the prototype away for the world comps in Lithuania. Thankfully Mac agreed to let me have the first flight, with young development engineer Paul Anklam in the back seat.

TEST FLIGHT

Straight after coming off tow, Paul said, "Master on, power lever up and press the red button when the engine instrument indicates that everything is ready." The engine bay doors opened without delay, the motor popped up and automatically developed full power promptly and smoothly but without any noticeable change in pitch. "For the most efficient climb you better slow down to about 50 to 55kts now," Paul remarked. "Then adjust the power to 27 kW."

"Even I can do that," I replied, and after a small power reduction, both varios were reading just under 4kts up. Not surprisingly there was no noise, apart from a pleasant humming sound coming off the propeller. I very much doubt whether anyone on the ground would have noticed the motor glider just 1,000ft overhead. Paul didn't even have to raise his voice when he said, "If you want to retract the motor again, just push the power lever all the way down"

Just for the fun of it I ran the motor with different power settings a few times and enjoyed the almost unbelievably smooth and quiet operation. Then it was time to put the "get out of jail card" away again. After closing the throttle, I kept one eye on the mirror and observed the propeller slowing down, automatically moving into a vertical

position and disappearing again. "That's too easy," I remarked, and Paul replied enthusiastically, "With a 27 kW power setting and two people on board, the ASG 32 El climbs between 1.5 and 2m/s. At this power setting, we get a full 20 minutes of engine running time out of a fully charged battery and the range is 100km when using the sawtooth method. Best of all, with an electric motor the power reduction at altitude is negligible."

ABOVE: The evercheerful Mac Ichikawa helps with take-off preparations.

CONTROL SYSTEM

By now we were under a suspiciously dark spot of an otherwise overcast sky. Much to our surprise the varios came alive again and soon we were climbing without the help of the motor. As an Open Class pilot I'm certainly not spoiled when it comes to a fast roll rate but the ASG 32 features an agility and control harmony that I have never before experienced with any other 20m glider. The reason is the new and innovative control mixer, which is providing a previously unknown method of integrating flaps with ailerons. The outer flaperons extend over 48% of the wingspan but in spite of this, the stick forces remain pleasantly low and make flying this surprisingly docile glider almost effortless.

Another pleasant surprise is the excellent feedback from the air and the aircraft's ability to point its pilot into the better part of the thermal. Without doubt this glider is another masterpiece from designer Michael Greiner – already a household name in gliding circles for his ASG 29.

Knowing that Mac Ichikawa and his young Australian travel companion were waiting we decided to land, but not before testing the motor a few more times. Its intuitive control system makes using this power plant a real pleasure. Engine management hardly adds to the pilot's workload and couldn't be easier thanks to a degree

continued over page



of automation impossible achieve with combustion engines! After just a briefing or a short demonstration, low-experience pilots can safely operate this powered glider without any stress at all. It is also the long awaited answer for clubs with competitively minded pilots. For the first time ever they have access to a performance orientated and motorized twoseater that can put members on the podium and is also perfect for coaching, long distance flying and record attempts. Without doubt, the integration of the new electric drive unit into this proven airframe is a big step

is a big step forward for the entire gliding movement.

Back on the ground the young

development engineer explained that quite a number of reputable companies helped to bring this new drive concept to fruition, a fact that Schleicher openly acknowledges by putting the logos of all these organisations on the fin of the ASG 32 El prototype - refer to the picture to the left.

RIGHT: Location of battery pack in the front of the engine bay.

HEAVYWEIGHT

In contrast to other electrically powered gliders the 67kg Lithium-Ion battery pack of the ASG 32 El is located in the engine bay of the fuselage. There, it is easily accessible, and lengthy cables with heavy-duty electrical connectors are no longer required. It also keeps the weight of the wings at manageable levels and still allows the installation of the same water ballast system that is fitted to other variants of the same model. With 120 litres of water in the wings, plus 5 litres in the tail tank, the wing loading can be increased to 54.1 kg/m²-by far the highest in its class.

Starting with a clean sheet of paper allowed the development team to implement a few additional special features. At the top of the list is a fully certified, all-up weight of 850kg – a whopping 50kg more than any other 20m glider. A maximum load of 120kg per seat is also previously unheard of and so are the cockpit dimensions. Even extra large and 2m tall pilots can enjoy long cross-country flights in absolute comfort. An in-flight adjustable backrest for the front seat is standard, as are an

anti fogging system for both cockpits and automatic control connections.

Occupant safety ranked equally high on the list of priorities. As an example, the latest CS 22 cockpit crashworthiness requirements of 9g, formerly 6g, have already been implemented and all remaining elements of the renowned Schleicher safety cockpit were also integrated. Thanks to the forward placement of the main wheel, the glider has no tendency to put the nose on the ground - even at maximum power or wheel brake application. This has allowed the elimination of a draggy nose wheel and together with other aerodynamic refinements – such as the optionally available retractable tail wheel – the glider features the cleanest fuselage of any two-seater currently on the market. Competition feedback indicates that this might contribute to the ASG 32's superior high-speed performance.

NEW ENTRY

In summary, there is now a new entry in the 20m twoseater FAI class. It is called ASG 32 and it comes in three different versions, namely a pure sailplane, a self-launcher and an electric sustainer or 'turbo'. No wonder it has already taken over as the most dominant aircraft on the Schleicher production line.





With the biggest event in Australian gliding in the last 30 years, the World Gliding Championships and OSTIV Conference, happening at Benalla in January 2017, a number of events and activities have been planned in the lead-up period.

EVENTS

Martin Place, Sydney. Friday 7 October 2016

This event attracted a lot of interest last year with foot traffic of many thousands.

Indoor Aviation Expo, Melbourne Showgrounds. Saturday / Sunday 22 - 23 October 2016

As we have arranged TV interviews at this event, we are looking for a young, articulate, confident pilot as a spokesperson. Please contact us!

Benalla Festival Saturday / Sunday 4 - 5 November 2016

Local promotion of the World Gliding Championships
Federation Square Melbourne
Friday 11 November 2016
This event is to help promote the
Benalla World Comps, the Horsham
SGP and Gliding and includes all-day
exclusive access to the location's
outdoor 65sqm LED Screen and the
smaller outdoor LED screen at the
bar. The Flying Show TV program
will be producing a program devoted
to gliding later this year.

We are also having produced two short films one on the World Comps and a second film about the adventure of gliding specifically directed at young people. We have already made arrangements to enter the second film in two film festivals. The two films will be available after the World Comps.

At the competition itself, we will have a range of very exciting reveals, displays and activities that you can participate in, as well as the opportunity to meet the best pilots and designers in the world and experience the atmosphere first hand. So we hope to see you there.

We are still looking for members to partner or sponsor either the World Comps or OSTIV or the Australian Team. Remember, our team includes the winner of the last Junior World Championships, so a podium finish is within our grasp. If you would like to be a partner or sponsor, please contact us. We have a range of packages available to suit all budgets. This is a great way to be part of this exciting event and team.

We are currently working to produce a more professionally presentable team as part of a long term goal to achieve self-funding for the national teams through commercial sponsorship. With sinking interest rates on GFA deposits, increasing costs and the increasing number of classes of competition, sponsorship is one way we can address the costing shortfalls without impacting GFA funds.

Other developments underway are a dedicated national team website

JOHN STYLES

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



along with a mobile app, both of which will be up and running before the World Comps, and continuing improvements to the social media sites.

We are getting much more efficient at obtaining grant money, so if your club needs assistance or advice in obtaining grants, please get in touch with us. The money is available, and the gliding community needs to make sure it gets its share. Most states have a number of grants available for state, national and international competitions. If your club is holding such events, ask your committee to make sure they apply for a grant.

In addition there are grants for equipment and facilities. Similar to anything related to government,

you need to apply well in advance of your requirement to allow plenty of time for your grant to be processed.

Check local, state and federal government websites for grant information. As a rule, state governments appear to be the most generous.

Of course, don't forget to set up an ASF fund for your club projects as well so members and friends can donate money and receive a tax deduction

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

FLYING AT LOW LEVEL

In March this year one of our experienced pilots lost control of the glider at about 300ft AGL during the turn onto final approach and crashed into a vineyard, suffering serious injury. Subsequent flight tests in similar gliders revealed the type has benign stalling characteristics and is reluctant to depart controlled flight even when controls (including airbrakes and flaps) are mishandled.

The accident investigation did not identify a definitive reason for the loss of control, but pilot inputs coupled with external turbulence are likely contributing factors.

Turbulence is usually present in two forms, mechanical and thermal. Mechanical turbulence is a product of wind strength and variation in the terrain such as trees, buildings, ridges and so on. It can extend up to 500ft above terrain and is more pronounced the lower we get. Thermal turbulence is caused by variations in heating and most glider pilots know that thermals can be quite broken and turbulent below 1,000ft above ground.

Consequently, it should come as no surprise to the glider pilot that it is quite common to experience turbulence and gusts under 1,000ft which, combined with the glider's inertia, can lead to widely varying airspeed. Indeed, upward vertical gusts can abruptly increase the angle of attack beyond the stalling speed, irrespective of the initial airspeed, resulting in one or both wings stalling. A spin in such circumstances is not unusual if the pilot is in a turn.

SO HOW DO WE PREVENT LOW LEVEL LOSS OF CONTROL?

- Always fly co-ordinated and never skid your turns.
- Always maintain safe speed near the ground (minimum of 1.5Vs) even when thermalling. Remember, the stall speed is higher during a banked turn than in level flight.
- When flying in turbulent conditions you should add a few more knots to your safe speed.
- Add half the wind speed to your safe speed on windy days
- Don't try and thermal away from low level, especially on a day of strong convection. When under 1,000ft you should be looking at landing options, not pushing your luck trying to save a retrieve.

MEDICAL CERTIFICATES

GFA Medical Requirements are outlined in the GFA Operational Regulations at Section 3.2, and in the Manual of Standard Procedures (Part 2) at Section 10.1. Pilots wanting to fly in-command who suffer from one of the prescribed medical conditions in the Operational Regulations, or those who hold an Instructor or Charter pilot authority, must hold either a valid CASA Medical Certificate or a Medical Practitioner's Certificate of Fitness in the format at Appendix 2 of the GFA Operational Regulations. Despite it being a requirement that all members must be familiar with GFA Operational Regulations, the GFA office is still receiving Medical Certificates that are in an obsolete or non-approved format. GFA can only accept documents in the CASA approved format at Appendices 1

CHRISTOPHER THORPE

Executive Manager, Operations

emo@glidingaustralia.org

and 2 of the current version of the GFA Operational Regulations. Members who use anything else risk having to go back to their doctors for a new certificate. For further information and examples of unacceptable medical certificates, please visit the GFA website: tinyurl.com/jdex59f.



NOTE: The only source for GFA approved material is the GFA 'Documents and Forms' library (http://tinyurl.com/zfl7xfv). Clubs that want to make GFA documents and forms available from their websites should link to the current document in the GFA library.

MUTUAL FLYING

Many years ago there was a provision in the MOSP that the command pilot of a mutual flight must carry out the take-off and landing. This is no longer the case.

The concept of the Command Pilot is described in Civil Aviation Regulation (CAR) 224:

- (2) A pilot in command of an aircraft is responsible for:
 the start, continuation, diversion and end of a flight by the aircraft; and
- the operation and safety of the aircraft during flight time; and
- the safety of persons and cargo carried on the aircraft; and
- the conduct and safety of members of the crew on the aircraft.
- (2A) A pilot in command must discharge his or her responsibility under paragraph (2)(a) in accordance with:
- any information, instructions or directions, relating to the start, continuation, diversion or end of a flight, that are made available, or issued, under the Act or these Regulations; and
- if applicable, the operations manual provided
- by the operator of the aircraft.
- (3) The pilot in command shall have final authority as to the disposition of the aircraft while he or she is in command and for the maintenance of discipline by all persons on board.

CAR 225 DEALS WITH THE PILOTS AT CONTROLS

(1) The pilot in command must ensure that one pilot is at the controls of an aircraft from the time at which the engine or engines is or are started prior to a flight until the engine or engines is or are stopped at the termination of a flight.

GFA does not hold exemptions to these two CARs, and despite the reference to 'engines' the intent is germane.

In practice mutual flying is conducted by many qualified pilots, including those who are medically unfit for command flying (MOSP 2, paragraph 10.1.1 refers). Indeed, it is not uncommon for two qualified pilots flying together to decide who will conduct the take-off and who will conduct the landing. Notwithstanding, only one pilot can log flight time

as pilot in command (MOSP 2, paragraph 8.1.4 refers), so it must be decided before the flight begins which of the two occupants will be in command of the flight.

In the case of 'B' Certificate pilots flying mutual, the Duty Instructor is entitled to nominate which of the pilots is to be at the controls for particular phases of flight subject to the nominated command pilot's experience. The same goes for which seat of a two-seat glider the command pilot occupies.

Mutual flying is a privilege and Club Training Panels may apply a higher standard than GFA but should be careful to balance safety with the pilot's rights to exercise such privileges.

FLYING WITH STUDENT PILOTS

We have four ways of flying with other people: Under Instruction (MOSP 2, paragraph 8.1.5), Charter Flying (MOSP 2, paragraph 10.7), Mutual Flying (MOSP 2, paragraph 8.1.4) and Private Passenger Flying (MOSP 2, paragraph 10.5).

A student pilot must hold a 'B' Certificate to fly mutual (MOSP 2, paragraph 10.2.2.2). If the student does not hold a 'B' Certificate, they may fly with a pilot endorsed for Private Passenger Flying but will not be able to manipulate the controls. If the student wants to manipulate the controls during flight, then they must fly with an Instructor and within the limitations of that Instructor's authority (e.g. cannot be on the controls below 800 ft if flying with an AEI).

Coaches who undertake 2-seat training will hold, as a minimum, an active and current AEI rating (MOSP 2, paragraph 12.1). Therefore, a student flying with a coach may manipulate the controls but can only receive instruction within the limitations of the coach's instructor rating.

WHEN SHOULD THE PRE-LANDING CHECK LIST BE COMPLETED?

The answer to this question is covered in detail in Operational Safety Bulletin (OSB) 01/14 - Circuit and Landing Advice.

This OSB advocates pilots should configure the aircraft for

landing once the decision to break off the flight has been made. This is discussed on page 2 under the heading 'The Break Off Point':

"Since landing mishaps usually occur due to poor workload management, it is important to get some of the tasks out of the way early and prepare for landing by:

- Making sure the straps are tight and deciding on a suitable approach speed.
- In gliders so equipped, dump any water ballast, lower the undercarriage and set the flaps, trimming to an appropriate speed for the downwind leg.
- Make sure the radio is on the correct frequency, that volume and squelch are correctly set, and that the microphone is positioned for best performance."

The pre-landing check should be undertaken on the downwind leg and no later than prior to turning onto base leg. This is discussed on page 4 of the OSB under the heading 'Pre-Landing Check':

"The pre-landing check should be completed once the approach speed has been set and the aircraft trimmed. This will usually be once the pilot is adjacent to the intended landing point but should be completed no later than prior to commencing the base leg turn."

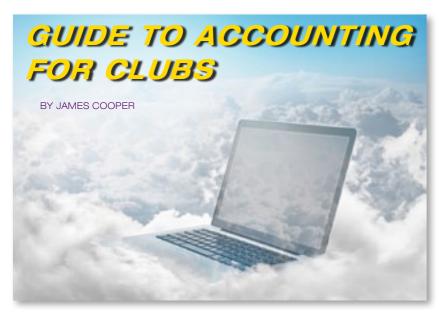
INSTRUCTOR REVALIDATION

Instructor ratings are subject to annual revalidation and if not revalidated will lapse. To be eligible for revalidation, an instructor must have been actively engaged in Instructing duties during the 12 months prior to 31 August each year. Revalidation will be by their Club CFI, listing them as an active Instructor in their Club's current annual return to the relevant RM/O (refer MOSP 2, paragraph 11.3). Instructors can only be listed on the return of their nominated gliding club, i.e. the gliding club they nominate to GFA on their membership renewal. Where an instructor is a member of more than one gliding club, they should nominate to GFA the club whose CFI has the greatest oversight of their instructing.

GFA APPROVED MAINTENANCE ORGANISATIONS



AEROSWIFT COMPOSITES	BALLARAT	JOE LUCIANI	0428 399 001	comcom2@bigpond.net.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. au
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	3 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	N 0427 860 992	morgans@sctelco.net.au
SL COMPOSITES	TEMORA	SCOTT LENNON	N 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



PART 2

In this part of his accounting series, James explains how to set up your club's accounts to handle regularly encountered transactions for members' costs and payments, and shows how SmartsLogs software

TRACKING VARIOUS NON STANDARD TRANSACTIONS

We come across a number of transactions in a gliding club that we should understand. Let's look at a number of them.

VOUCHERS

It should first be understood that the sale of a voucher is NOT income. It is merely when a customer transfers money to your bank account for later payment of a flight. The flight is the income and the voucher ultimately pays for the flight. It is important to track individual vouchers to see that they only pay for one flight and are written off once they become out of date.

So let's look first at how we set up the voucher account, and then at how we sell and redeem vouchers, reconcile the voucher account and write off outdated vouchers.

• I set up a bank account called Voucher, and two items that link to the Voucher bank account. One item called 'Sale of the Voucher' has the description 'Gliding Voucher PUT NUMBER HERE', so that when the voucher is sold it is clear that PUT NUMBER HERE should be replaced with the actual voucher number. The other item is a payment item called Voucher Payment. This is

| Inter Sales Receipts | Tax Ame | Tax Amount | Tax Amoun

used when the voucher is redeemed and used to pay for the AEF customer's flight.

• When the voucher is sold we make a cash sale to the AFF customer

I change the sale so that it records the name of the person who we sold the voucher to. For later tracking, it does no harm to enter address, phone and email address

The item Sale of Voucher is used and the number of the youcher is entered.

If the customer purchases two vouchers, don't enter the quantity of 2 - instead enter two separate lines, as each voucher has to have a separate voucher number and is later reconciled individually.

- When we get an AEF, we process it in SmartLogs. SmartLogs asks for the voucher number and this is entered, ensuring that the flight is insured. When it posts to Reckon Accounts, a memo is issued that has both the invoice number that it will pay, and the voucher number. The payment is automatically allocated to the Voucher bank.
- Next we should reconcile the Voucher bank with an opening balance of \$0 and a closing balance of \$0, ticking off the redeemed flights on the right with the voucher sales on the left.
- Finally, at the end of the financial year or perhaps each month or quarter, we need to write off any vouchers that are now out of date. To do this we again go into the reconciliation and tick off all of the old vouchers, those being, say, over a year old.

We then make a general journal entry where we debit the Voucher bank and credit an income account called 'Profit on Sale of Vouchers', to the same value of the old yourhers that have not been redeemed

• One issue that needs to be considered is when a voucher is sold through an agency where the amount that the club gets is less than the standard voucher cost. For example, you may sell a voucher normally through the club for \$160 but only \$130 through an agency. When this happens you need to see that the voucher payment is adjusted to \$130 and the sale of the flight is also adjusted to \$130.

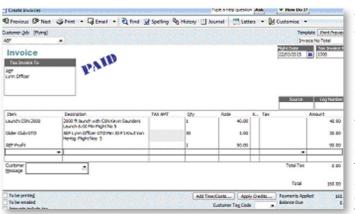
PROCESSING AEFS

As we have seen previously in the article, on an invoice for a standard flight, we will charge an amount for the launch that goes to the Tug income, which may be allocated also to the very tug that does the launch let's say \$40 for a 2,000ft launch. The other item would be the income for the glider, let's say 30 minutes at \$1 per minute totalling \$30. So the flight would be \$70 if charged to a member. However, for an AEF we get more than \$70 - for example, \$160. Where do we put the extra \$90? My recommendation is that it should be posted to the income account 'Profit on AEF'.

So the invoice will look like the example above, opposite.

When we process the sale through SmartLogs all the costs are automatically allocated.

To clarify why we do this - we can see the true income of the tug, the glider and we can see the income we make for the extra effort of selling AEFs.



MUTUAL FLIGHTS

To track mutual flights, of course, we need to invoice each member for the flight. We also need to be aware that we need to track the glider and tug time and cost. Some clubs have different rates for members. For example, we have a bulk rate for members at GCWA where they pay a bulk fee up front for gliders and are charged \$0 for glider hire other than for the DG1000, for which they are charged a discounted rate. This makes calculating the cost of the flight a little difficult. So for example if one of the members was on bulk rate and the other was not, the glider would be charged at (50% of first pilot's rate)+(50% of second pilot's rate).

The tug needs to be charged at the normal rate.

What we need to do is charge one pilot the full rate for the flight, taking into consideration the average cost mentioned above.

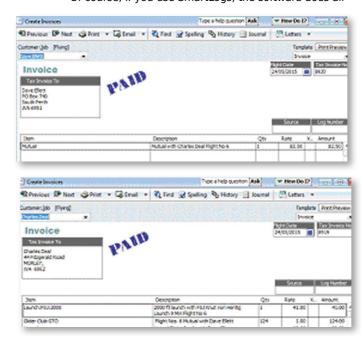
We then need to put in a credit line to that pilot for, generally 50% of the flight, but with adjustments if the two pilots have different charge rates for the glider. This is done against a liability account called 'Mutual', thus reducing the invoice.

Second, we need to make a second bill to the other pilot for the value of the mutual only.

This way, both the tug and glider are tracked at their correct total minutes and dollar value, and each pilot is tracked at their correct rate for the flight.

The two transactions can be seen below.

Of course, if you use SmartLogs, the software does all



the work for you and posts the transactions correctly to your accounting system.

CLUB GLIDER TEST FLIGHTS

Club glider test flights can be run in a similar manner as the mutual flights.

The flight is charged to the member as if they were flying, and at the normal rates.

There is a third line that is added to the invoice, like the mutual, but it would be called Test Flight. This item would post to the expense account Gliders:Fixed:Test_Flight, so that we can see the costs of our test flights to the club. This item would have a negative value of the total value of the invoice, thus reducing the

invoice to zero, so that the pilot does not get charged. Of course, we expect nothing less than SmartLogs processing this automatically.

MEMBER'S CREDITS

It is often the case that a member will become in credit. They may make payments to the club in advance of flying, and quite possibly purchase products for the club and require the value of that purchase to be credited to their account.

The sequence of events is again quite simple and logical.

When a member makes a payment to the club, the sequence is to go and receive payment against their outstanding invoices. But let's assume that they have \$200 of outstanding invoices and they make a payment of \$300. The transaction is simple - you receive the payment of \$300 and allocate it against the outstanding invoices, leaving them with a \$100 credit that can be applied to future invoices.

Should a member make some purchases for the club, for example, some stationery, the process is as follows:

- 1 It will be necessary to make an item for each purchase that members may make. Each item will point to the expense account of the same name.
- **2** An Adjustment note is made for the member for the item that was purchased.
- **3** The club's accounts reflect the reason for the purchase. The example below shows a member's credit.

Once the member does some more flying, the credit will be allocated against their flights.

E Create Adjustment Notes/Refunds

Type a help question

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REFUNDING MEMBERS WITH LARGE CREDITS TO THE CLUB

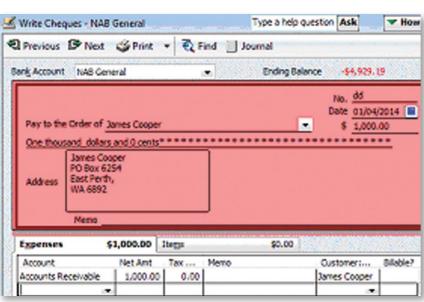
ITEM	QUANTITY	DESCRIPTION	RAYE	AMOUNT	; y,
Launch:FSJ:2000	1	2000 ft launch with FSJ Charles Galloway Launch 10 Min Flight Nos 2	41.00	41.0) Ta
Glider Club.GTO	30	DG 1000 GTO Per Minute Flight Nos 2 P1 Dave Ellett	1.00	30.0) Ta
FlightOther Pre Paid Student Expense		William Cates	-71.00	-71.0	o Ta
•					
					\top

In some cases, a

member may have built up a large credit with the club, perhaps by making many purchases of goods for the club and having their expense credited to their account as above. It is wise not to let this credit get too big. Otherwise, if the member calls back their loan it could stress the bank account. So an occasional refund may be wise. To do this, the transaction is simple but not always clear to the average operator of the software.

Make a Cheque or Spend Money, depending on the terms of your accounting package, to the member.

The account that you put the payment to will be Accounts Receivable or Trade Debtors. Ensure that you put the member's name on the expense line so it shows in their account. Reckon or QuickBooks enforce this,



ensuring that the Accounts Receivable account always balances to the members' accounts.

Finally, the refund made can be allocated to the outstanding credits, in Receive Payments.

PRE-PAID STUDENTS

Some clubs have prepaid students. These students pay for their flights in advance, but at a fixed price. For example, they may have bookings for five instructional flights at \$340.

The issue is that we need to allocate the costs of the five flights to the Tug and Glider, and make it balance with the \$340 that was paid in advance.

 Pre-Paid Students Profit Income Expense

The first thing to do is to set up your accounts to manage pre-paid students. Some people may choose to do it differently but I like

having a header Income account called Pre-Paid Students Profit.

Then I have two sub accounts, Income and Expense. An accountant may not like having an expense as a sub of Income, but it works well.

When the student pays for a course it will go to the Income account, \$340 in our case. The trick now comes with the invoice for the student's flight.

The Tug fee needs to be posted against the Launch income account, \$41 in the case shown here.

The Glider needs to be posted against the Glider Income account, \$30 in this case.

There is then a third line that posts against the Pre-Paid Student Profit:Expense account. This will zero the invoice because the student has already paid for his flight. The Tug and glider will both be accounted for, and the Pre-Paid Student Profit will also be reduced. If we get 5 flights at \$71 each, the total posted to Pre-Paid Student Profit:Expense will be \$355. This will be taken off the \$340 that the student initially paid, thus showing that the loss to run the course cost the club \$15.

Of course, if you entered the flights through SmartLogs and had the preference to manage Pre-Paid Students, all the accounting will be looked after for you.

REPORTING TO THE COMMITTEE

Let's consider what the committee requires, as well as whom the people may be who sit on the committee.

Committee members are generally volunteers. They want, and need to have their work load reduced to a minimum. They generally have little understanding of an accounting system, a profit and loss and Balance sheet. So we need to make the paper work as simple as possible for them to understand.

The committee needs to know if the club is making money or not and be able to compare it to previous years so see trends. The report that shows this is the

They also need to see how much the club is worth. This comes from the Balance sheet.

We can put these in gliding terms. The balance sheet is like height. The profit and loss is like the vario. You need to monitor both. I have had comments from club managers saying that all they do is look at the money in the bank! This guite frankly is a receipt for disaster. It is no good being at 5000ft but having the vario loosing 500ft per minute. In 10 minutes you will be on the ground. Similarly it is no good having \$50,000 in the bank and losing \$10,000 a year. In 5 years will be closing the hangar doors. And remember the gliders and tugs have a value BUT every year they depreciate, i.e. loose some of their value and will eventually need to be replaced. If you don't budget for this and have \$50,000 cash in the bank and need to spend \$100,000 on a new glider, again you will be closing the hangar doors.

Next issue I will look at Profit & Loss and Balance Sheets.

ACCIDENTS & INCIDENTS JUNE & JULY 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 General Statistics Date From: 01/06/2016

	Date to:	3.			
Damage					
	QSA	V	WAG NSWGA		
Nil		2	1	1	4
Minor		1	1	2	4
Total		3	2	3	8

Injury					
	QSA	WAG. NSWGA Total			
Nil		3	2	3	8
Total		3	2	3	8

Phases					
	QSA	٧	VAG. NS	WGA To	otal
Outlanding			1		1
In-Flight				1	1
Launch		3		1	4
Ground Ops			1		1
Landing				1	1
Total		3	2	3	8
Type of Flight					
	QSA	V	WAG. NSWGA Total		
Local			1	1	2
Cross-Country		1		1	2
Training/Coaching		2		1	3
			1		1
Total		3	2	3	8

4-JUN-2016 WAGA FORCED / PRECAUTIONARY LANDING KR-03A PUCHATEK



The command pilot flying with a Private Passenger in a DG-500 entered the circuit joining area at around 800 ft AGL after flying through some light rain just south-west of the airfield. Upon entering the downwind leg the command pilot saw the Club Puchatek trainer was also on its downwind leg and gave a radio call noting he was following. As the DG-500 approached the upwind boundary of the airfield the glider experienced a high rate of sink and the command pilot angled towards the airfield with the intention of flying a modified circuit to land midfield. The command pilot lost sight of the Puchatek while he was concentrating on his landing options. As the

DG-500 was abeam the midpoint of the operational runway, the command pilot realised that a low-level 180 degree turn to land on the operational runway was ill-advised, especially as he had still not sighted the landing Puchatek and that the remaining runway length was minimal. Having already selected an alternative off-field landing area, the command pilot made a 90 degree turn away from the runway and landed safely in a paddock.

LS_{1-F}

16-JUN-2016 WILDLIFE



While thermalling to the left at about 4600ft QNH (3,200ft AGL) the pilot heard a loud bang and felt the aircraft shudder. The pilot immediately straightened out and considered evacuating the aircraft. However,

after cautiously checking the function of all controls, the pilot confirmed the glider was flying normally. The pilot looked down both wings and could see no damage, and using his smartphone was able to see no damage to the tail plane. The pilot decided to fly back to the home airfield, which was within glide range. After a very gentle and cautious circuit, the pilot landed without further incident. Upon inspection the right wing (upmost during the turn) was found to be damaged, consistent with a bird strike involving a large bird, most probably a wedge-tailed eagle. Although

birds and glider pilots often share the same thermal and can operate near each other with relative safety, birds can and do occasionally come into contact with a glider. While it is uncommon that a bird strike causes any harm to aircraft crew, many result in damage to aircraft.

25-JUN-2016 QSA **SYSTEMS PIPER PA-25-235**

The tow plane's ASI malfunctioned during launch. The tow pilot climbed to a safe height and wavedoff the glider. Both aircraft landed safely. Subsequent inspection revealed the ASI plumbing was not blocked and the ASI worked normally thereafter. It is suspected that an insect blocked

the pitot tube, which became cleared upon landing or inspection

28-JUN-2016 OSA POWERPLANT/PROPULSION **ASK 21 MI**



Under investigation. This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected

when the investigation has been completed. The

experienced a loss of engine power and subsequent engine surging after take-off. The engine was shut down and the glider was safely returned to the airfield for a normal landing. After landing the engine was inspected and it was identified that the air filter standpipe had separated from the butterfly opening. There was damage to the corrugated shrouding of the exhaust system as well as the air filter. Minor damage was also identified on the fins of the radiator. This appears to have occurred from the

air filter standpipe being caught between the radiator and the exhaust when the engine was retracted. The cause of the air filter standpipe separation is being investigated. The clamp that secures the standpipe had been tightened a number of times after the DI procedure discovered it had become loose. The glider involved has been reported to be one of the highest launch cycle airframes in the AAFC fleet, however this is yet to be confirmed. All AAFC self-launching operations in ASK 21Mi gliders are suspended until further advice. The ASK 21Mi may still be flown using non self-launching methods.

2-JUL-2016 WAGA **GROUND OPERATIONS DG-1000S**

While turning under vehicle tow the glider's right hand wingtip caught in a wire fence. The vehicle driver was navigating a path between a pile of burnt trees left from recent hangar construction and the boundary fence, with an observer assigned to monitoring the right wing that was in the driver's blind spot. The observer was either distracted or misjudged the turning radius and failed to notice the close proximity of the wingtip to the fence. The vehicle driver stopped immediately upon impact, thereby minimising the damage to minor scratching of the wingtip and a bent towing bar. The club has removed the obstacle.

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17-JUL-2016 **NSWGA** FLIGHT PREPARATION/NAVIGATION TWIN ASTIR

While conducting the first launch of the day the command pilot flying from the rear seat noticed that the front canopy was not closed and locked The launch had been delayed by weather and also by a number of IFR aircraft operating at the airfield. The pre-solo student completed the pretakeoff checks with some prompting, however the command pilot was distracted by reading back an airways clearance as the canopy was closed. The launch crew did not notice that the forward canopy was not closed and locked. With the student on the controls, the command pilot flew the launch. At approximately 200ft AGL the command pilot allowed the tug to climb through the glider's station and assumed a low tow position. As the glider moved through the tug's wake the command pilot noticed the rear of the forward canopy lift approximately 1 cm. The command pilot directed the student pilot to hold the canopy closed and to lock it. However the student was unable to move the canopy

locking control knob. At approximately 800ft AGL and with the student holding onto the canopy, the command pilot released and conducted a modified circuit to land on the reciprocal runway without further incident. The canopy locking mechanism was inspected and found to be serviceable with no damage noted. The CFI noted that the ground crew should be at a distance from the aircraft while the pilots complete their checks so as to not distract or potentially interrupt the checks. The 'Canopy closed and locked' check should also include a test of trying to lift/open the canopy

.24-JUL-2016 QSA **MISCELLANEOUS PW-6U**

During a training flight where the instructor was simulating a double release failure, a bow came into the aerotow rope as the glider returned to the line astern position and the weak link broke when tension came on. The rope fell back over the port wing where it remained. The instructor activated the glider's tow release in the hope that the rope would slide off the wing but the rope

remained in situ. Aircraft control was not affected and the command pilot joined circuit. A steep final approach was flown well past the threshold to avoid the rope fouling any obstacles and a safe landing ensued. The aircraft suffered no damage from the event. It is not uncommon for slack to develop in the rope during out-of-station manoeuvres and for the weak link to break when the rope comes back under tension. In situations involving a large bow in the rope it is recommended that pilots release the rope just before the slack is fully taken up to avoid breaking the weak link and potential control difficulties should the rope wrap itself around the airframe.

30-JUL-2016 **NSWGA** AIRFRAME DG-300 ELAN ACRO

After a normal landing and during the ground roll the main wheel sank into soft ground and the undercarriage collapsed, resulting in the undercarriage doors being tom off at the hinges. It is possible that dirt in the front strut kept the undercarriage from locking overcentre, despite the cockpit lever indicating the wheel was down and locked.

AIRWORTHINESS DIRECTIVES

AIRWORTHINESS DIRECTIVE

BRP-POWERTRAIN GmbH & Co. **ROTAX 912 AND 914 ENGINES SUBJECT**

Manufacturer(s):

BRP-Powertrain GmbH & Co. KG (previously BRP-Rotax GmbH & Co. KG; Bombardier-Rotax GmbH & Co. KG; Bombardier-Rotax

Applicability:

Rotax 912 A1, 912 A2, 912 A3 and 912 A4 engines, Rotax 912 F2, 912 F3 and 912 F4 engines, Rotax 912 S2, 912 S3 and 912 S4 engines, and Rotax 914 F2, 914 F3 and 914 F4 engines, all serial numbers.

These engines are known to be installed on, but not limited to, the types and models aeroplanes as listed in Appendix 1 of this AD. The installation of these engines was either done by the respective aeroplane manufacturer or through modification of the aircraft by Supplemental Type Certificate. Reason:

Due to a quality escape in the manufacturing process of certain floats, Part Number (P/N) 861185, a partial separation of the float outer skin may occur during engine operation. Separated particles could lead to a restriction of the jets in the carburetor, possibly reducing or blocking the fuel supply to the affected cylinder.

EASA AD No.: 2016-0144

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This condition, if not detected and corrected, could lead to in-flight engine shutdown and forced landing, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, BRP-Powertrain published Alert Service Bulletin (ASB) ASB-912-069/ASB-914-051 (single document, hereafter referred to as 'the ASB' in this AD), providing instructions for identification and replacement of the affected parts

For the reasons stated above, this AD requires identification and replacement of the affected floats with serviceable parts.

Required Action(s) and Compliance Time(s): Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, an affected engine is an engine having a serial number (S/N) as listed in Table 1 of Appendix 2 of this AD, or any other engine S/N, if equipped with a carburetor identified by P/N and S/N in Table 2 of Appendix 2 of this AD, or an engine that, after 08 May 2016, has had an affected float P/N 861185 installed in

Note 2: For the purpose of this AD, an affected float is a float having P/N 861185, that has been initially delivered on a date between 09 May 2016 and 17 July 2016 (inclusive), and that does not have 3 dots. Certification documents (e.g., Form 1), delivery document or record of previous installation of the float are acceptable to determine an initial delivery on or before 08 May 2016. An example of a serviceable float having 3 dots is shown in Appendix 3 of this AD. (1) Within 25 flight hours (FH) or 30 days after the

effective date of this AD, whichever occurs first, inspect the engine to identify if it is affected (see Note 1 of this AD). A review of the engine maintenance records is acceptable in lieu of the inspection, provided that the engine configuration and maintenance history can be conclusively determined from that review

(2) For any affected engine, before next flight after the inspection as required by paragraph (1) of this AD, replace any affected float with a serviceable float (see Note 2 and Appendix 3 of this AD) in accordance with the instructions of the ASB. (3) From the effective date of this AD, do not install on any engine an affected float, as defined in Note 2 of this AD.

(4) From the effective date of this AD, it is allowed to install on any engine a carburetor equipped with a float P/N 861185 provided that, before installation, it is determined that the float is a serviceable part, as defined in Note 2 of this AD. A review of the applicable maintenance records is acceptable to accomplish this determination. provided that the maintenance history of the carburetor can be conclusively determined from

EASA AD No.: 2016-0144

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(5) From the effective date of this AD, it is allowed to install on any aeroplane an affected engine (see Note 1 of this AD), provided that, prior to installation, engine has passed an inspection in accordance with the instructions of the ASB.

GFA CLUB LIST

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

sean@glidingaustralia.org

716 FLIGHT GLIDING CLUB

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

2 WING AAFC

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

ADELAIDE SOARING CLUB

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

ADELAIDE UNIVERSITY GLIDING CLUB

Operations from Stonefield with Barossa Valley Gliding Club. Winch launching weekends and public Holidays year round. Facilities include, Clubhouse, bunkhouse, toilets, showers, Kitchen, BBO 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 CLUBPipers 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 Beverlev 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.beverlev-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 soméone 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 CLUBBloodtree 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.

continued over page

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 commercia 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. 4 club aircraft and 2 private. Clubhouse, Shower and toilets. Caravan Park, Private units, Hangars. 13 members. Private owned strip.

GRAFTON GLIDING CLUB

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

GRAMPIANS SOARING CLUB

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

www.grampianssoaringclub.com

GYMPIE GLIDING CLUB

Located at Kybong 10 km south of Gympie, 26 degrees 5, 152 degrees 42 E. on the Bruce Highway. Telephone 54851895/54477647 . Winch operations . Operates Wednesdays and Saturdays and other days by arrangement. Facilities include Club House and Hangars . Gympie Airfield is a CTAF and hosts other power aviation and commercial operations. The Club has 2 Club two seaters, 2 single seaters and 10 private single. www.ggc. gympiegliding.org.au

HORSHAM FLYING CLUB

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

HUNTER VALLEY GLIDING CLUB
Warkworth - (10km W of Singleton. S
along Putty Rd to Mt Thorley intersection, then W towards Denman. 1st turn right after crossing the river at Warkworth), Tel 02 6574 4556. Aerotow operations weekends, Public Holidays and one friday/ month. Club owns 2 two seaters and 2 singles and the private fleet includes 16 gliders. Facilities: Clubhouse, bunkhouse, čaravan 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 was opened in February 2014. 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/

BBO: 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 two seater.

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 holidays. Bathurst A/D

NORTHERN AUSTRALIAN GLIDING CLUB

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

NORTH QUEENSLAND SOARING CENTRE Corinda Avenue, Columbia, Charters Towers, Tel 0428 797 735, Operations by winch Sundays and public Holidays by arrangement. 5 Private gliders. www. 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. richmondalidina.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 Berri Rd, Tel 0417 890 215. Operations weekends, public Holidays and by arrangement. Two club aircraft, 1 private, Bar, canteen, Club house, bunkhouse, workshop, hangar sites. www. sportaviation.riverland.net.au.

SCOUT GLIDING CLUB

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

SOUTHERN RIVERINA GLIDING CLUB

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

SOUTHERN CROSS GLIDING CLUB

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

SOUTHERN TABLELANDS GLIDING CLUB Lockesyleigh" Carrick (11nm NE of 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/LOperations 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.soarnarromine.com.au

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

TEMORA GLIDING CLUB

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

WARWICK GLIDING CLUB

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

WAIKERIE GLIDING CLUB

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

WHYALLA GLIDING CLUB

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

CLASSIFIED ADVERTISING

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

LS3 VH-WVX, The best LS3 in the country. Fully repainted in PU. Winner 3 x National championship in club and 15m class, 5 X 1000 km flights, 5th place in Junior worlds. LS8 performance for less than half the price. Great handling, great condition. Fully enclosded metal clam shell trailer, competition ready. 2800 hours. 800 flights. Fresh form 2. ground handling gear and one man rigging device. Fly away after the Kingaroy nationals. \$44,000 negotiable based on what you want included. **Call Terry on 0408 085 988**



VH-LIJ, ASW-28, 1350 hours, 370 launches, Year 2003. no accidents, excellent condition, trailer, oxygen, 302, competition ready. For more details and photos visit: http://asw28.biz. \$110,000 OBO.Email la@ozemail.com.au



VH-GZA LS8-18 Q7,2001, 1400TT LXNav V7, V3, Oudie, Nano, Flarm (IGC), Becker 4201 Radio, Butterfly Flarm Display. Cobra Trailer, Kerry covers, Tow out gear. Contact Matt Gage 0421 382 990 matt@knightschallenge.com

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



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-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



TWO 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-GFF Nimbus 3T 25.5m. Total hours 2900, Engine hours 40. Tilt-up panel mod and full instrument panel rewire completed by Maddog Composites. Panel configured for Ixnav V7 + Oudie IGC and Flarm fully multiplexed with Dittel Radio fitted. Cockpit fitted with Mountain High Oxygen system and bug wipers also available. Fully set up for competition or distance flying. Pfeiffer trailer has been fully refinished and reconfigured (by Maddog Composites) with Cobra style wing dollies stabilised with side bearing runners and hydraulic lift for the fuselage. Comes with full IMI one man rigging system and tow out gear, including tail lift. No heavy manual handling required with this setup.

Glider also comes with full all-weather covers and wing and tail ballast tanks all fully operational. Also comes with 24.5m and 22.9m wingtips and various spares. Sustainer is fitted and fully operational with min pilot weight 78kg and maximum weight with full fuel 100kg. Glider is fully sorted and in very good condition inside and out. Genuine 1:60 glide performance in a very elegant and capable package. Glider is currently hangered at Bathurst Soaring Club and a package with T-hanger is also possible. Price: \$84,000 negotiable. Contact Adam Gill Phone 0417 770 084



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



CLASSIFIEDS

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.netau.



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

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

Fully functional simulator Runs on Condor. Separate instrument panel and outside view with projector (projector provided if required at extra cost). Retractable undercarriage, flaps, water dump, trim, air breaks and of course controls. Canopy. Good for training early pilots and taking to displays. \$4500. Contact **James Cooper 0429 992**468 **skypec2c://r/204042999 2468**

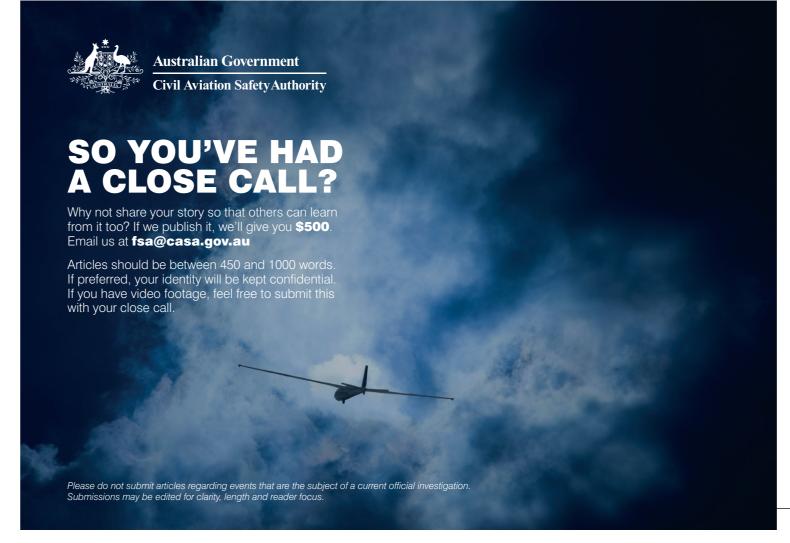




The Southern Tablelands Gliding Club is a winch club which operates on Saturdays from Carrick near Goulburn. We have potential for additional hangar space. Parties interested in hangar space and flying at Carrick please contact Robert Howdin – secretary@stgc.org.au
For further information see our website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









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