

GLIDING

AUSTRALIA

Issue 33 December 2016 - January 2017

www.glidingaustralia.org

***WORLD GLIDING CHAMPIONSHIPS
BENALLA - PROGRAM***

***AEROBATICS AT WARWICK
KINGAROY MULTICLASS NATIONALS***

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GLIDING AUSTRALIA

No. 33 December 2016 - January 2017

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RETURNS
If you are sending documents they must be emailed to returns@glidingaustralia.org

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

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

9am-5pm Monday - Thursday 9am-3pm Friday

Tel: 03 9359 1613 Fax: 03 9359 9865

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



The Australian Gliding Team for WGC Benalla - from the left, Steve O'Donnell, Bruce Taylor, Tom Claffey, Andrew Georgeson, Peter Temple, Matthew Scutter.

Below, Benalla town and airfield.

This edition of *GA* includes the program of the World Gliding Championships - Benalla bound into the centre of the magazine. Inside you will find a listing of all contestants from the teams of 28 countries, including the six members of our own Australian team, a competition area map and the full event schedule, from training through to the closing ceremony and prize-giving.

Congratulations to all of the pilots involved for putting in the extra effort required to qualify for their national teams - especially the six Australian pilots forming our local team. Recognition is also due to the many people who have worked towards bringing this World Championship to Australia, making special mention of the Australian Team coaches, captain and all those from the GFA and Gliding Club of Victoria who have worked continuously behind the scenes.

I hope that you enjoy this extended edition. Next issue we will bring you the story of how the contest unfolded. During the event, be sure to follow online at

[facebook.com/WGCBenalla_wgc2017.com](https://www.facebook.com/WGCBenalla_wgc2017.com) and at tv.glidingaustralia.org where we will be playing videos direct from the championships.

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FROM PRESIDENT MANDY

STRATEGIC PLAN AND PART 149 UPDATE

Last September we invited members to complete an online survey to guide us in setting our strategic plan for the next 4 years. I believe this is the first time this has been done.

The survey responses from over 500 members produced 74 pages of comments for us to analyse.

The results have all been collated and published, in GFA Documents, and provide interesting reading.

The Board have used your feedback to produce our strategic plan containing over 100 action items. From this broad list we have distilled 10 key initiatives for the next 12 months:

- Re-issue Basic Gliding Knowledge.
- Promote Beyond 3000 membership growth objective – specifically, to address churn.
- Support availability of one-week training courses for new members.
- Provide 'just culture' education.
- Develop more inclusive and respectful cultures and behaviours and counter bullying or brusque treatment of all members including female and young pilots.
- Run club health checks – Develop tool based on regions, capture data baseline including facilities, assist clubs to prepare Strategic Plan.
- Engage with Presidents to discuss members' responses to surveys.
- Engagement of CFIs and Presidents regarding SMS through seminars, articles and audits.
- Develop and trial development, marketing and change management training sessions and toolkit for club

representatives. Implement with Regional Association assistance and guidance.

-Publish syllabus for new Flight Instructor refresher courses (FIRC).

In addition to these 10 items, we have conducted a Regional Health Check. From this we have produced a Statement of Expectations in agreement with all regions. This lists the minimum services that a region is expected to offer to its members. We hope that this will standardise the services provided to all members across all regions.

So that you can be prepared, here is advance notice that we will be sending the Member Survey out again in the middle of next year to compare member responses after 18 months. This will be your opportunity to influence our future direction. You can see that we took notice of the first survey results, so you can respond with confidence that your comments will be heard and your opinions will be taken into account.

By the time this goes to print, the deadline for submissions to CASA on Part 149 will have closed. This is a very significant issue and has occupied a lot of the Board's time in recent months. I believe that we have sent a clear response to CASA alerting them to our concerns. I am confident that a substantial number of GFA members will also have sent in individual responses which will make a significant difference to the weight of our argument. We must now wait for a response from CASA. The current CASA timeline shows



'Make Regulation' in November 2016 with implementation from April 2017 to October 2018. Our understanding is that we will be one of the later organisations to be 'converted'. If CASA address our concerns satisfactorily and we sign Part 149, we will face a new funding model. For many years the funding has been tied to the CASA Deed that the GFA President signs every June. Future funding is not included in Part 149 and this gives us an opportunity to make a case for a change in the funding model to reflect the work that we do. The current funding has no basis, and funding has been frozen for 3 years with no CPI increase. All of the other Sport Aviation organisations are working on the same issue and we have close co-operation through the Australian Sport Aviation Confederation (ASAC) (Hang Gliding, Parachuting, Ballooning, Model Aircraft, Roto Craft) and RA Aus.

MANDY TEMPLE
PRESIDENT

WHERE DO NEW MEMBERS COME FROM?

For the past six months we have been asking new members how they found out about GFA and gliding.

We are working to refine the Other category and have added a number of new categories based on our Other responses.



GFA ADVOCACY

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

PART 149

Over the past few months most of our efforts have been directed into this important area. We have produced our response to CASAs final draft and also a form response for members.

If after consultation we agree to the amended Part 149 we will then need to produce what is called an Exposition, setting out how we will behave as an organisation that co-manages gliding with CASA.

FUTURE FUNDING

Funding is currently tied to the Annual Deed of Agreement, which will be obsolete once Part 149 comes into effect.

We are working with other Sports organisations, through ASAC, and RA Aus to get agreement on a fair and sustainable funding model post Part 149.

Project Beyond 3000

Aviate in April

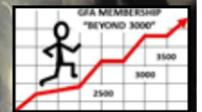
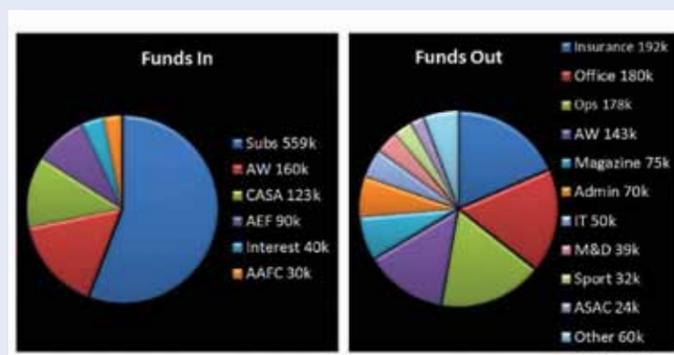
1. Fly a Friend at any gliding club in Australia in April
2. When they join GFA for 12 months GFA will repay 50% of the GFA membership fee to your club.
3. When the member renews in April 2018 GFA will again refund 50% of the GFA fee to your club.
4. Let's do it!

GFA FINANCES

These diagrams show approximately where our money comes from and where it goes.

Items to note:

- Membership subscriptions are our largest source of income.
- AW is cost neutral.
- AEF fees contribute almost as much as CASA.
- Wages have been allocated to the appropriate cost centres - Chief Technical Office to Airworthiness, Executive Manager Operations to Operations, Office staff to Office, and Executive Officer to Administration.
- Insurance is our largest expense. From a \$270 membership, \$12 goes to the regions and \$50 goes to insurance. All of the other services come from the remaining \$208.



EXECUTIVE OFFICER

CLUB HEALTH CHECK SURVEY

The Regions have been offering clubs the opportunity to receive some feedback from their members, giving them an overview of 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 Australian 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, Kingaroy

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 approximately 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 focussing now on growing their membership, attracting

and retaining women pilots is a major opportunity.

WIG week will be held at Mount Beauty in the Victorian highlands in 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 yet. See the GFA Calendar on the web page for details.

Women pilots are encouraged to contact Wendy Medicott (wendymedlicott@optusnet.com.au) who can provide details of support available through grants and scholarships, which 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 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 nowhere near enough - it needs a lot of work on 'how to use it'.



TERRY CUBLEY
EXECUTIVE OFFICER
eo@glidingaustralia.org

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-ignite, crowd control?

- Are you available for a few days to just help out with one of the myriad of jobs that has to happen every day?

- If you are able to help, please email info@wgc2017.com.

- It is worth looking at the competition website, which gives a full list of entered pilots from the 28 countries that 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 club 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 membership 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.

YES, IT'S FINALLY HAPPENING !!!

Aussie Libelle gathering

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 essential 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

FAI GLIDING BADGES TO 24 OCTOBER 2016



A BADGE

LAM KA C J	12189	LAKE KEEPIT SC
WONG CHI S W	12190	LAKE KEEPIT SC
BECKMANN NOAH	12192	BALAKLAVA GC
PENNELL KENT RR	12195	DARLING DOWNS SC

BERYL HARTLEY
FAI CERTIFICATES
OFFICER
faicertificates@glidingaustralia.org

C BADGE

CLARK ANNE	11946	GCV
SMITH WADE	11646	301 AAFC NSW
RUDDER ALAN J	11876	BYRON BAY



B, C BADGE

PERKINS DALE T	12055	GEELONG GC
WHALING-LAURENS JACK	12060	301 AAFC NSW
LI LOK H A	12138	DARLING DOWNS SC

Click the **BADGE DECLARATION** button on glidingaustralia.org to go straight to the form. Or use this address
tinyurl.com/hsp4h7p

A,B, C BADGE

HARMON REMY A	12189	KINGAROY SC
WARMAN CLIVE P	12193	LAKE KEEPIT SC
PURDEN T	12194	301 AAFC NSW
SACCHETTI PETER C	12196	LAKE KEEPIT SC

SILVER C

WADLEY GEOFFREY A	4915	CANBERRA GC
GILL-VALLANCE CARRICK	416	MT BEAUTY GC

DIAMOND DISTANCE

CROFT PAUL		BEVERLEY SC
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750 KLM DISTANCE

ORTON JOHN	162	G.C.V.
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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.

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_chronoforms5&chronoform=Badge_Declaration

Make sure you declare: Pilot name, Glider 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 the OO.

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

Post your green gliding certificate book

Make the payment on the GFA web site in the shop

Safe soaring, **BERYL HARTLEY**

GFA CALENDAR

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

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

SAGA COACHING WEEK AT WAIKERIE

27 - 31 December 2016

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

8TH SERIES SAILPLANE GRAND PRIX HORSHAM

14 - 20 December 2016

Entries for the Horsham Sailplane Grand Prix 14 - 20 December 2016 are now open. This will be the first event in the 8th Series of the Sailplane Grand Prix and is a qualifying event. The two top scoring pilots will be selected for the SGP final, which will be held in Chile later in 2017. This promises to be a significant and spectacular event in this year's gliding calendar. Don't miss it!
www.sgp.aero/australia2016

AUSSIE LIBELLE GATHERING 2016 BENDIGO

28 - 30 December 2016

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

34TH FAI WORLD GLIDING CHAMPIONSHIPS BENALLA

8 - 21 January 2017

wgc2017.com
facebook.com/WGCBenalla

OSTIV CONFERENCE BENALLA

8 - 13 January 2017

ostiv.org/newsdisplay/xxxiii-congress-2017.html

VINTAGE GLIDERS AUSTRALIA 40TH ANNUAL RALLY BORDERTOWN SA

8 - 15 January 2017

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

WAGA STATE COMPS AT BEVERLEY

10 - 20 January 2017

VSA COACHING WEEK HORSHAM

28 January - 3 February 2017

Contact David Meredith jantardave@gmail.com

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.com.au
LAKE KEEPIT REGATTA
25 February - 4 March 2017
www.keepitsoaring.com

SA STATE COMPS ASC

11 - 13 March 2017

Contact **Mandy Temple 0428 378076** thetemples@internode.on.net

COMPONENT REPLACEMENT AND FORM 2

20 -26 May 2017

Waikerie
16 participants
Cost - to be advised
Coordinator - Peter Cesco

Contact - cescop@optusnet.com.au or mobile **0422 006 111**

DIAMOND HEIGHT AT STONEFIELD



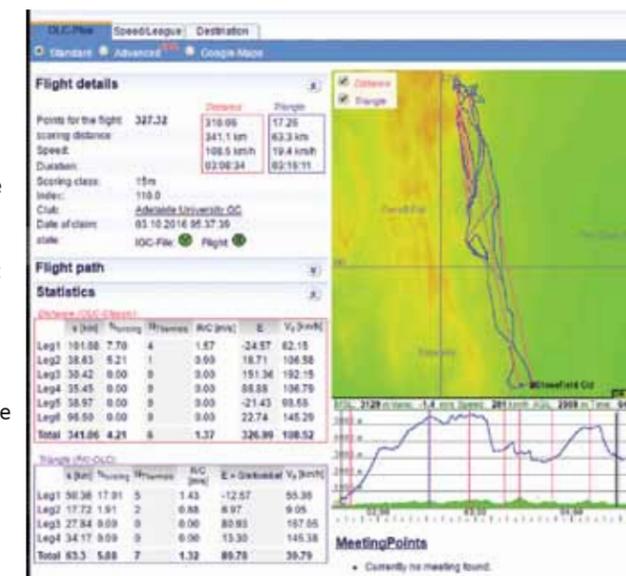
OCTOBER 3 2016

The day started out looking pretty miserable, like the previous couple had with 25 to 30kt winds on the ground, intermittent low cloud with showers. South Australia was seeing some of the worst weather it had seen in 50 years. There must be a flying camp on. It is fairly common to see wave around the area on a westerly and we always have our eyes and ears open for it. I had tried a couple of winch launches the previous day with the ASW20 to try and contact what we knew surely must be there, only to be shot down after 12 minutes of clawing desperately at rotor both times, getting blown downwind like a leaf. I just wasn't getting the release height and position I needed. This day, though, something cool happened. I was in the hangar with my head down working on something when the howling wind outside started to die right down. I

walked out to see cumulus very rapidly forming over the paddock upwind of the field at about 2,500ft. It grew quiet and a rumble of wind in distant trees was heard. I thought, "This is the case when it would work." So out came the winch and the '20 and in no time I was sitting on line staring down the target - the line of cu's which were starting to advance upwind. The launch was superb and I went off at maximum rough air

speed in pursuit. The lift I found on the way could only be described as violent and I could see the shadow on the ground growing quickly upwind. Things were changing fast. After 3.5 miles of rotor dance upwind at 3,500ft, it went smooth, the vario started picking up and I'd had it. I radioed the lads back at the field and they took to the motorglider. With oxygen on and a quick call to ATC, I was headed north to clear airspace but mindful of the gap that may close behind, and imminent showers from the west. The lift was a steady 6kts up to about 15,000ft where it tapered off to 18,400ft, the most I could wring it for, just high enough for a diamond, a bit east of Mt Bryan. Stonefield has showed us again how wonderful a place it can be to fly from. And yes, it gets mighty cold up there!

LEIGH STOKES



2016 SAGA COACHING WEEK AT WAIKERIE



This year's Coaching Week at Waikerie will be a great opportunity for pilots to further their flying skills during a one-week coaching clinic.

The South Australian coaching panel will hold the event between Christmas and New Year from 26 to 31 December 2016 with no course fee, due to generous funding from both the GFA and SAGA. Participants are expected to arrive on Monday 26 December and the event will close with a wind up dinner followed by a New Years Eve party on 31 December.

So far we have received enrolments from more than 20 local and interstate pilots and the services of our top coaches have already been secured. The course is also open to international visitors - everyone is very welcome!

Organizers are providing for all level of experience and even cater for pre- and early post silo pilots. Pilots who don't have access to a glider can expect to fly in one of the three ASK 21s in attendance. Short theory lectures in the morning will be followed by practical

flying in the afternoon and a debriefing session in the evening but the emphasis is on a polishing of skill and knowledge in a relaxing environment of fun.

A group of coaches will guide less experienced pilots around shorter tasks and turn points closer to the airfield. Advanced pilots will be coached around more challenging tasks. Most coaching will be conducted on a lead and follow basis but an opportunity for coaching flights in an ASH 30 Mi, Arcus and other 2-seaters also exists. In addition we will also be offering outstanding training in a touring motorglider. Regardless of whether you are just beginning your cross-country career or whether you are an experienced pilot, you will greatly benefit from this week.

Full catering is planned at the airfield and members of the Waikerie gliding club will again provide their famous evening meals for very modest costs. Of course, the club's kitchen facilities are also available for members who prefer to provide their own catering. For registration and accommodation

bookings please visit <http://sagacoaching2016.blogspot.com.au>

For further details please feel free to contact **Bernard Eckey on (08) 84492871** or e-mail: eckey@internode.on.net

South Australian State Gliding Competition March 2017 Adelaide Soaring Club - Gawler

Sat 11th to Mon 13th and Sat 18th to Sun 19th March 2017 (5 days)

Non-comp flying available every day mid-week

Come along and finish the season with some great flying over the Barossa Valley

Last comp of the soaring season – Lots of fun for all with great prizes

Everyone welcome – On field accommodation and meals

Contact Mandy Temple CD for more info 0428 37 80 76

WARWICK GLIDING CLUB CASE STUDY

BY DAVID KINLAN



GFA MEMBERSHIP GOAL

GFA is determined to grow membership to increase the viability and affordability of our sport. Here is another case study in our series - Warwick Gliding Club.

The Warwick Gliding Club in SE Queensland was originally called the Southern Downs Gliding Club and was established in 1962. Like many clubs in the 1960s and '70s, the boom years in gliding in Australia, the club had on average 150 members with a club fleet of several gliders and 30 to 40-odd members turning out and flying each and every weekend with a strong social scene. Alas, those days are long gone!

In those early years, the club focussed primarily on training, air experience flights and limited crosscountry flying. However, like many clubs in the following decades and into the new millenium, member numbers waned and the club committee was faced with a problem. How to retain its club members and still offer what they were seeking in the sport?

ADAPT TO MEMBERS' NEEDS

It was clear to the committee and instructor panel at the time that the club had to adapt to changes in needs

as members increasingly became interested in cross country flying. While instructing and air experience flying would still be accommodated, it would be the exception rather than the norm. The club was gradually morphing into a cross country and largely private owners' club.

Located a two-hour drive out of Brisbane, the club realised that other gliding clubs closer to the city were better placed for instructional flying, which ran parallel to the drop in instructor-rated members in the club.

The club gradually disposed of its aging fleet and decided that quality rather than quantity of the fleet was paramount. Rather than a few aged, underutilised single seater and two-seater training aircraft, members felt that maintaining one modern trainer and a single seater was the way to go. The proceeds from the sale of the fleet went back into newer aircraft, in this case a PW-6 and a Discus CS. This was well before the GFA grant system was in place - if your club is looking to update its fleet, it should seriously consider the GFA loan as the kickstarter to invest in new aircraft. New aircraft attract new members!

CHANGE IS NOT EASY

Such a radical change is never an easy matter and there was much discussion at the time about the course the club was taking. With the club's membership relatively stable at 40 members there were enough key and core people to keep the club viable. Some clubs are operating with only half this number, but only just.

The Warwick club does not operate in a vacuum and the influx of new members is strongly influenced by other clubs in the region. This is not in itself a bad thing for the gliding community. For example, if you are not achieving your gliding goals, rather than getting frustrated within your own club, you might look to other clubs to see if what you are seeking is on offer elsewhere. This 'looking over

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level there is an issue as membership is not growing as it is in other states, and even a constant number is not growth. The trend must be addressed by the GFA, GQ and individual Queensland clubs themselves. Modest growth to replace the aging members has to start at individual club level. It is important to recognise where your new members are coming from and try your utmost to keep them in gliding for the long term.

DEDICATED TO CROSS COUNTRY

The Warwick club has always been dedicated to cross country flying and the instructor panel has

focussed on ensuring new members achieve their gliding goals in a structured manner. The club has a very high number of independent operators. Rather than setting up hurdles in a member's progress to an active, independent cross country pilot, the approach of both the club and instructor panel has been to facilitate that progression in the best way possible. Sadly, this has not been the case in all clubs. Too often in gliding we lose members as they struggle and flounder at hurdles set before them. It is incumbent for all club members to be alert to this, listen to what new members are saying, their gripes and frustrations and feed this information back to the club committee and ultimately the instructor panel. I am happy to report that the Warwick instructor panel are acutely aware of this need. Without doubt, member retention has been high due to this progressive policy.

HANGARAGE

Another way to ensure member retention is to have club facilities that will attract private owners. Hangarage is key to this - there is an acute shortage on almost every airstrip you may visit. The natural progression of a modern glider pilot who is likely to stay in the sport for a long time is to buy a first glider fairly quickly. Gliders have become relatively affordable compared to the past, creating a situation that is different from decades ago when lots of pilots only flew club aircraft. We now have fewer pilots but also fewer available hangar spots. The 'build it and they will come' phrase springs to mind here.

If you can offer affordable hangarage then private owners will either join your club, or members will progress to owning their own aircraft and want to fly on a regular basis. In 2015 Warwick took the step of building a new hangar on land that it had purchased from the local council many decades before. This new hangar has already started to fill up rapidly.



While the GFA does not yet offer loans on hangarage, perhaps it should. A hangar may well be one of the best ways to retain and increase gliding membership and, as an asset, a hangar won't devalue.

CORE MEMBERS

As in many clubs, the Warwick club has a core of active members and, within that core, some individuals who do more than their fair share of heavy lifting to keep the club running at all. Without those individuals the club would simply grind to a halt! It is up to all committees to recognise this and ensure these individuals don't get overlooked and/or burnt out, and try to share the workload more fairly.

FINANCE - LOANS AND GRANTS

The club's finances are a crucial barometer showing where the club is going into the future. The club has to be run as a business, so look at both income and costs to determine the direction you want it to focus on. As a private owners club, you need to ensure you have a full tug roster and that your tug earns money on each tow and builds up a reserve for major refits, engine overhauls, etc. There is no point in finances just breaking even, as you are actually going backwards! Start laying the financial basis for goals to be achieved. A loan is not a scary thing and,

once paid off, your club will have a valuable asset.

Also consider what grants are available to deal with infrastructure upgrades like updating your clubhouse, as this is the first thing a potential new member sees. Quite a few grants are around and vary from state to state so it's worth investigating just what is available. Our 'grant queen' Val Wilkinson has secured many small grants that add up to a tidy sum of money over the long term that would otherwise have had to be drawn from club funds.

An active social scene is important to any club, but how do you keep club members coming out even during the less flyable winter months? The Warwick club adopted a 'winter cup' prize whereby both attendance and distance flying were scored, encouraging even low airtime or student members to venture out and accrue points. As a result general attendance was lifted during the quieter months, which has contributed to the club's coffers.

In addition, the club has punched above its weight and been the venue of many regional and state comps over the years, which has been a revenue earner for the bar and catering. The club was instrumental in opening up Goondiwindi as a venue for the Queensland Easter Competition for a few years in a row. By taking its two-seater to operate AEFs at Goondiwindi, the club was able to profit from the interest in gliding within the local community and even gained a club member from the visits.

Another important and often overlooked aspect is promotion of the club's activities in the local media. Any significant event is worth announcing in the local newspapers who are always hungry for content. A new hangar opening, regatta, club competition or State Comp are all newsworthy items that help raise the club's profile in the local community and attract local club members.

There is no doubt all these factors collectively have contributed to the ongoing success and financial viability of the Warwick Gliding Club. Within your club, start thinking in terms of at least a 5 year plan toward what you see as the club's future direction and how to invest to ensure that it will be achieved. Try to plan ahead rather than just soldiering on!

GA



the fence' is healthy and something that all clubs need to recognise. If you feel you are losing club members through the dreaded churn, then suggest they approach other clubs. Or, if they are students frustrated with the time it's taking to go solo, direct them to an intensive gliding course at a 7 day a week operation to boost their training before giving up gliding entirely. Likewise, if you enjoy giving instruction then it may be better to relocate to a club that is primarily training orientated rather than remain in a cross country club with fewer students.

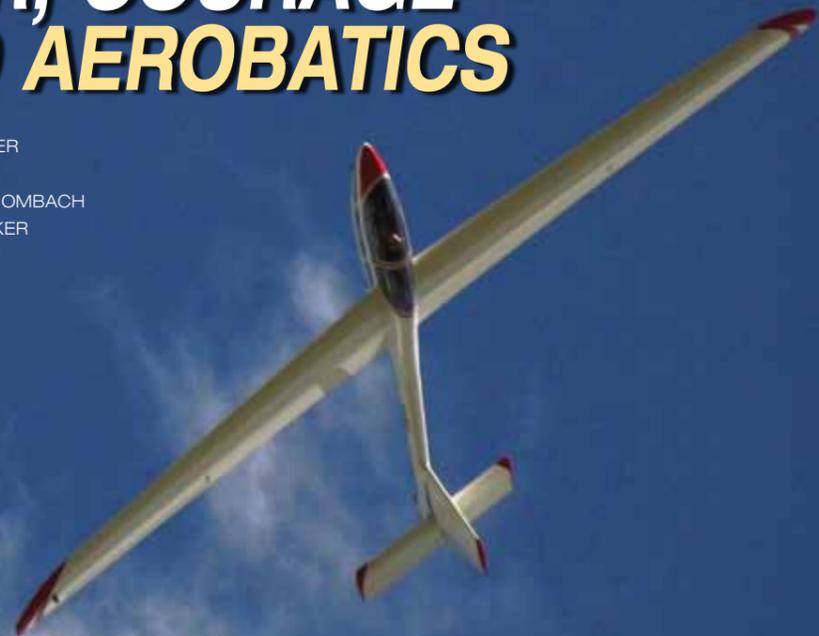
According to GFA figures over the last decade Queensland clubs have in fact shifted backwards in membership, losing more members than they are gaining, with the lowest total membership in years. However, this is not reflected in present member numbers at Warwick, which have largely stayed constant. Clearly, at a state



FEAR, COURAGE AND AEROBATICS

BY SIDNEY DEKKER

PHOTOS: MICHAL OMBACH AND SIDNEY DEKKER



I never knew that fear and courage were so closely related. When Michal Ombach, past coach of the Polish National aerobatic gliding team and Engineering Director of Allstar PZL Glider, was visiting Warwick Gliding Club in Queensland for two weeks in September and October 2016, he told me that he'd only had two instructional aerobatic flights in his life. The rest he taught himself.

ABOVE: Performing aerobatic manoeuvres in gliders, with no help from an engine, is the ultimate exercise in energy management.

BELOW: Michal Ombach

"Weren't you scared?" I asked.

"Oh absolutely, absoluuutely," he said, with the thick Slavic 'l' and 'lute' coming out as 'loot.' He'd been scared.

But if he ever had been, there was nothing visible of it any longer. On a demonstration flight in the SZD59 Acro early in his visit, he casually performed an outside loop, a Lomcovak tumble and seemingly more time hanging upside down in his belts than some people in our club spend on a 300km cross-country.

There is very little in the way of an aerobatic gliding community in Australia, so we have to import our talent.

Michal Ombach has talent, and experience, in spades.

For two weeks, we hosted him at Warwick Gliding Club, offering members the opportunity to fly with a master, even in the humble PW-6U. It helped that Poland's gliding manufacturing community is relatively small, and that all relevant people - including Michal - know each other and each other's work, engineering backgrounds and proclivities. He quickly showed that he probably knew the PW-6U better than anybody in Australia, with easy references to those who designed, engineered and built it.

Although his current company is not involved in the PW, Poland has a relatively fixed group of aeronautical designers and engineers in ever-shifting alliances and employment relations against a tapestry of mergers, closures, bankruptcies and re-openings, hooking them into glider producing companies with names that contain so many consonants that they befuddle any attempt at pronunciation - unless you're Polish.

IMPRESSIVE FLYING

Those who flew with Michal were universally impressed by the intense accuracy of his flying, the precision of his manoeuvres, his unfazed coolheadedness and his unruffled posture - whatever the Gs and in whatever direction. The man is simply very, very good.

Michal's English was much better than any of our club members' Polish, and he was able to communicate his briefings and instructions in ways that were simultaneously disarming and phlegmatic. As the two weeks progressed, he got down to some serious coaching. The Arresti diagrams came out. He started drawing sequences of figures that I should follow. Sitting at the edge of the field, he explained the aerodynamics of both positive and negative flick rolls out of either inverted or right-side-up flying. And he challenged me to fly figures I had never dreamt of performing.

"What I'm not happy about, is you have not made inverted spin," he said one day.

"But, but," I protested lamely, and then referred to a pathetic twirl on top of a positive loop earlier that week.

"That was nothing," he dismissed. "Nooothing."

And so I went. It turned out that my initiation to serious aerobatics was not going to be much different from Michal's own. Without a two-seater capable of or certified for doing such a figure, the first one was going to be by myself. I had, in fact, only had two flights with Michal - none with an inverted spin. We'd done a flight in the MDM Fox at Boonah, courtesy of its owners, and one in the PW-6U.

Then Michal concluded that it was a waste of time to continue flying together, and that I really should practice the manoeuvres myself. From now on, he'd be watching me from the ground, which he did intimidatingly well and punctiliously, incidentally.

On one 45-degree down full flick roll that I performed at the start of a sequence at 3,000ft AGL, he noticed I had to use ailerons to complete the roll in the last 20 degrees or so. He immediately diagnosed that I'd entered the figure too fast. He was right, of course. Now I know that the Acro has relatively long ailerons, but even so - seeing their deflection accurately from a full kilometer away? Go figure. The man truly knows what he's looking for.

INVERTED SPIN

Up to 3,000ft AGL, off tow, checks, roll inverted, slow down by pushing the stick, and then full opposite rudder and stick. Can there be beauty in violence? Because this inverted spin was both. It was a spin, all right. But everything about it was, well, inverted. I didn't exactly feel that I shared the Acro's voracious appetite for performing it.

Michal had wanted to see at least a turn and a half. That had been his brief. My ability to deliver on this expectation was predicated on two assumptions. One: I can count. Two: my hands and feet would follow the instructions from my head. Both assumptions turned out to be entirely too generous.

If you haven't done it yet, you can take my word for it: counting turns in your first inverted spin can be no more than a heroic attempt, and it is hardly your first priority.

The first priority, indeed, is getting it to stop. I had no idea how long that would take, and so my hands and feet decided for me. The stick went neutral, as did my feet. The Acro thought about it for what seemed like a lifetime, while bucking and rocking itself back to level flight - not straight-and-level, more like straight-down-and-level.

Looking down past my feet, I saw that the runway was about perpendicular to when I'd started inverted, and concluded that I'd probably - probably! - only done three quarters of a turn. I thought that even this limited adventure had eaten up a phenomenal amount of height. But, of course, Michal's unflappable opinion during the debrief not much later was that that was really "nothing, noothing."

TASK MASTER

Michal is a hard task-master. Of course, he wasn't satisfied with my inverted spin. I shouldn't have recovered as quickly as I did. "Hold the controls, keep it in!" he said. I will have to practice more, or find more courage somewhere.

I started to find that the tow is actually the scariest of manoeuvres in glider aerobatics. Not because it actually is, but because it affords you the time and headspace to let



TOP: Pointing the nose straight up may scare some pilots. Doing it well and precisely can be harder than you think.

ABOVE: Aerobatic flying involves angles and accelerations that might be unfamiliar to some pilots.

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fear climb onboard. If I'd measured my heart rate during the typically short aerobatic flight, I wouldn't be surprised if it would be consistently high during tow, simply because I was getting myself worked up over what was coming. Then later, it might be elevated in episodes during the actual figures not because of fear, but because of their physiological demands.

When you are actually flying the figures, you are simply too busy watching far ahead, observing the horizon, investing in accuracy, trying to get things right, flying the plane, checking the altimeter. "Forget about airspeed, forget about airspeed!" Michal would keep saying. "Is noothing. Instrument is too late. Feel glider, feel glider!"

HARMONY

Once all of that is under control, it is time for aesthetics. It's called 'harmony' in aerobatic flying, a big term with fuzzy edges, but which includes everything from staying inside a particular piece of airspace to balancing each figure with

symmetrical portions of flight before and after, and a demand for gracefulness and elegance that are not typically on your mind when you first perform any of those things. "Don't be in hurry, don't be in hurry!" Michal would mentor me countless times. Of course I was in a hurry! I just wanted to get the bloody thing over with, or make sure I'd get around the loop, or bend, or curve, or push, or preserve enough energy for the next figure, so as to get into it without wasting either height or speed.

No longer, though. The best thing about soaring - my first love in flying since the age of 14 - is, after all, its grace, its beauty, the elegance and suppleness of its performance, whether on a long cross-country, in competitions, or upside down. I find it a fantastic invitation to try, each time, to overcome the fears, to succeed technically in performing a figure, a flight, and to then invest in the aesthetics of that performance, like when I play Schubert for other people on the piano. I will not be done learning for many decades.

Others relish this invitation in ever-longer cross-country flights. Where some consider being out-of-glide range from the home field to be the scariest thing possible, others have overcome those anxieties and push across vast empty spaces, some of them unlandable, without ever being bothered much by what the altimeter is telling them.

Then my 13-year-old joined me for the last day of Michal's visit. She'd just turned 13 the week before and had never been in a glider before. After two flights with me and one with Michal - through all of which she had shrieked with pleasure at the various rapid accelerations and decelerations, in whatever

RIGHT: Rolling out for crosswind after a successful series of figures.

BELOW: Sidney and his daughter before their flight.

Cartesian plane - she insisted on yet another flight with me toward the end of the day.

Immediately off tow, she asked for the controls and performed a beautiful loop, followed by various ranvers (stall turns) and additional figures that would have made grown men in our club cry. I was stunned, and humbled. What had I been so worked up about in my own aerobatic flying? Did doing it well really require my thousands of hours?

To her, flying all this apparently was - to borrow Michal's phrase - "nothing, nooothing". Perhaps 13-year-olds are merely courageous, simply because they are anatomically unequipped to be scared. Without a fully developed frontal lobe, perhaps they are all courage and no fear. And so, floating in on a final approach with a gentle, honey-coloured sun at our backs, shadows lengthening, the air softening and thickening and the wind gone home for the day, having been upside down more than I anticipated, I landed with my 13-year-old in the front, contented, proud and elated all at the same time.

FLYING THE ENVELOPE

For all those who are both scared and fascinated by this sort of flying, there is of course a reasoned 'don't try this at home' piece of counsel. But in a sense, do try this at home - with help and support, that is. There is something deeply satisfying - and, of course, a great investment in flight safety - in getting to know the outer reaches of your glider's flight envelope.

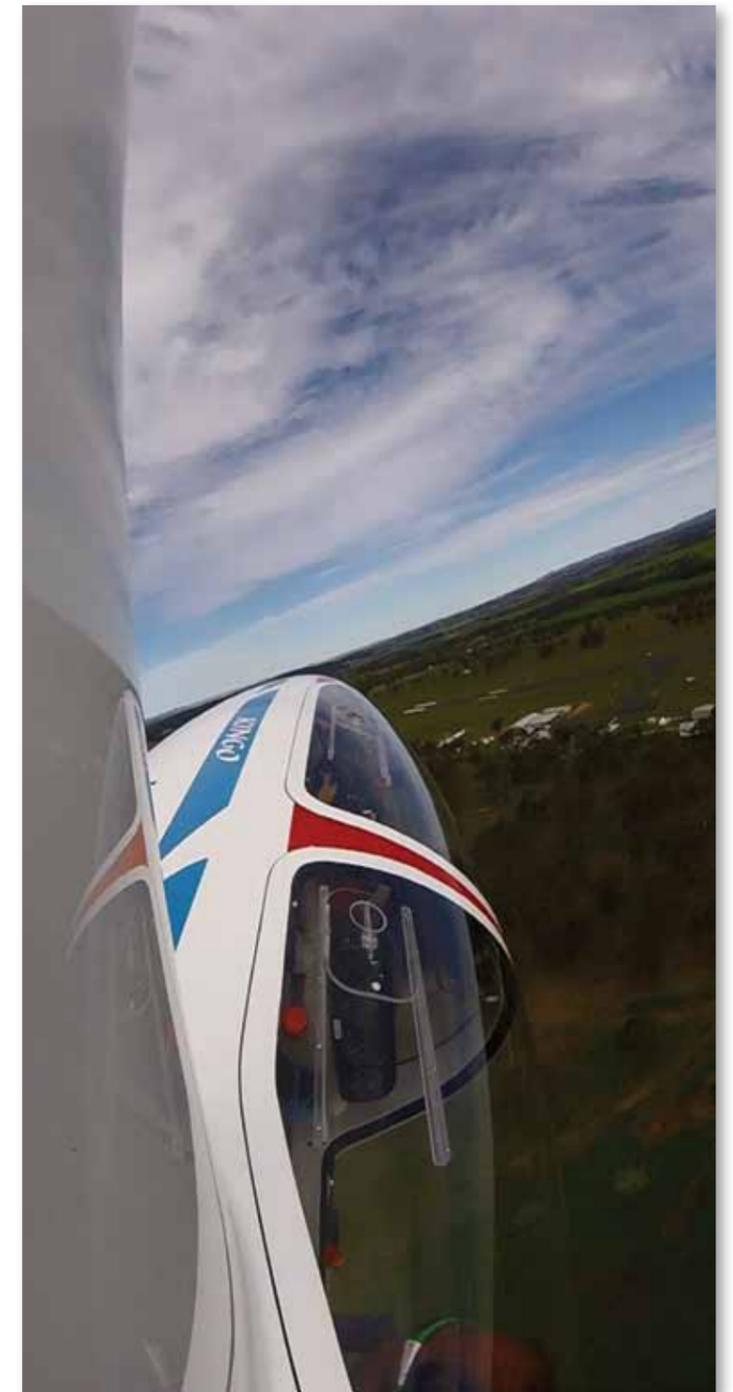
Most of us stay comfortably inside a tiny portion near the middle, if we can help it. We can't always. So an introduction to other parts of the envelope can be very healthy and informative. There are those who would consider or even dismiss aerobatic flying as 'stunt flying', implying that it is unnecessarily risky or even a stupid thing to do.

Nothing is further from the truth. It would be like saying that performing a Shakespeare play on stage, in all of its emotional highlights and beauty, and truly filling the envelope and exploring the boundaries of his artistic genius, is stunting with the bard. Whereas quietly sitting in your armchair at home reading the script of the same play would be to remain authentic to him. The armchair-reading is like staying in the middle of your flight envelope. Performing the play (with many, many rehearsals!) is exploring the envelope in its entirety. Which of these makes you better, more confident, more authentic and accurate?

I have flown with many different kinds of pilots in the past three decades, in a variety of forms of aviation. No pilots are as precise, as honed, as intensely concentrated, observant, positionally aware, prudent and as knowledgeable of the boundaries of the performance of their aircraft - and the possibilities of creative flying beauty within those boundaries - as those who have mastered aerobatics, whether in fast jets, prop planes or gliders.

Talk with me, talk with your instructor, and if you have the sense, sensibility and means, invite Michal back over. The trip to Australia to him, only 16,000km or so, after all, "is nothing, nooothing".

Sidney Dekker is CFI of Warwick Gliding Club and owner of an SZD-59 Acro.



TOP: This is not an approved circuit entry... Using the runway for reference is a great way to improve the accuracy of aerobatic figures.

BELOW: Some aerobatic figures remove the need for a sun hat.





The recent Standard, 15m, 18m and Open Class Nationals at Kingaroy in October 2016 saw only one no-flying day out of a possible 11 contest days. This cancelled day was a compulsory rest day. The 10 day contest dished up all sorts of varied weather, causing met man Adam Woolley and task setter Jim Crowhurst to come up with tasks ranging from the cut-throat 142kms to many tasks over 400kms. Strong winds, wave, blue thermals, overdevelopment and long streets with prospects of thunderstorms gave an exciting mix of challenges.

ABOVE: Kingaroy Airfield

The comp was expertly directed by Greg Schmidt and supported by many very capable Kingaroy members who had put in an enormous effort for months before and during the event, which was greatly appreciated by all pilots and crews. Griding before briefing at 09:30 was the norm. This allowed maximum use of the short, early-season Queensland weather days.

THE IRRESISTIBLE CHALLENGE

For me, it possibly began sometime during my coaching of the Australian Juniors Team. Maybe a focus on winning was re-ignited after merely 'participating', with some random successes over the last 10-plus years. If it wasn't the Juniors, it was possibly being left out of the Oz team for

BELOW: John and Pam Buchanan



the WGC at Benalla - again, probably due to a participating attitude rather than a winning one. I don't know.

But when Miles Gore-Browne said I was selected to fly the Standard Class in Lithuania I think there was a little stirring of emotions combined with a re-kindling of an interest in competition. That said, this might be the last time I would fly in a world gliding comp. So, even though many years before I had sworn I would never fly another comp in Europe due to the unfamiliar weather, terrain, food, accommodation, language, costs and vagaries of equipment and glider quality, I went! Damn! The saving grace was that I had Adam Woolley and my son Brett with me in LIT and that made the experience much more enjoyable. All that youthfull exuberance?

I got out of Europe as soon as possible after a disastrous last day and may have felt a bit heated. That's when I decided to do something about my 'participation' in comps and decided a win would be a more palatable way of exiting the scene - if indeed that was what I was going to do.

I had been gliding since turning 15, so finding something else to do wasn't easy. Hence, I devised a plan, the elements of which I am sure go back to the Junior WGCs and were only completed days prior to the Kingaroy Nationals.

Until now, season after season for the last 12 years or so, I had announced that I was giving up comp flying. Such was my lack of enthusiasm. Then the new season would arrive and having nothing much else to do it felt like an obligation to get onto the Nationals merry go round again. I had found that safari-ing up to Burketown and doing record flying with Pam and Gerrit Kurstjens

was much more enjoyable. Here you could fly without having to go to the compulsory briefing, or be in bed early to arrest that sagging energy - or not even fly if you did not want to. Much more enjoyable.

However, the subconscious ideas of the last year came to the fore and I spent most of the time since Lithuania devising and enacting what I had to do to win. For all pilots, a plan to win would be personal in nature and would have to be tailored to their individual time, equipment, mental and physical situation. A definite commitment and a will to win must be backed by actions required to ensure success. I had been putting a fair bit of time into BB's performance since Benalla as well as some personal training. I was glad the weather was iffy some days during the comp as I was prepared for anything and tended to see opportunity rather than apprehension.

ENERGY MANAGEMENT

For me the main plan ingredient was energy management. Up against much younger and stronger competitors meant that I had to have maximum physical energy every day, to maintain a mental will to win, and enough fire in the belly and confidence to enact it while facing any psychological issues that might arise.

Hence, there was a need for physical, mental and psychological energy management.

If I could be as fit and rested at the end of the comp as at the beginning, I would likely be able to attend all the point catching details between takeoff and landing. It transpired that my muscles were more relaxed and loose by the end of the comp than at the beginning.

The physical energy management starts with fitness, health and endurance training prior to the comp to build up reserves - too much to go into this article. Stopping the exercise at the beginning of the practice period stores energy reserves. Managing the physical energy during the comp requires discipline to ensure adequate rest and sleep to be able to perform at 100% - or something a bit less, actually - each day. The disciplined routine included stretch and self-massage for 45 minutes after the flight accompanied by plenty of water, then dinner, relaxation and bed at the allotted time. Getting out of bed, breakfast, preparing the aircraft, attending briefing, etc were also disciplined in my approach.

To effectively achieve the above physical energy management for 14 days requires mental and psychological energy management. This was further assisted by doing relaxation exercises, dropping the highs and lows of coffee and alcohol and avoiding any outcome focus. Strategies for in-flight energy management are also very important.

Psychological energy management also included an assessment of my competitors and deciding what I thought were attributes that gave me the edge. This helps confidence and keeps the butterflies under control while also allowing an unemotional analysis of daily performance.

So, what does overall energy management achieve? I think it helped rebuild the confidence of youth enabling me to trust myself and allow instinctive decision making at critical times or at times of multiple choices. After several decades of gliding and competing there should be some good, natural experiences back there that can be relied on to make the right choices when under pressure



On the grid waiting to launch. From the top, David Jansen, Mak Ichikawa, Lisa Trotter





ABOVE: There was a wide variety of weather conditions during the competition including a dramatic shower.

or when the rational, conscious mind encounters indecision or conflicting choices. When the mind is free, calm and lucid it can see and process much more of the available information – as distinct from looking and not seeing and hence, missing what can be important clues. Imagine a tennis player in a grand slam. When about to

hit the ball the brain is probably processing a few thousand inputs apart from the spin of the ball, the wind, his/her grip, the movement of the feet, the movement of their competitor . . . This is not for the rational mind. To hit a winning shot, instinct must flow freely.

For the mind to be lucid, the body must be physically relaxed in flight. Then, the all-important requirement of ‘feel’ is empowered. Without feel, atmospheric energy is missed, bypassed or ill-used.

A personal, internal process focus, in addition to an external one, is required to be understood. This assists the body and mind to relax, trust themselves, feel the air, to see everything all around and to make good decisions.

By contrast, inappropriate distractions on the ground or in the air during a contest can place subconscious, menacing black clouds on the shoulders of pilots where long, slender, pearly white, wings should reside.

PRE COMP SHOCK

Then, just before the comp, a major setback occurred as Pam’s 95-year-old Mum took a turn and was hospitalized in Mildura. Pam immediately went to Mildura as I went to Kingaroy. The prognosis for the next few days looked grim and I prepared to head for Mildura at a moments’ notice. As luck had it Mum improved a little and Pam arrived at the comp after the first days - although with the strong likelihood we would both soon be leaving.

BELOW: Andrew Georgeson and Bruce Taylor.



FAR LEFT: Open and 18m Class winners John Buchanan, David Jansen and Tom Claffey.

Hence, I admit to being a bit surprised then when my flying during the contest at Kingaroy seemed to go exactly as I had hoped for in my plan. Even the daily results and the timing of those results, went to plan and

allowed some tapering off in the last couple of days. I’m not the only one who may have been stimulated by poor showings in rain-soaked Lithuania. All Class winners at Kingaroy, which included Adam Woolley who I had been coaching a bit along the way, Mak Ichikawa and Allan Barnes were ex Lithuania and were the only Lithuania pilots at Kingaroy. Perhaps we all felt a bit miffed. GA

LEFT: 15m Class winner Adam Woolley with Jim Crowhurst who took second place.



BELOW: Standard class Champion Allan Barnes with Mak Ichikawa who took top score hors concours with second-placed Peter Trotter.



BOTTOM: The winners of the Team Trophy, Kingaroy GC.



55TH AUSTRALIAN MULTICLASS NATIONALS KINGAROY

10 - 21 OCTOBER 2016 OPEN

1 BB	JOHN BUCHANAN	ASG29	7,558
2 4D	DAVID JANSEN	ASG29E	7,428
3 T1	TOM CLAFFEY	ASG29	7,389
4 B1	BRUCE TAYLOR	JS1C	7,357
5 AG	ANDREW GEORGESON	JS1C	7,150

18 METRE

1 BB	JOHN BUCHANAN	ASG29	7,558
2 4D	DAVID JANSEN	ASG29E	7,428
3 T1	TOM CLAFFEY	ASG29	7,389

15 METRE

1 UKM	ADAM WOOLLEY	VENTUS A0	7,500
2 GG	JIM CROWHURST	LS8	7,333
3 IKB	STEVE O'DONNELL	VENTUS 2CXT	7,245

STANDARD

HC 1A	MAK ICHIKAWA	LS8	7,686
1 S7	ALLAN BARNES	LS8	7,516
2 P1	PETER TROTTER	LS8	7,344
3 HCB	GREG BEECROFT	LS8	7,269

FULL RESULTS AT soaringspot.com/en_gb/55th-australian-multiclass-nationals-kingaroy-gld-2016

Club Insurance Programme Update

Many members will be aware of the Club Insurance Programme (CIP) initiative recently launched by Aviation Insurance Brokers. This is to inform all GFA Clubs and members of the benefits and the process involved for those interested in participating.

Proven Results

The first club that chose to participate in the CIP has achieved an exceptional result, achieving a reduction of over 20%. Collectively the club and its members who had already aligned their policy dates with the club's policy achieved savings of more than \$20,000. If other clubs follow the same process, we are confident of achieving savings on insurance premiums of more than \$100,000 nationally in the next 12 months.

The Process

Your club and individual members both appoint Australian Insurance Brokers as insurance brokers. We then arrange for the policy dates of members to be aligned with the club. Below is a hypothetical scenario:

Member: John Smith
Current Annual premium: \$2,000
Current Broker Fee: \$200
Amount payable \$2,200
Policy Renewal Date 1st January
Club Renewal Date 1st of July

John appoints Australian Insurance Brokers. The annual premium is then levied pro-rata until the Club renewal date. We invoice \$1,000 (i.e. 6 months of the annual premium with no fees) and arrange cover to be aligned with the Club. At renewal of the Club policy we market the package to various insurers to find the best coverage at the best price benefiting both Club and members.

John selects the best option based on preferential pricing, and we invoice new annual premium. Using recent CIP results as a typical example, this would be \$2,000 – 15% CIP Discount = \$1,700, representing a \$500 or 25% saving from John's original premium.

Competitive Pricing

We waive any fees your current broker may apply for the policy extension, providing an immediate saving. Then once the policy is aligned with the Club, you benefit from CIP pricing, providing further savings.

Insurance Broker Selection

When appointing a broker, it's important to understand the fundamentals of the insurance purchase transaction. When an insurance company is approached to quote a risk, they do so to the first broker who approaches them with the exact same terms provided to any subsequent brokers. So it is vital that your broker provides the insurer with the best information that will lead to the most favourable pricing. This is why broker selection is so important.

Also, the insurance company will only provide renewal quotes to the appointed broker and no other broker will have access to the quotes without a Letter of Appointment. If you find a capable broker whom you would like to deal with but they are unable to access the current insurer's quote, this may result in the current broker retaining your business undeservedly. It is for this reason we seek a Letter of Appointment as it allows us to present terms from all insurers (including your current insurer) so we may provide our recommendation not only based on price but also coverage.

What Makes a Good Broker?

The differences between brokers are their knowledge, service, claims handling capability and, when it comes to pricing, the application of any fees. Additional points to consider are what the broker's industry involvement is, and how much leverage they have when dealing with insurers.

As part of our role as the GFA's broker, and since our appointment in 2012, we strive to develop innovative ways to improve our service to the GFA and its members.

We Get Results

Our results include an overhaul of the current GFA member's liability policies with substantial inroads being made with respect to pricing and coverage. This includes increasing the BBL cover from \$250,000 to \$1,000,000 and addressing gaps in previous policy coverage all while reducing the premium. The Club Hangarkeeper's Liability Insurance Scheme has proven hugely successful with over 40 clubs participating and enjoying the savings available. As part of our commitment to the GFA, we have also agreed to waive any fees for short term cover for members aligning policies with their club's insurance.

Experienced Team

Aviation Insurance Brokers has a team of five brokers, most of whom are pilots themselves and collectively have more than 50 years of experience in aviation insurance. We are the largest specialty aviation insurance broker in Australia and operate out of Archerfield Airport supporting aviation operators nationwide from regional airlines to UAV operators and glider pilots. Each broker has their own administration support team guaranteeing quality service and support to their clients.

If you would like to discuss the CIP or to appoint Aviation Insurance Brokers please do not hesitate to contact us and we would be pleased to discuss your options.

Contact

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

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



34th WORLD GLIDING CHAMPIONSHIPS 2017 BENALLA

8 - 22 JANUARY 2017

wg2017.com

PROGRAM COMPETITOR LISTING



swiftavionics

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Nano3

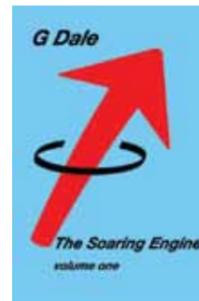
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FROM THE PRESIDENT OF THE GFA



Dear Friends

As President of the Gliding Federation of Australia, I welcome you all to the skies of Benalla for the 34th World Gliding Championships of 2017. I look forward to sharing our skies with pilots from around the world. We have an excellent team of experienced and dedicated volunteers who have been working for months to prepare facilities and equipment for your arrival. I am sure that you will enjoy our great Australian hospitality and welcome when you arrive in Benalla, and of course our excellent soaring conditions.

My wish is that you will fly safely and take home great memories of your time in our beautiful country.

MANDY TEMPLE
GFA PRESIDENT
AUSTRALIAN TEAM CAPTAIN

CHAMPIONSHIP DIRECTOR

On behalf of the organisers of the 2017 World Gliding Championships at Benalla, I welcome all participants and their supporters to our town and what we believe will be a great and memorable competition. The weather is always impossible to predict, but whatever nature provides, I am sure you will find the organisation, the town of Benalla, and the Australian gliding community will be working very hard to ensure you have every opportunity to fly and demonstrate the full range of your soaring skills. It has taken a few years in the preparation, but each of you have also put in many hours and dollars or euros to get here. We hope you leave fully challenged, fully satisfied and with wonderful memories.

TERRY CUBLEY

WELCOME TO GLIDING CLUB OF VICTORIA

The Gliding Club of Victoria is proud to be the host club of the 34th FAI World Gliding Championships.

We welcome all competitors, crew, team members and family to our club and wish you all success in your endeavours.

We hope your time spent with us is enjoyable and safe.

JOHN SWITALA
PRESIDENT GLIDING CLUB OF VICTORIA



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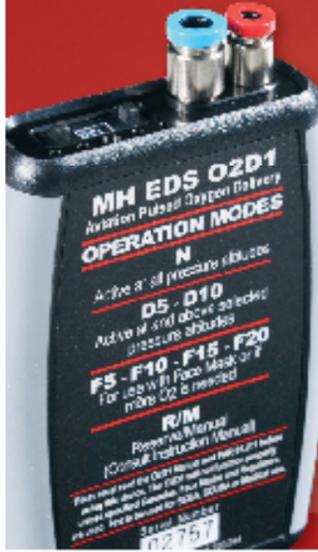
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Kits include all the components you need to enjoy soaring above 10,000 ft and be SAFE.
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Complete Kits with everything you need
Local Support and Free Advice



REIGNING WORLD GLIDING CHAMPIONS

33RD FAI WORLD GLIDING CHAMPIONSHIPS Leszno, Poland 2014

15 METRE CLASS

1. Sebastian Kawa	Diana 2	POL
2. Wolfgang Janowitsch	Ventus 2a	AUT
3. Jean Denis Barrois	ASW 27b	FRA



Sebastian Kawa
15 M Class Champion 2014



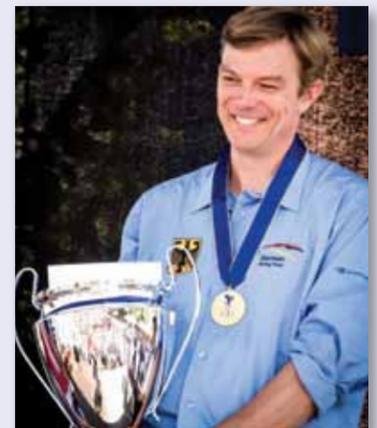
Karol Staryszak
18 M Class Champion 2014

18 METRE CLASS

1. Karol Staryszak	ASG29	POL
2. John Coutts	JS1 B	NZL
3. Lukasz Wojcik	JS1 C	POL

OPEN CLASS

1. Michael Sommer	EB29	GER
2. Andy Davis	JS1 C	GBR
3. Killian Walbro	JS1 C	FRA

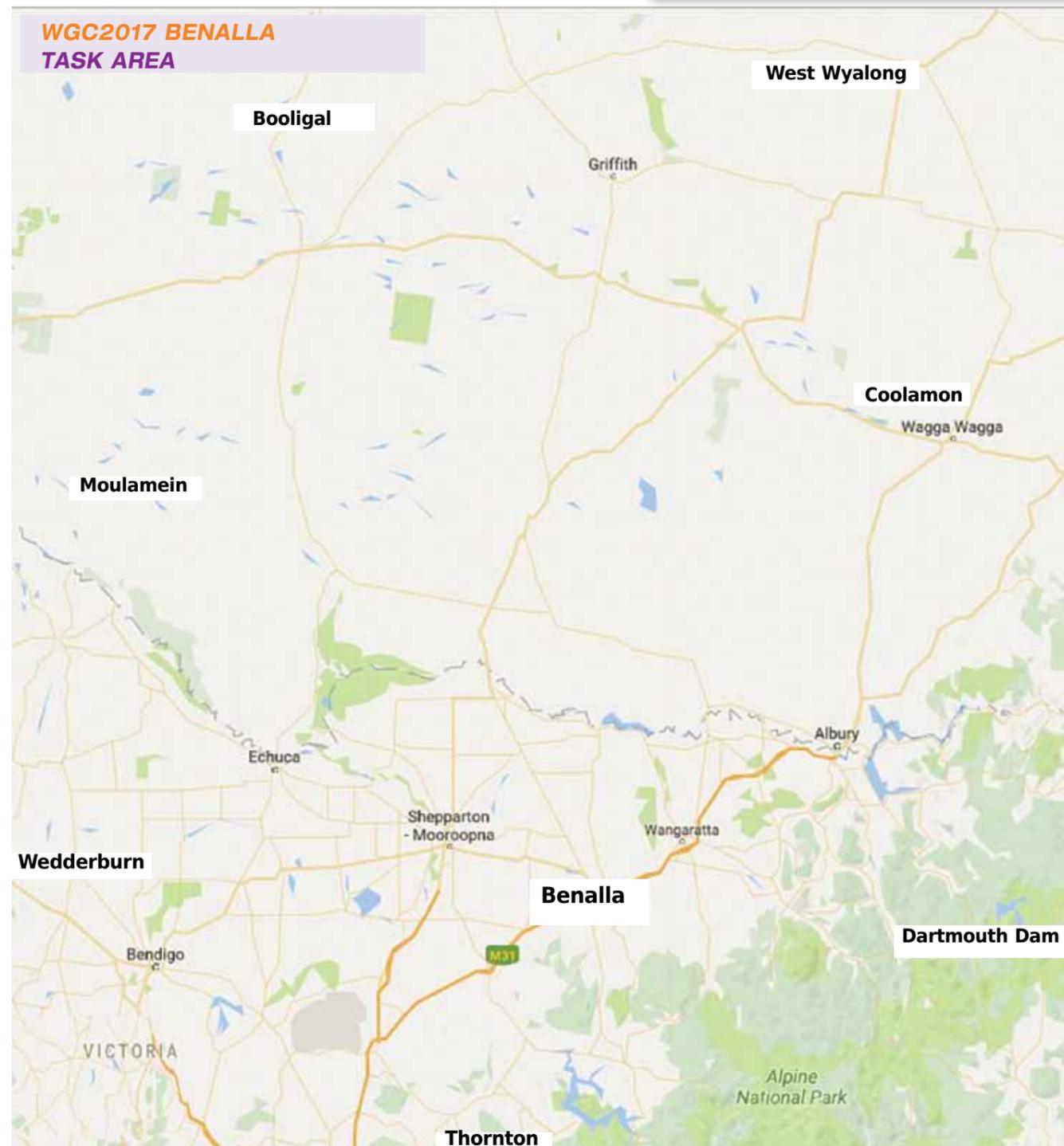


Michael Sommer
Open Class Champion 2014

OSTIV CONFERENCE

The OSTIV Congress will be held in the Benalla Performing Arts Centre (BPAC) near the club house at Benalla Airfield. Featuring major international contributors, the congress will provide a fascinating insight into the development of gliding and the latest meteorological and technical advancements. Everyone is welcome. There is no charge to attend.

Program of OSTIV Congress is available to download as a PDF at tinyurl.com/jg4h380 or just go along to BPAC.



CHAMPIONSHIP SCHEDULE

PILOT & TEAM REGISTRATION & TECHNICAL INSPECTION

31 DECEMBER 2016 – 4 JANUARY 2017

FIRST OFFICIAL TEAM CAPTAIN BRIEFING

4 JANUARY 7:00PM

MANDATORY SAFETY BRIEFING

5 JANUARY 9:30AM

OFFICIAL TRAINING

5 - 7 JANUARY

OPENING CEREMONY

8 JANUARY 5:00PM

CONTEST FLYING

9 - 21 JANUARY

FAREWELL PARTY

21 JANUARY EVENING

CLOSING CEREMONY AND PRIZE-GIVING

22 JANUARY 11:00AM

FOLLOW ALL THE ACTION AS IT HAPPENS

Results will be posted daily at wgc2017.com & soaringspot.com



facebook.com/wgc2015



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LIVE TRACKING

wgc2017.com/live/tracking

Video news at tv.glidingaustralia.org
wgc2017.com

YouTube channel [glidingaustralia](https://www.youtube.com/channel/UCglidingaustralia)



WGC2017 Benalla PROGRAM

COVER PHOTO BY JENS TRABOLT, NORDIC GLIDING MAGAZINE OF JAN W. ANDERSEN IN HIS EB29

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Membership enquiries cathy@glidingaustralia.org

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WHAT GLIDER IS THAT?

Some contestants are shipping gliders to Benalla that have never been seen in Australia before. It will be interesting to see how these gliders, flown by top pilots, will perform.

BELOW: Jan W Andersen flying from his home club in North Zealand 40 km NW of Copenhagen, Denmark. Photo by Jens Trabolt, Nordic Gliding Magazine

MIDDLE: Michael Sommer in his EB29

BOTTOM: Diana 2



Photo by Jens Trabolt, Nordic Gliding Magazine



VENTUS 3

The newest model is the Ventus 3, which has never been tested in a World Championship before. There will be six of these new super 18m ships in the skies around northern Victoria and southern NSW. Glider pilots, keep your eyes peeled. Steve Jones GB, Börje Eriksson SWE and John Coutts NZL will be flying the pure glider variety. Giorgio Galetto ITA, plus Wolfgang Janowitzsch and Andreas Lutz AUT, will be flying the turbo version.



Giorgio Galetto (TOP LEFT) and Börje Eriksson (RIGHT) in their Ventus 3s.

ABOVE: Ventus 3

LEFT: Owe Engström with his ASH25 EB28.

BELOW: ASH25 EB28



EB29

The Binder EB29 was flown to victory by four times Open Class World Champion Michael Sommer at Leszno in 2014. In fact, since 2010 Michael has won two WGCs and placed second at Uvalde in 2012, plus several European and national championships, in his EB29. Benalla was Michael's home club from 2002 to 2009 when he lived in Melbourne. So, he is no stranger to Australia and is clearly the man and machine combination to beat in Open Class at these championships. Jan Andersen, one of four pilots to have also flown at Benalla 1987, will be flying an EB29 as well. Germans Stephan Beck and Tassilo Bode, Belgian Pierre de Broqueville and Sebastian Eder from Austria will also be flying EB29s.

ASH25 EB28

Owe Engström from Sweden is bringing his pride and joy to Benalla. The design of the EB28 is based on the ASH 25. Glider manufacturer Binder purchased unfinished fuselages and inner wing panels from Alexander Schleicher and fitted modified, larger outer wing panels with 28m wingspan and a single piece canopy. He installed a Solo engine with an extension and retraction system he had designed himself, and called his modification ASH 25 - EB 28. It will be easy to recognise this impressive glider both in the air and on the ground at Benalla.



DIANA 2

Current World Gliding Champion in 15m Class, Sebastian Kawa, and his Polish team mate Lukasz Grabowski will be flying the Diana 2. Kawa won the 2012 and 2014 WGC in the Diana 2 as well as three World Grand Prix Championships. In addition, Janusz Centka took top place in a Diana 2 way back in 2006. Italian Stefano Giorzo In 2010 won the WGC in Hungary on his Diana 2, then in 2015 modified it into a 13,5m glider Diana VersVS winning the WGC in Lithuania.

For the 2017 WGC in Benalla he has now again modified his glider at Alisport into a self-launcher Diana VersVS-FES and will fly in 15M Class.



AUSTRALIA
Captain Mandy Temple

OPEN CLASS
Andrew Georgeson
Bruce Taylor

18M CLASS
Tom Claffey
Peter Temple

15M CLASS
Steve O'Donnell
Matthew Scutter



Andrew Georgeson



Bruce Taylor



Tom Claffey



Peter Temple



Steve O'Donnell



Matthew Scutter



AUSTRIA
Captain Kurt Graf

OPEN CLASS
Sebastian Eder
Ludwig Starkl

18M CLASS
Wolfgang Janowitsch
Andreas Lutz

15M CLASS
Werner Amann



Sebastian Eder



Ludwig Starkl



Wolfgang Janowitsch



Andreas Lutz

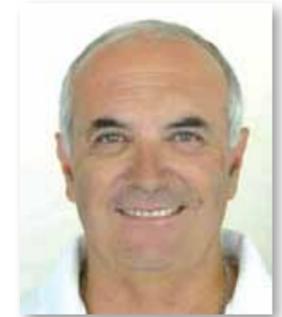


Werner Amann



ARGENTINA
Captain Sergio Oscar Reinaudo

18M CLASS
Raul Garda



Raul Garda



BELGIUM
Captain Baudouin Litt

OPEN CLASS
Pierre de Broqueville

18M CLASS
Francois Delfosse

15M CLASS
Manu Litt



Pierre de Broqueville



Francois Delfosse



Manu Litt



CANADA
Captain Joerg Stieber

18M CLASS
Jerzy Szemplinski
Dave Springford

15M CLASS
Luke Szczepaniak
Sergei Morozov



Jerzy Szemplinski



Dave Springford



Luke Szczepaniak



Sergei Morozov



P R CHINA
Captain Peng Du

OPEN CLASS
Peng Du

15M CLASS
Guangwei Shang



Guangwei Shang



Peng Du



CZECH REPUBLIC
Captain Petr Krejcirik

OPEN CLASS
Petr Krejcirik
Tomas Rendla

18M CLASS
Roman Mracek
Petr Svbeda

15M CLASS
Radek Krejcirik
Ondrej Bordovský



Petr Krejcirik



Tomas Rendla



Roman Mracek



Petr Svbeda



Radek Krejcirik



Ondrej Bordovský



DENMARK
Captain Ib Wienberg

OPEN CLASS
Jan W Andersen
Steen Elmgaard

18M CLASS
Arne Boye-Moller



Jan W. Andersen



Steen Elmgaard



Arne Boye-Moller



FINLAND
Captain Pekka Halonen

COPEN CLASS
Antti Lehto

18M CLASS
Martti Koivula
Erkki Heinonen

15M CLASS
Hannu Halonen
Timo Nurminen



Antti Lehto



Martti Koivula



Erkki Heinonen



Hannu Halonen



Timo Nurminen



FRANCE
Captain Eric Napoleon

OPEN CLASS
Sylvian Gerbaudr
Laurent Aboulin
RESERVE Christophe Ruch

18M CLASS
Eric Bernard
Killian Walbrou
RESERVE
Christophe Cousseau

15M CLASS
Louis Boudierlique
Guilliam Girard
Anne Ducarouge
RESERVE Denis Guerin



Sylvian Gerbaudr



Laurent Aboulin



Eric Bernard



Killian Walbrou



Louis Boudierlique



Guilliam Girard



GERMANY
Captain Walter Eisele

OPEN CLASS
Tassilo Bode
Stephan Beck
Michael Sommer

18M CLASS
Matthias Sturm
Mario Kiessling

15M CLASS
Michael Eisele
Thomas Wettemann



Tassilo Bode



Stephan Beck



Michael Sommer



Matthias Sturm



Mario Kiessling



Michael Eisele



Thomas Wettemann



GREAT BRITAIN
Captain Max Kirchner

OPEN CLASS
Russell Cheetham
Andy Davis

18M CLASS
Steve Jones
Mike Young

15M CLASS
Ed Johnston
Derren Francis



Russell Cheetham



Andy Davis



Steve Jones



Mike Young



Ed Johnston



Derren Francis



HUNGARY
Captain Peter Gonczi

OPEN CLASS
Gyorgy Gulyas
Peter Szabo

18M CLASS
Peter Harsfalvi

15M CLASS
Zoltan Kore



Gyorgy Gulyas



Peter Szabo



Peter Harsfalvi



Zoltan Kore



ITALY
Captain Luciano Avanzini

OPEN CLASS
Ricardo Briigliadori
Alberto Sironi

18M CLASS
Giorgio Galetto
Guido Dalla Rosa

15M CLASS
Thomas Gostner
Stefano Ghorzo



Ricardo Briigliadori



Alberto Sironi



Giorgio Galetto



Guido Dalla Rosa



Thomas Gostner



Stefano Ghorzo



JAPAN
Captain Akemi Ichikawa

15M CLASS
Makoto Ichikawa



Makoto Ichikawa



LITHUANIA
Captain

18M CLASS
Adomas Grabskis

15M CLASS
Gintas Zube
Linas Miežlaiškis



Adomas Grabskis



Gintas Zube



Linas Miežlaiškis

18M CLASS
John Coutts
Tim Bromhead

15M CLASS
Alan Belworthy
Steve Wallace



John Coutts



Tim Bromhead



Alan Belworthy



Steve Wallace



NETHERLANDS
Captain **Frouwke Kuijpers**

OPEN CLASS
Jeroen Verkuijl
Mark Wering

18M CLASS
Steven Raimond
Maurits Dortu

15M CLASS
Alfred Alferts
Ronald Termaat



Jeroen Verkuijl



Mark Wering



Steven Raimond



Maurits Dortu



Alfred Alferts



Ronald Termaat



NORWAY
Captain **Mika Saväng**

15M CLASS
Lars Rune Bjørnevik



Lars Rune Bjørnevik



POLAND
Captain **Jacek Dankowski**

OPEN CLASS
Lukasz Wojcik
Adam Czeladzki

18M CLASS
Tomasz Krok
Pawel Wojciechowski

15M CLASS
Sebastian Kawa
Lukasz Grabowski
Christoph Matkowsk



Lukasz Wojcik



Adam Czeladzki



Tomasz Krok



Pawel Wojciechowski



Sebastian Kawa



Lukasz Grabowski



Christoph Matkowsk



NEW ZEALAND
Captain **Julian Elder**

OPEN CLASS
Brett Hunter
Mark Tingey



Brett Hunter



Mark Tingey

COMPETITORS



RUSSIA
Captain **Dmitriy Timoshenko**

18M CLASS
Dmitriy Timoshenko

15M CLASS
Sergey Ryabchinsky



Dmitriy Timoshenko



REPUBLIC OF SOUTH AFRICA
Captain **Carol Clifford**

OPEN CLASS
Laurens Goudriaan
Oscar Goudriaan

18M CLASS
Pieter Nouwens
Marcus Nouwens

15M CLASS
Attie Jonker
Uys Jonker



Laurens Goudriaan



Oscar Goudriaan



Pieter Nouwens



Marcus Nouwens



SERBIA
Captain **Branko Stojkovic**

OPEN CLASS
Zoran Frenc

18M CLASS
Branko Blagojevic



Zoran Frenc



Branko Blagojevic



Attie Jonker



Uys Jonker



SLOVAKIA
Captain

18M CLASS
Lubor Kuvik
Vladimir Foltin



Lubor Kuvik



Vladimir Foltin



SWEDEN
Captain **Mika Saväng**

OPEN CLASS
Jim Acketoft
Owe Engström

18M CLASS
Markus Ganev
Börje Eriksson



Jim Acketoft



Owe Engström



SLOVENIJA
Captain **Darko Gagula**

18M CLASS
Erazem Polutnik
Luka Žnidaršič



Erazem Polutnik



Luka Žnidaršič



Markus Ganev



Börje Eriksson



SWITZERLAND
Captain Lüthi Roland

18M CLASS
Rolf Friedli

15M CLASS
Fridolin Hauser



UNITED STATES OF AMERICA
Captain Fernando Silva

OPEN CLASS
Bill Gawthrop
Michael Robison

18M CLASS
Gary Ittner
Sean Fidler

15M CLASS
Erik Nelson
Sean Murphy



Rolf Friedli



Fridolin Hauser



Bill Gawthrop



Michael Robison



Gary Ittner



Sean Fidler



Sean Murphy



Erik Nelson

WORLD GLIDING CHAMPIONSHIPS BENALLA 2017

15 METRE CLASS

Steve O'Donnell	Ventus 2cxt	AUS
Matthew Scutter	Ventus 2ax	AUS
Werner Amann	ASW 27 / 18	AUT
Manu Litt	Ventus 2B x	BEL
Sergei Morozov	ASG-29E-15	CAN
Luke Szczepaniak	ASW-27	CAN
Radek Krejcirik	Ventus 2ax	CZE
Ondřej Bordovský	Ventus 2b	CZE
Hannu Halonen	Ventus-2CA	FIN
Timo Nurminen	Ventus-2B	FIN
Louis Boudierlique	ASG-29	FRA
Guilliam Girard	Ventus 2ax	FRA
Anne Ducarouge	ASG-29	FRA
Denis Guerin	RESERVE	FRA
Ed Johnston	ASG29	GBR
Derren Francis	Ventus 2a	GBR
Michael Eisele	Ventus 2ax	GER
Thomas Wettemann	Ventus 2a	GER
Zoltan Kore	Ventus 2ax	HUN
Thomas Gostner	Ventus ax	ITA
Stefano Ghiorzo	Versus FES	ITA
Mac Ichikawa	Ventus 2a	JAP
Gintas Zub	Ventus 2ax	LTU
Linus Miežlaiškis		LTU
Alfred Alferts	ASG29 E	NED
Ronald Termaat		NED
Lars Rune Bjørnevik	Ventus 2cT	NOR
Alan Belworthy	ASW 27b	NZL
Steve Wallace	Ventus 2ax	NZL
Sebastian Kawa	Diana 2	POL
Lukasz Grabowski	Diana 2	POL
Christoph Matkowski		POL
Attie Jonker		RSA
Uys Jonker		RSA
Sergey Ryabchinsky	Ventus 2 CX	RUS
Fridolin Hauser	ASW27	SUI
Erik Nelson	Ventus 2ax	USA
Sean Murphy	Ventus 2b	USA

18 METRE CLASS

GARDA RAUL ATILIO	Ventus 2 cxt	ARG
Tom Claffey	ASG29	AUS
Peter Temple	ASG29	AUS
Wolfgang Janowitsch	Ventus 3 T	AUT
Andreas Lutz	Ventus 3 T	AUT
Francois Delfosse	ASG 29E	BEL
Jerzy Szemplinski	ASG29-18	CAN
Dave Springford	ASG29-18	CAN
Guangwei Shang	ASW28-18	CHN
Roman Mracek	ASG-29E	CZE
Petr Svoda	ASG-29E	CZE
Arne Boye-Moller	JS1 c	DEN
Martti Koivula	ASG 29E	FIN
Erkki Heinonen	ASG 29E	FIN
Eric Bernard	ASG 29E	FRA
Killian Walbrou	JS1	FRA
Christophe Cousseau	RESERVE	FRA
Steve Jones	Ventus 3	GBR
Mike Young	ASG29-18	GBR
Matthias Sturm	ASG29	GER
Mario Kiessling	Ventus	GER
Peter Harsfalvi	ASG-29E	HUN

Giorgio Galetto	Ventus 3 T	ITA
Guido Dalla Rosa	JS1	ITA
Adomas Grabskis	JS1 b	LTU
Steven Raimond	ASG29 Es	NED
Maurits Dortu	ASG29 Es	NED
John Coutts	Ventus 3	NZL
Tim Bromhead	ASG29	NZL
Tomasz Krok	ASG29	POL
Pawel Wojciechowski	JS 1	POL
Pieter Nouwens	JS1c	RSA
Marcus Nouwens	JS1b	RSA
Dmitriy Timoshenko	Ventus 2C	RUS
Erazem Polutnik	ASG 29 ES	SLO
Luka Žnidaršič	Ventus 2 FES	SLO
Branko Blagojevic	ASG29	SRB
Rolf Friedli	ASG29	SUI
Lubor Kuvik	ASG29 -18e	SVK
Vladimir Foltin	LS10	SVK
Markus Ganev	ASG 29	SWE
Börje Eriksson	Ventus 3	SWE
Gary Ittner	ASG-29	USA
Sean Fidler	ASG-29	USA

OPEN CLASS

Andrew Georgeson	JS1c	AUS
Bruce Taylor	JS1c	AUS
Sebastian Eder	EB 29	AUT
Ludwig Starkl	Antares 23 T	AUT
Pierre de Broqueville	EB29	BEL
Peng Du	Arcus m	CHN
Petr Krejcirik	JS-1C	CZE
Tomas Rendla	JS-1C	CZE
Jan W. Andersen	EB 29	DEN
Steen Elmgaard	ASH 31 Mi	DEN
Antti Lehto	JS-1C	FIN
Laurent Aboulin	JS-1c-21m	FRA
Sylvian Gerbaud	JS-1c-21m	FRA
Christophe Ruch	RESERVE	FRA
Russell Cheetham	JS1 C	GBR
Andy Davis	JS1 C	GBR
Stephan Beck	EB29	GER
Tassilo Bode	EB29R	GER
Michael Sommer	EB29R	GER
Gyorgy Gulyas	JS-1C/21m	HUN
Peter Szabo	JS-1C/21m	HUN
Ricardo Brigliadori	JS1 21mt	ITA
Alberto Sironi	Quintus M	ITA
Jeroen Verkuijl	JS1c	NED
Mark Wering	JS1c	NED
Brett Hunter	JS1 c	NZL
Mark Tingey	JS1 c	NZL
Lukasz Wojcik	JS1 c-21	POL
Adam Czeladzki	JS1 c-21	POL
Laurens Goudriaan	JS1C	RSA
Oscar Goudriaan	JS1C	RSA
Zoran Frenc	JS1-21m	SRB
Jim Acketoft	EB28	SWE
Owe Engström	Ash25 EB28	SWE
Michael Robison	JS1-C-21	USA
Bill Gawthrop	S1-C-21	USA

More information on the pilots is online at wgc2017.com

116 pilots from 28 countries will compete in three classes.
Results will be posted daily at wgc2017.com soaringspot.com

IGC WORLD RANKING
1. Laurent Aboulin
2. Sebastian Kawa
3. Michael Sommer
Full listing at igcrankings.fai.org

THE CLASS OF '87

It has been 30 years since the first time the World Gliding Championships were held in Benalla in 1987. The '87 program is an historical snapshot, like looking at an old school yearbook. Who were the people in the class of '87 and where are they now? All the officials, team members, captains and everyone who took part in that gliding jamboree have stories to tell. Since then, many thousands of hours have been flown, World Championships won and lost and a wealth of collective experience gained.

Several famous Australian gliding personalities worked to make the championships happen, not least C E Wally Wallington, and many others.

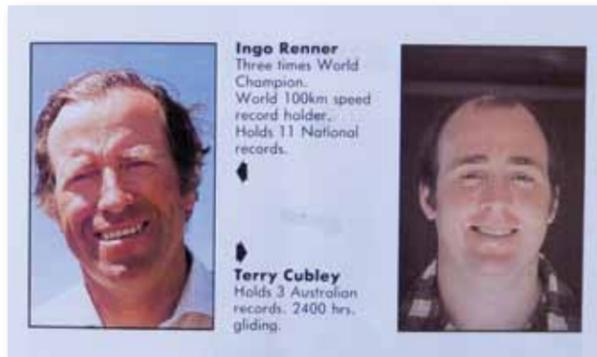
There are four pilots who flew in '87 and will also compete at Benalla 2107. Here are a few reminiscences from them and others who flew in '87, and some who will be involved in '17. The photographs are from the '87 program.

TERRY CUBLEY

Vice President of the International Gliding Commission (IGC) and GFA Executive Officer

Benalla '87 Standard Class DG 300 21st place

Benalla '17 Championships Director



I was 33 years old and flying in my 3rd World Championships. I flew a DG300 in Standard Class. All of us on the Australian team were hoping for a 'home ground' advantage, but alas, it was not to be. I finished in 21st place out of 44.

We flew 12 days with some good distances, but the weather was rather tricky. I remember quite a few low, blue days and struggling home from the river, some huge gaggles and pre-start wave being quite common. We did have a few good cu days, and some great thermals and some fast speeds. One of the advantages of Benalla as a competition site is that you do get a range of challenges that test a broad range of capabilities - the winners will need to be very adaptable.

I remember vividly the 30th of January, day 11 of the competition. The weather prediction was 9,000ft and cumulus, so Standard Class was set a 695km triangle to Coolamon (NE near Temora) and then Hay and return. The day was only 4,500ft, occasional climbs to 6,000ft and very blue. I remember the start games when it was obvious that this was silly, and then being engulfed by a huge gaggle of over 40 gliders that just rolled along the task. The French team started early but were rolled by the gaggle after some 300km.

Hay is very remote and when the gaggle turned to head South back to Benalla the view was very shocking to most pilots - flat featureless desert, limited landing options. Of course, there was no GPS to give us confidence of what lay ahead. The gaggle just seemed to stop - pilots not sure if it was safe to proceed or what the preferred direction was. A few of us with some experience in the area pushed forward and the gaggle then regained its confidence and

started to roll on again. My log book shows an outlanding some 30km short of the finish line.

I am hoping that in 2017 we will have an increased number of good, high cu days, but assure you that we will give you every chance to experience some great tasks and many challenges, and enjoy our Australian hospitality.

INGO RENNER

World Champion 1976, 1983, 1985, 1987

Benalla '87 Open Class ASW 22B World Champion 1987

Benalla '17 Australian Team coach

The Championships turned out to be a great success weather wise. The organisation stood up to the task and the pilots made it a safe and enjoyable contest.

The longest task in Open Class was an FAI triangle of 840km, which was completed by 16 gliders.

Before the start on many days, we climbed up in sheer wave to reach the highest possible height before the start. This was a unique experience and unlike any other competition I have flown.

All the pilots enjoyed the strong thermals over the dry and dusty plains of southeast Australia and the 200km visibility in clean air.

Of all the 13 WGCs I participated in, I was the best prepared for this one. I had an ASW22 provided by the factory that I could practice in for half a year before the comp - in Europe, including Spain, and in Benalla. I had a first class crew and good local knowledge of cross country flying in this area. I have very positive memories of Benalla '87.

BRIAN SPRECKLEY

World Champion 1987

1st Vice President of IGC, Chair of the Sailplane Grand Prix management team, the IGC Ranking List and the IGC Stewards group

Benalla '87 15m Class LS6 World Champion 1987

Benalla World Championships in 1987, when there were still only three WGC classes, was a great meeting of wonderful people in a wonderful atmosphere.

The flying was always challenging - blue days, cumulus days, windy days with shear wave on top of the cumulus, not one of those boring 'same as yesterday' type comps.

Large paddocks and long final glides, always a secure feeling that landing was never going to be a drama, until you land in a paddock just as it gets dark!

The race starts with that rush for the first good climb on the Warbies and trying to time the cycling of the little cu with your start time. The final glides must start from the Murray River if you want a trouble free arrival, but aren't possible in strong SW winds, which always resulted in a nerve racking last 20km.

How close can it get to perfect with 11 contest days, great people, great organisation, great roast chicken, great parties and Aussie beer?

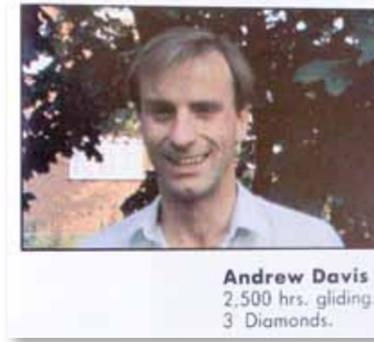
Just remember the mantra for a safe arrival in Benalla - "linga longa in Yarrowonga". You will understand by the end of the contest.

ANDY DAVIS

World Champion 1993, 2003

Benalla '87 Standard Class Discus 13 place

Benalla '17 Open Class JS1c



I flew Standard Class at Benalla in '87 in a Discus B. Friendly Aussies were everywhere although they were annoyed about Ian Botham's batting and bowling. The weather was mostly blue with a lot of gaggle flying, which I didn't particularly enjoy. Many of the tasks were set to the north along the Murray River but we had one interesting task into the mountains. And I clearly remember that increasing headwind on final glide.

JAN WALTHER ANDERSEN

WGC Silver 1999

Benalla '87 Standard Class DG 300 8th place

Benalla '17 Open Class EB29

I had the great pleasure to visit Benalla two times, attending both the Pre Worlds in January 1986 and the Worlds in 1987. I rented a brand new DG 300 'G1' through the DG Factory and had so many wonderful days both on the ground and in the air.

First of all, the Australians are the most friendly and hospitable people on earth. This, combined with the amazing scenery and the 'wow effect' of arriving in the Australian summer while leaving Denmark in frost and snow, are all very good factors that make you feel happy.

The gliding opens up quite new dimensions. As the weather conditions south of the Murray river are a bit weaker than to the north, the pilot's decision-making ability is challenged when long task are planned - you need to accept leaving Benalla late, but not too late, in order to make it home again by the early evening. The endless horizon and fantastic gliding conditions make you feel like Jonathan Livingston Seagull where 'the sky is the limit'.

GIORGIO GALETTO

World Champion 1999

WGC Bronze 1997

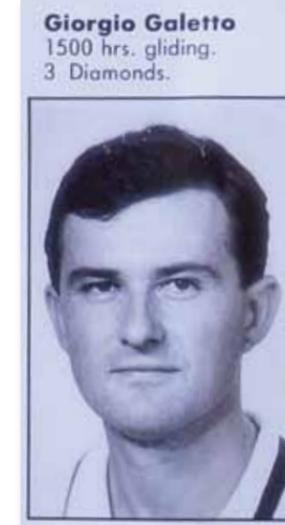
Benalla '87 15m Class AWW20 L 28th place

Benalla '17 18m Class Ventus 3T

It's exactly 30 years since I flew in Benalla in 1987 and I am happy to come again. The bad aspect is that I am 30 years older, but the positive aspect is that I have still been selected for the Worlds, with the same motivation and enthusiasm ever.

I have been in Australia several times since '87, and had the honour and joy to be part of the 'coach the coaches' initiative. But my first competition in the southern hemisphere will remain in my heart forever.

In 1987 I remember an enjoyable event with my ASW20, a glider that was



at that time overtaken by the brand new LS6.

We often flew blue days and, as a pure mountain pilot, I was very surprised that it was possible to find wave over land as flat as a pancake - thermal shear wave.

One day, the 15m Class had a task of 750km on a blue day. I flew more than 700km in 9 hours, but as far as I remember, nobody made it.

I remember also a retrieve by tow at night, a dark, moonless night.

At that time, I was really surprised by the total lack of bureaucracy. I am Italian and I arrived with tons of documents, but I was only asked to show the FAI Sporting License. I was astonished.

However, the most vivid memory is the heat, the heat and still more heat!

STEPHEN O'DONNELL

Benalla '87 15m Class

Ventus B 26th place

Benalla '17 15m Class Ventus 2cxt

I was flying a Ventus B prototype. I had a good competition, and won a day. It was a very long, fatiguing comp. There were a lot of big tasks over 500km and up to 750km. There were mass outlandings as well. It was a big, long competition.

IB WIENBERG

Benalla '87 15m Class Ventus b 21st place

Benalla '17 Team Captain Denmark

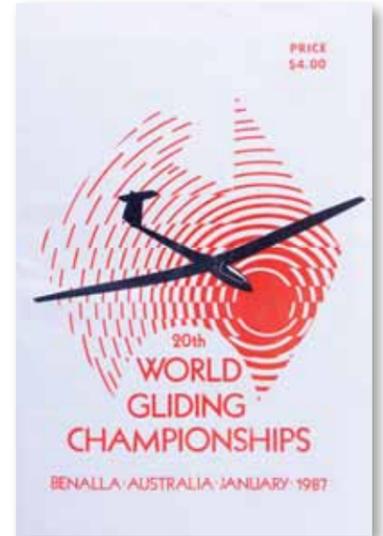
Benalla 1987 was the best gliding experience I have ever had.

My wife Kirsten and I stayed at the Benalla Caravan Park from late December to early February, and we enjoyed every day of it.

The flying was spectacular - higher, longer and faster than I had flown earlier - and although I am a Danish lowlander by nature and should be at ease in the plains, I found that I had rather much to learn. By the end of the competition I felt more in harmony with local conditions - too late for a high placing, but I am pleased with my one day win and all I learned from Benalla 1987.

I stopped flying international competitions some years ago and have been a regular visitor to Australia during the best part of the gliding season since then, flying cross country and a Danish record when possible, from Corowa and Tocumwal.

The 2017 WGC will be my 15th visit to Australia, this time as team captain with the Danish pilots. It will be a joy to be back in Benalla.





Championships Director
Terry Cubley

Terry has been Australian national champion five times and has competed in seven World Championships. He was the Competition Director at the Gawler WGC, Operations Director at JWGC Narromine and served as referee, steward and jury at three international championships. He is currently the Executive Officer of GFA and Vice President of the IGC.



Competition Manager
John Switala

John is the President of host club the Gliding Club of Victoria (GCV).



Task Setter
Tobi Geiger

Tobi has represented Australia in four World Championships in Club and Standard Classes as well as competing in numerous Australian Championships and international competitions. He is a long time member of GCV with a wealth of knowledge of and experience of flying tasks from Benalla.

COMPETITION OFFICIALS

- Championships Director**
- Competition Manager**
- Operations Director**
- Safety Officer**
- Task Setter**
- Chief Scorer**
- Technical / Scrutineer**
- Meteorology**
- Promotions**
- Media Relations / Webmaster**
- Tracking**
- Administration**
- Tug Master**
- Chief Marshall**

- Terry Cubley**
- John Switala**
- Peter Gray**
- John Orton**
- Tobi Geiger**
- Tim Shirley**
- Colin Collum**
- Jenny Thompson**
- John Styles**
- Sean Young**
- Matt Gage**
- Rhonda Gelletly**
- Darcy Hogan**
- Richard Cotton**

INTERNATIONAL JURY

- President Rick Sheppe (USA)**
- Members Bob Bickers (GBR)**

STEWARDS

- Chief Steward Renato Y Tsukamoto (BRA)**

Operations Director

Peter Gray



Meteorology
Jenny Thompson

Chief Steward
Renato Y Tsukamoto

Renato Tsukamoto, Chief steward. Renato is an active glider pilot in Brazil and was the Chief Steward for the Pan American Continental championships in the USA in 2015.

Steward
Rob Moore

Rob had competed in 28 consecutive Australian Nationals until the mid 1990s. He has crewed for in 11 International Competitions, three of which were as Team Manager, one of those being the 1983 World Championships. He was a Steward at the 2009 Australian Gliding Grand Prix. Rob has an OAM and FAI Air Sports Medal for services to gliding.

Jury President
Rick Sheppe

Rick is an instrumentation engineer as well as glider pilot. He is interested in all aspects of gliding, including rule-writing. He is currently serving as the IGC Delegate from the US.

Jury Members
Bob Bickers

Bob Bickers, Jury member. Bob is an active glider pilot from Lasham in the UK. He has been team captain of the British Gliding team and Steward in Leszno 2013 and Jury President in Lithuania 2016.



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Before my selection to fly in Club Class in the 2016 World Gliding Championships, I knew nothing about Lithuania except that it was somewhere in the north of Europe.

is that the team members almost never travel together to get there. For starters, the 2016 Lithuania pilots were spread along the whole east coast of Australia. Dylan and Butch were flying in from Queensland, me from NSW, and Cathy and Tobi from Victoria. Adam was joining us from his home in Japan, and Matt was tacking his trip onto a work safari through the USA, the UK and Germany.

ABOVE: Allan waits to launch with Matthew Scutter.

Originally, the selection for Standard Class was Bruce Taylor and Matthew Scutter. Matthew had qualified under FAI rules by virtue of winning the Junior World Champs in Narromine. But Bruce decided to fly in the US Nationals instead, and Matt was keen to fly in the 20m 2-seater class with Dylan Lampard.

Standard Class, now empty, was later filled by Adam Woolley and Butch (John) Buchanan. Tobi Geiger and I were in Club Class giving us a full team of six pilots ably joined by our team captain Cathy Conway.

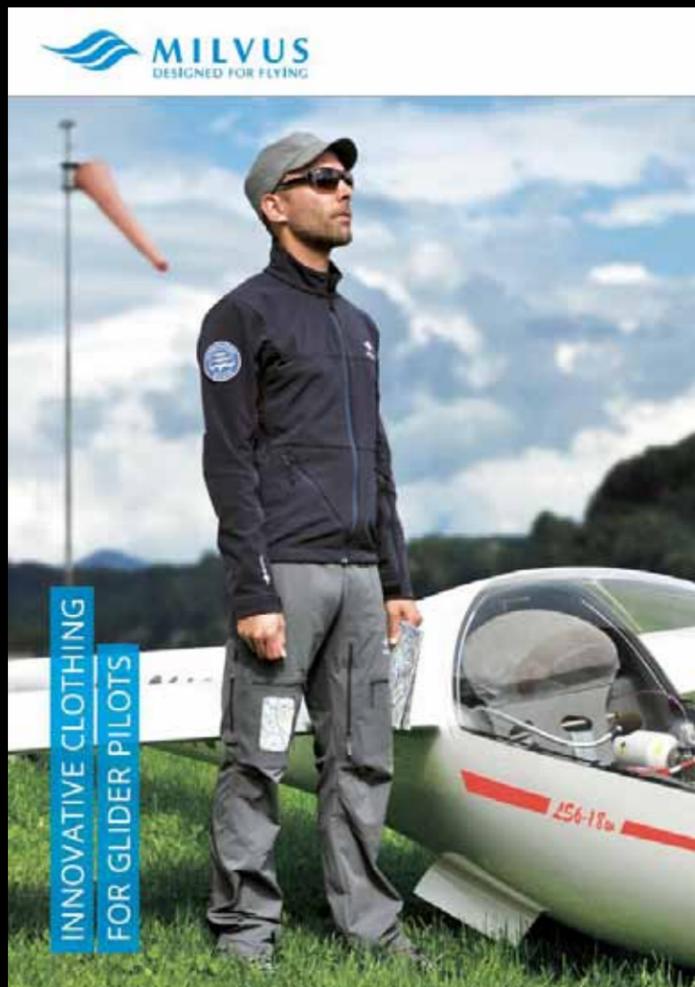
I've flown quite a few Club Class comps in Europe, and have been lucky enough to fly one of the nicest LS1-fs on the planet. Unfortunately, the owner, Helge, was flying his own qualifying comp at the same time, making it unavailable, but one of my best friends Swaantje Geyer offered me her ASW-19 to fly. Swaantje's health was very poor and slipping fast, and I felt extremely awkward about taking up her offer.

My crew was to be my old friend Jane from New Zealand. She had often mentioned her desire to come crewing, and jumped at the offer. But 30 minutes before we were to check in at Sydney airport, she got an emergency phone call and had to fly home. Suddenly, boarding the long flight to Amsterdam unexpectedly alone, I was crew-less and worried. You can't turn up at a World Championships without a crew.

BELOW: PZL-104 Wilga 'Golden Oriole', a Polish short-takeoff-and-landing (STOL) aircraft, handled most of the aerotows.

In Amsterdam, I got a message from Kathe. She had heard of my dilemma and offered to share the driving from Germany to Lithuania. This was a godsend, because by the time I reached Wolfsburg in Germany, I was absolutely shattered. The train journey from Amsterdam was meant to be a direct service with a reserved seat. But it became a shocker, with

continued over page



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TOP: Alan crossed northern Europe from Amsterdam to get to Pociunai.

BOTTOM: Wilga on final glide.
Photo by kvitrina.com

The opening ceremony was held the day before the first competition day. There was the parade of athletes, the traditional costume dancing, the speeches by town officials, and the raising of the flag. We were cheerfully welcomed by one official to "Lithuania, land of rain". Now I'm sure that hadn't been on the official bid document! Over our shoulders, we were watching the black shelf-cloud of a cu-nimb advancing on us. As if on cue, during one of the later speeches, the heavens suddenly opened and the crowd dispersed amid much howling and wailing.

THE FLYING

The flying itself was always a challenge. Most of the tow planes were Wilgas. Towing behind these is pretty turbulent due to the broad prop-wash. Often full aileron was required to stay in station. The other tow planes were light sports aircraft like the Dynamic, which were much nicer to tow behind.

At pre-start, just staying in the air was usually a struggle, and many pilots needed relaunches. One day we were towed to cloud base at 600m AGL and worked our way down from there. Pre-start was critical and intense. Although each of the three classes had their own 5km radius start line, the patchy conditions often meant that all classes were sharing the same part of the sky. The low cloud bases meant that the top few hundred feet of convection was extremely busy, and often more time was spent avoiding other gliders than centring the thermal.

During the competition, I only saw 5,000ft on one occasion, and generally the convection was low, from 2,000 to 4,000ft, weak, and with small mobile cores. The clouds were generally reliable but the wind was sometimes strong. Outlanding options were mixed, with nearly all of the countryside covered in forest, rivers, lakes or tall crops.

Fields were generally small but often very undulating, especially in the Polish border region where a band of glacial moraine deposits of at least a 40km was located, and where I wouldn't have wanted to land anywhere. You would probably walk away uninjured, but the chances of avoiding damage to your glider would be slim. By the end, only one serious accident had taken place during the whole competition, when a Hungarian pilot somehow stalled his glider down onto the steep gabled roof of a house.

BEST DAY

As at all World Comps that I have attended, Day 1 was tense. The organisers were relatively untested, as were the pilots and crew. The sky was dead when we started towing, with just the odd wisp of weak cu at about 2,000ft under a solid overcast sky. Tobi and I could not get together pre-start - it was effort enough to just stay in the air.

Even so, this turned out to be my best day of the comp. I flew the whole AAT almost without spotting another glider, and mucked up only on my final glide, when, still unsure of my instruments, I suddenly spied the airfield hidden in heavy shade much closer than where I had been looking. I finished an embarrassing 800ft high at VNE. Still, it was good enough for 2nd for the day. Unfortunately, after that my performance took a nose-dive.

INTO POLAND WITHOUT A PHONE

On some days, if you were not in a strong gaggle, you were history. The gaggles tended to be smaller and fragment faster on the better days, but there were not too many of those. We flew over the border into Poland every day except one, and on one 3,500ft day, we had a headwind task down into Poland.

Tobi and I started just before 2pm, which was the earliest we could reach the start line. We found ourselves in a small gaggle of about six pilots, but Tobi and I were the only ones who would ever lead out. It was incredibly frustrating, because every glide had a strong possibility of an outlanding. The strong wind and weak thermals meant it was easy to become separated, and with the others always behind us we were in a vulnerable situation.

Eventually Tobi landed out, as did the rest of our gaggle. I managed to struggle onto the first turnpoint, reaching it just before 5.30pm - 120km at an average of 32kph. The lead gaggle of about 40 pilots was just a few kilometres ahead, but that made all the difference. With that many pilots, you know someone on the glide will find the best core. On your own, every glide is a gamble.

I landed in a tiny, ploughed paddock on the final leg an hour later. Since I was in Poland, my Lithuanian sim card would not work, and to my amazement I discovered that the local mobile phones could not ring international numbers. Finally, I managed to find a teenager who spoke English. He used his Facebook account to find my crew's Facebook account, sent a friend request, and a message on where I was. It was well after midnight by the time they dropped me off back at the hotel and took the glider back to the airfield.

On most days, however, we did make it back home. The finish ring had a minimum height of 500m (1,800ft) QNH at 5km from the airfield. This sounded pretty high, but gave people plenty of time to bleed off their speed and do a straight-in without any dramas. I heard no complaints and only a few people busted the limit and took a 1 point per meter penalty. I was surprised that they used a QNH height for the ring, but with a high finish ring, there were no safety implications of a change in pressure during the task.

In all, we had seven days validated out of a possible 14. This is by no means unusual by European standards.

FOR THE EXPERIENCE

But it's not just about the flying. You don't go to Europe for great flying conditions - you go for the experience and the camaraderie of flying at the Worlds. It's almost as much about what happens on the ground as about what happens in the air.

Some of that ground stuff was good, like the International Night when each nation's team provides a sample of their food and drink - always alcoholic. The Australian offer was vegemite on toast and Anzac biscuits, followed by a selection of Aussie wines bought at the local store. Then there were the



team meals at Tango's Pizza - about €5 for a starter, pizza, dessert and beer - and the team co-operation whenever anyone had a need. There was also the local sightseeing on bad-weather days - the sights of Vilnius, Kaunas and Trokei Castle.

But some of the ground stuff was also pretty bad. In particular, there was the FAI flag saga. It's a ritual at every Club Class Worlds that the flag should be stolen. It is usually mysteriously returned in time for the closing ceremony. This year the organisers had taken special precautions. The flag had been raised, and padlocked to the top of the pole. The lanyard had then been removed for extra security.

GIVE BACK THE FLAG!

Yet one morning, the flagpole was bare. The CD was enraged. At that morning's briefing, he announced that there would be no more flying until the flag was returned. The entire briefing erupted into a sea of booing, jeering and abuse, all directed at the CD. It was the most confrontational sight I have ever seen at a competition. The CD was adamant, and in the end the President of the FAI Jury had to step in and overrule the CD. We got a good flying day, but the CD lost a great deal of respect.

Nevertheless, no one in our team got the placing they were looking for, and in my case it was my worst result at a Worlds. Personally, it is easy for me to see why. My head was very much in the wrong space for this competition. Two good gliding friends of mine had died just before the competition. My long-time partner and crew could not come, and then my backup pulled out at the eleventh hour. My local crew had no driver's license. My family had medical emergencies while I was away, and my flying partner Tobi and I had had no opportunity to practice our team flying.

These factors are not offered as excuses, but simply as an explanation. So many things have to go right to get a good result at the Worlds, and they don't all involve flying.

So, would I go back to another Worlds? In spite of all the expenses and tribulations that must be overcome before and during a Worlds, I find the experience to be completely beguiling. I love the atmosphere, I love flying in new places, I love the competition and the people that make it. For me, it's worth a lot of sacrifice, and if those ducks all line up next time, well, who knows...

Roll on Poland 2018!

GA

MELBOURNE CUP VINTAGE RALLY

BY DAVID GOLDSMITH

The Melbourne Cup Vintage Rally took place at Bacchus Marsh over the Melbourne Cup long weekend, with vintage gliding scheduled for all four days. Sunday was also the Australian Gliding Museum's Open Day and AGM.

Usually affected by the vagaries of the weather, and after a winter that was colder and wetter than normal, we took the opportunity of joining the Geelong Club's Friday winch-day to get the rally started early. The weather was beautiful, sunny, cool and calm with weak thermals. Some good flying was enjoyed, Rob Benton in his and son Andrew's Ka6CR VH-XFF enjoying the longest flight with 2 hours 37 minutes, and 30 minute flights by Peter Champness in the Foka 5 VH-GZD and Dave and Jenne

Goldsmith in the Australian Gliding Museum's Slingsby T31B VH-GDB. Other pilots to try some T31 open cockpit nostalgia were Julian Smibert, Peter Kingston and Wayne Mackley. Thanks are due to Geelong club members for handling a slick launching operation, with some reaching heights over 2,000ft AGL.

Saturday morning promised warmer conditions and better thermals. Bob Hickman was away first in his Boomerang VH-GQY, having 30 minutes followed by 2 hours 4 mins. The longest flights were 2 hours 56 minutes by Rob Benton in the Ka6CR and 2 hours 53 minutes by Peter Champness in the Foka 5. However Peter achieved the longest OLC distance, with 103 km. Dave and Jenne Goldsmith shared 1 hour and 52 minutes in the ASK-13 VH-GPY, climbing to 5,500ft and enjoying the clear blue sky with a few rare puffs of cumulus. Kim Van Wessem came from Adelaide with his Cherokee II VH-GLU and had his first flights at Bacchus Marsh, flying the ASK-13 and Cherokee. Leigh Snell celebrated a successful 53 minute solo Form 2 evaluation flight in his Kookaburra VH-GRX before taking son Rohan for a fly, having another half an hour. Leigh's wife Sue, with Jenne, enjoyed 34 minutes in the ASK-13. A perfect day nicely rounded off by dinner at Stoney's Club.

The weather was unsuitable for the following three days including Cup Day, with strong winds and a little rain, but few felt shortchanged after the pleasant conditions offered on Friday and Saturday.

ABOVE: The Museum T31b – the thrill of flying!
LEFT: The Museum AGM and Barbeque – a good time was had by all.



ABOVE: Peter Champness ready to launch in his Foka 5.
RIGHT: Sylvia Sharman, Kim Van Wessem, Jenne Goldsmith and Andrew Kenigsvalds with Kim's Cherokee II from Adelaide
LOWER RIGHT: The Golden Eagle (1937) with the Phoenix (1957), 20 years of progress.

THE WORLD'S THIRD OLDEST FIBREGLASS GLIDER AT THE 2016 OPEN DAY

The prototype Phoenix, the world's first fibreglass glider, flew in November 1957, almost 60 years ago. Eight were built, with the prototype now in the Deutsches Museum in Munich - see wikipedia.org/wiki/Akafflieg_Stuttgart_FS-24. Phoenix number three, fitted with a T tail and retractable undercarriage, was purchased some years ago from Hans Disma in Holland by John Ashford. This has now passed to the Australian Gliding Museum and was recently assembled for display as the featured aircraft for 2016/17. It is positioned beside the delightful gull-winged Golden Eagle from 1937, stark contrast and emphasising the remarkable development of gliding over the intervening twenty years. It is hoped to return the Phoenix to flying condition in the coming year, to be flown by Museum members.

The Open Day, Annual General Meeting and Barbeque attracted well over 40 members and visitors. With plenty of time to enjoy the exhibits, as the weather prevented the flying program, visitors enjoyed a social and informative interlude. The Museum development continues at a rapid pace with 58 gliders, a covered enlarged paintshop completed, and continued progress towards the ultimate aim of a public museum. The Committee thanked all volunteers and members for their continued efforts in the many facets of development of the museum. A delicious barbeque and salad lunch followed, with more socialising through the afternoon in the delightful and stimulating museum environment.



GP Gliders The Future of Gliding



The future of soaring is electric and it's coming very soon. The self-launching electric sailplane will allow unparalleled freedom and independence for the glider pilot, which will generate a need for change in the way gliding is conducted while finally making soaring a carbon neutral sport. A number of manufacturers have been exploring this new technology and applying it to their sailplane designs.

However, there is one company that has designed their own electric sailplane from the ground up, incorporating the latest design, technology, materials and safety features. That company is GP Gliders based in Poland in an area known as Aviation Valley in South Eastern Poland, famous for its aerospace industry and pilot training centres.

GP Gliders aims to be a unique glider manufacturer, offering the latest technology to produce sailplanes with unparalleled performance and safety.

Electric power offers some substantial advantages over traditional internal combustion engines:

Much simplified and less pilot intensive operation means safer flying

A smaller, lighter yet more powerful power plant giving greatly increased reliability compared to internal combustion engines

No need for messy flammable fuel on board therefore the risk of fire is virtually eliminated

Full power available on start up with no warm up required
Power output unaffected by attitude

Almost no noise

No need for headset when motor is in use

No vibration

Virtually zero maintenance

True carbon neutral capability

Ability to re charge directly from solar panels on your hangar or trailer equals potentially zero cost flying

With a range of 13.5 metre and 15 metre pure and electric self-launching sailplanes plus dedicated trailers all with a large range of options GP Gliders is set to become a niche player in the sailplane market.

GP Gliders chief designer is *Grzegorz Peszke*. The Peszke company is a producer of aviation products, including high performance propellers, light sport airplanes, and gliders based in Krosno, Poland. Founded in 2007, the company has substantial expertise in the use of composite technology and aero structure design. Lead designer Grzegorz Peszke is an experienced designer, constructor and competitor. He has set



records in Radio Controlled Thermal Soaring in the F3B class.

As Grzegorz Peszke said, "I designed the GP series to be innovative in every way," says Peszke. "I want to produce a totally new glider that gives pilots what they need and want."

Grzegorz's son and managing director of GP Gliders Jerzy said, "The idea to build a light, dynamic glider came about a few years back when we caught wind of the FAI's plans to introduce a new class. This class will have essentially only two limitations – maximum wingspan of 13.5 m and maximum wing load 35 kg/m². We think that this class has enormous potential for growth, and it creates new possibilities both for pilots and for small producers like us."

Continuing Jerzy says "World Champion *Sebastian Kawa* has joined GP Gliders in the very important role of technical consultant during development work on our constructions, which gives us the opportunity to take advantage of his immense expertise and experience in that area".

In addition Sebastian will also act as GP Gliders ambassador promoting our gliders and gliding around the world.

GP Gliders ambassador and number one supporter

Sebastian Kawa shows just how light a GP14 wing really is.

Finally Jerzy explains, "As it turned out later, the paths of the Kawa and Peszke families had crossed in the past owing to a shared passion for flying. In the 1960s my grandfather, Jerzy Peszke, was a flying instructor to Sebastian's father, Tomasz."

The Institute of Aviation in Warsaw are engaged in the design of GP Gliders and their laboratory facilities have helped immensely in selecting the optimal aerodynamic and structural solutions, and most helpful of all have been the comprehensive tests preceding their implementation. This provides the confidence that GP Gliders have selected the best possible solutions to ensure their gliders' competitive edge, as well as the cohesiveness of the concept.

Currently GP Gliders has 3 models. The pure sailplane GP11 PULSE is a purpose designed first single seater that can take its pilot into cross country flying safely with docile handling. The GP14 electric self-launching sailplane is the high performance 13.5 metre model which is available in both standard and slim fuselage options.

The GP 14 VELO sailplane is designed to be the ultimate expression of innovation and performance in the 13.5 meter class for which an equally innovative and performance-minded self-launch system has been designed. An L/D of 43:1 combined with a wing loading of between 35 - 55 kg/m² and an aspect ratio of 26 ensures excellent performance.

It features a 25 kw motor as standard with a 4 kw battery which will deliver 3 x 1,600 ft climbs OR 1x 1,600 ft climb + 100km in-flight range.

Speaking about the GP14 VELO glider, Jerzy explains, "The glider was created using the most modern 3D design methods available, as well as exclusively CNC machines during modelling. We also refused to make any compromises in aerodynamics – elliptic wings and tail-plane contain sophisticated outlines, as well as the most efficient and adjustable-span profiles created by Grzegorz.



"The manufacturing technology is based on the best composite materials available, including carbon fibre, kevlar, rohacell foam and newest-generation epoxies which ensure the best durability/load ratio.

"The glider's structure is also highly temperature-resistant, which allows us to offer a wide range of interesting exterior colour schemes rather than just the traditional white paint, or use gliders as advertising space for event sponsors. This would be a significant innovation and also provide us with a large competitive edge."

Finally the GP15 JETA is their first 15 metre sailplane and again is designed to provide the highest level of performance ever seen in a 15 metre glider. Again, this is available in both standard and slim fuselage options and features the 25 kw motor with 4 kw battery pack.

The GP 15 JETA is our newest and most sophisticated, multitask 15 m, electric self-launcher up to date. Strongly focused on gliding performance, the design represents natural evolution of flawless GP 14 VELO platform, adopting the very sleek fuselage.

As with the GP14 the RESLS (Retractable Electric Self Launching System) takes only 5 seconds from deployment to start and power is instant thanks to the electric motor. In addition from motor off to retraction and stowage is also only 5 seconds.

The highlights of the JETA are aspect ratio of 29, unseen before in 15 m glider class and best L/D of over 50:1 (slim fuselage version) and a wing loading of 33 – 60 kg/m². The new glider is a further step forward in terms of aerodynamic efficiency and use of carbon-epoxy composite technologies.

The option of electric controlled flaps on the GP 14 and the GP15 add another exciting feature to these gliders.

All models are designed with the latest safety features incorporated including a carbon/kevlar/vectran cockpit safety shell and a ballistic recovery rescue system.

With a process of continued development the young team at GP Gliders are focusing on producing the finest sailplanes using the latest technology and materials while at the same time giving pilots what they want.

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GUIDE TO ACCOUNTING FOR CLUBS

BY JAMES COOPER



PART 3

In this part of his accounting series, James explains how to set up your Profit & Loss Balance Sheet.

PROFIT AND LOSS (P&L)

Our committee members, who generally may have little understanding of finances, need to have clear, concise information. The first report I would suggest that they want is a Profit and Loss showing, for example, the last eight years' financial activity, in separate columns. This will allow them to compare the current year with previous years and therefore see trends.

Note that the report is shown in Accrual Basis, not Cash Basis. Cash basis would show only transactions that have been paid, and is not suitable for the purpose of looking at the profitability of the club.

Those with inquiring eyes will see the Income Suspense line. This is where SmartLogs posts income from transactions, the reasons for which are unclear. An Extra Charge column in SmartLogs can be populated. The treasurer will then go to the

transaction and adjust it to the correct account.

The P&L here is shown in collapsed view, which only shows the header accounts - AEF, General Income, Gliding Income, Tug Income and Winch. The report can and should be expanded in detail mode so that the committee can see what activities drove the header account. For example, in Tug Expenses you can see the cost of the 100 hourly, General maintenance, Fuel etc.

Looking at the Profit and Loss (P&L), the bottom line probably shows that the club is somewhat erratic in its operation and we should be aware that it may make good money one year, and make a loss the following. The committee should be aware of this. With a little more study it can be seen that, other than 2009-2010 due to very high tug costs, the first 4 years were profitable while the following 4 years are not and are more erratic. So what was it that caused this change, and what can be done to prevent the high tug costs in 2009 and 2010?

The next report we should look at is the P&L for this year per month. Now the issue we have with a P&L shown by month over a year is that we see massive fluctuations in each month. So let's see the reason why and how to make things understandable.

I have not shown the P&P in detail as it would take up too much printed space, but my commentary will tell you the details behind the figures that would normally be available.

If we look at July, we see a huge profit, and if we saw these figures at the beginning of the year we would be thinking that by the end of the financial year we would be replacing all of our fleet with new shiny gliders. But the figures are skewed by the fact that all the members were recharged for their membership on the 1st of July.

October is not a good month as there were bills for glider and tug insurance, which were also affecting the profit in January and April. Big expenses also occurred under General Expenses for Rates in November.

So when these figures are shown to the committee they don't show a smooth trend that would give some idea as to how the club is going. Each committee meeting will have comments like "We have to consider the exceptions this month and that month".

What the committee wants is a P&L that is not dominated by exceptions. This can be done quite easily as follows:

First, I may need to explain what a General Journal is. For non-bookkeepers and accountants, a Journal is a transaction in your accounting system that moves dollar amounts from one account to another in equal and opposite values. In normal day to day running, they are not used as they give little information as to what is happening, but for what we are about to do they are the best way to do things. Journals always have an equal amount of debits and credits.

If you really want to know what is happening in a Journal and why we Credit or Debit an account there is a little device to assist. If you want to increase the value of an account, using the up

Account	Debit	Credit	Memo
Accrual:GLIDER Insurance		500.00	Accrual Account.
Glider Expenses:Fixed:Insurance	500.00		Expense account.

arrow, you debit Expenses and Assets, and credit Liabilities Revenue and Equity. Now let's leave accountants' talk.

Going back to our problem of levelling out the exceptions in our P&L, we set up some 'Other Current Liability' accounts under the Accruals header, with sub accounts as shown. Of course, these can be added to or removed according to the individual clubs' requirements. These accounts reflect bills for those big ticket items. For example, when a bill comes in for insurance it is not posted to the Expense account Glider:Fixed:Insurance but instead to Accrual:Glider Insurance.

Now let's assume that we get three bills a year from the insurance company. We now want to spread the insurance bill over four months, not one. We enter the bill in January against the accrual account for the total of the bill, let's say \$2,000 and of course we pay it. Now we then make four General Journals for January, February, March and April for one quarter of the \$2,000, that is, \$500 each where we Credit the Accrual:Glider account and Debit the Expense account Glider:Fixed:Insurance. What this will do is take the transaction from the Accrual

Account	Debit	Credit	Memo
Accrual:Memberships prepayments		24,000.00	Post to Accrual Account
General Income:Membership	24,000.00		Clear the Membership Income Account

account and move it to the expense account.

When using most accounting packages you should be able to make the first transaction and memorise it, so that at the beginning or end of each month it is created automatically.

Membership posted on 1 July has a little exception. The reason for this is that whenever a new member joins mid-year, the income account needs to be driven. So that when we charge all our members fees for the new year the transaction will also go to the Income account 'General_Income:Membership'. I suggest that perhaps after two months in early September, when you have had time to find out who has re-joined and who has not, you Void invoices to those who have not re-joined. You are now left with the income for members who have joined for the New Year dated 1 July. To make things

Account	Debit	Credit	Memo
Accrual:Memberships prepayments	1,000.00		Reduce the Accrual Account
General Income:Membership		1,000.00	Post to the Income account

simple let's assume that the total income for membership is \$24,000. You found this figure from the Sales by Item report dated 1 July.

We do two Journals - the first to clear the income

account with a single journal for 1 July.

The second Journal posts back to the Income account and reduces the Membership Prepayment account and is repeated every month, so that by the end of the financial year the Accrual account will be back to zero and the Income account General_Income:Membership has \$2,000 added to it every month of the year.

Again this monthly journal is memorised so that it is created when the computer opens up at the end of each month.

So now when all this is done we can get a Profit & Loss by month report, as below, where we can see any trends. In addition we get an idea from the first few months where we are likely to be by the end of the year. OK, it is not perfectly smooth - no club is - but those big ticket items have been smoothed out.

BALANCE SHEET

Whereas the P&L shows us how much money is going in or out of the club, the balance sheet shows us the value of the club. As explained before, the P&L is the Vario and the Balance sheet is the Height.

The Balance sheet is made up of many things and I have reduced its length for this article to save space. But it includes money in the bank, saving and loan accounts. Undeposited funds are cash, Cheques and Card payments that have not arrived at the bank yet. The money owed to the club by members, Accounts Receivable as shown below, is in negative therefor showing that in general members are in credit with the club. Be aware that although the figure is in negative you could and probably do have some members who are behind on their payments and need chasing for money.

Other items in the balance sheet show the value of the Fixed Assets as Gliders, Tugs and Buildings. We will talk about their value later.

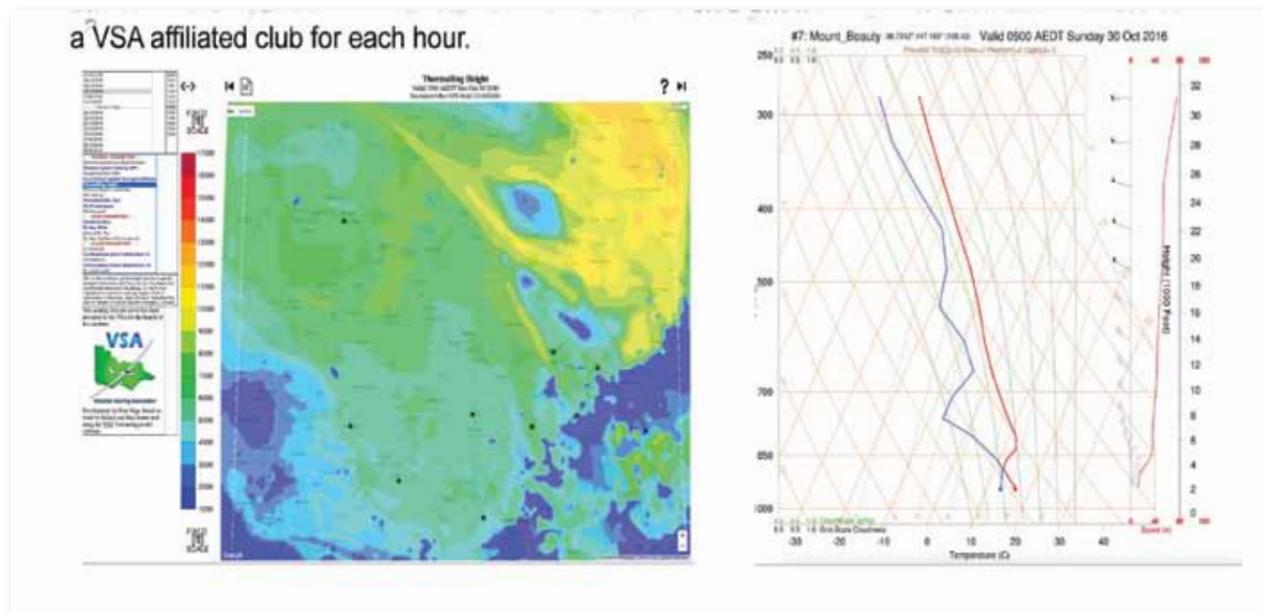
In addition to the Assets, there are the Liabilities accounts - the money that the club may owe, for example, Loans from members or the National Body, Bills that have been received and not paid. Right at the bottom will be Retained Earnings. This is the profits and losses that have accrued since the beginning of the club's life.

ASSETS	
Current Assets	
Chequing/Savings	
IAB General	16,372.01
Canteen Main Account	1,328.60
Canteen Cash	35.00
Self Insurance	23,761.97
Special Purpose	26,760.43
Voucher	-4,654.00
Total Chequing/Savings	63,622.61
Accounts Receivable	
Accounts Receivable	-6,967.63
Total Accounts Receivable	-6,967.63
Other Current Assets	
Canteen Stock	563.36
Fuel Stock	56.40
Undeposited Funds	650.00
Total Other Current Assets	1,269.76
Total Current Assets	57,924.94
Fixed Assets	
Trailers	3,123.90
Admin and General	65,203.92
Gliders	209,425.03
Tug	19,615.46
Total Fixed Assets	297,368.31

Profit & Loss											
July 2007 through June 2015											
	Jul 07 - Jun 08	Jul 08 - Jun 09	Jul 09 - Jun 10	Jul 10 - Jun 11	Jul 11 - Jun 12	Jul 12 - Jun 13	Jul 13 - Jun 14	Jul 14 - Jun 15	Jul 15 - Jun 16	Jul 16 - Jun 17	TOTAL
Ordinary Income/Expense											
Income	13,762.72	14,482.16	8,277.36	8,892.08	8,882.74	11,034.37	8,282.62	8,888.76	77,684.46		
AEF											
General Income	36,133.75	28,858.27	18,300.11	32,311.46	32,225.45	33,241.49	27,882.52	35,310.29	240,375.23		
Glider Income	18,289.04	21,233.53	18,887.79	18,883.78	12,790.66	12,525.67	18,371.44	22,225.48	127,771.62		
Income Suspense	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-642.00	-642.00		
Tug Income	17,659.74	42,854.82	46,191.91	45,359.43	45,483.66	47,482.16	27,693.91	92,944.97	355,648.91		
Glider Payment	0.00	-134.88	0.00	0.00	0.00	0.00	0.00	0.00	-134.88		
Winch	0.00	0.00	-175.83	245.28	18.38	0.00	0.00	0.00	-175.83		
Total Income	152,529.18	104,564.27	80,236.33	107,996.64	98,275.41	101,158.58	84,256.41	127,521.36	838,934.17		
Gross Profit	152,529.18	104,564.27	80,236.33	107,996.64	98,275.41	101,158.58	84,256.41	127,521.36	838,934.17		
Expense											
General Expenses	18,361.12	20,949.18	27,489.10	21,249.20	22,982.17	21,121.36	20,421.72	20,075.26	172,779.06		
Glider Expenses	26,126.81	28,619.32	20,876.84	21,871.17	48,262.03	24,222.28	28,649.42	34,841.14	269,861.85		
Loss Cash	0.00	0.00	0.00	0.00	905.00	0.00	0.00	0.00	905.00		
Tug Expenses	12,858.47	32,268.35	69,812.06	51,342.29	54,162.82	59,989.90	43,887.26	93,882.79	340,729.69		
Winch Expense	34.00	441.35	0.00	175.87	83.17	0.00	0.00	0.00	751.77		
Total Expense	68,382.61	83,238.33	118,439.73	94,739.44	130,211.24	105,442.24	93,259.57	108,799.23	789,216.69		
Net Ordinary Income	15,846.48	21,325.94	-38,203.40	13,257.17	-31,935.83	75,716.32	-9,003.16	18,446.13	49,717.48		
Other Income/Expense											
Interest Income	1,158.58	2,158.96	2,482.57	4,359.88	5,811.93	1,159.33	1,447.86	755.48	18,647.67		
Other Income	742.77	636.33	421.64	194.02	920.02	612.16	2,221.51	359.66	9,744.33		
Total Other Income	2,279.12	2,779.25	2,904.11	4,553.90	6,731.95	1,771.49	3,669.37	1,115.14	19,391.99		
Net Other Income	2,279.12	2,779.25	2,904.11	4,553.90	6,731.95	1,771.49	3,669.37	1,115.14	19,391.99		
Income	16,425.60	24,105.19	-35,299.29	17,811.07	-25,203.88	77,487.81	-5,333.79	19,561.27	69,109.47		

VSA SOARING WEATHER SERVER

BY MATHEW GAGE



ABOVE: The new VSA Soaring Server with map and temp trace. The site covers Victoria and Tasmania.

For a number of years, we have been using various internet sources for Soaring Weather predictions. Before that, we flew temperature traces at comps, or used the results of the BOM balloon flights from various locations - we still do at times. These provided a relatively accurate view of the airmass at that specific location at the time the flight was made.

Others, notably David Wilson, took that information and used their own programs to derive predictions of soaring conditions through the day.

In recent years, we have had websites that do the same work based on predicted soundings provided by NOAA - the GFS weather model, and instead of basing the output on a single location, do it for a grid of locations, producing pretty pictures that help give a view of the whole area. Initially, that was RASP and later XC Skies and SkySight. Recently, in conjunction with the VSA, I have created a new web site for the area used by the VSA affiliated clubs.

GFS MODEL

The GFS model is produced every six hours giving predictions at three-hour intervals for 10 days and then a further six days at 12hour intervals. In Australia, these predictions are on a grid at 0.25 degree spacings.

For every system, the critical factor is in predicting the actual surface temperature accurately.

RASP was initially produced by Dr Jack, a one time glider pilot and professional meteorologist in the US. Behind the scenes, RASP took the GFS weather model and then ran the WRF (Weather Research & Forecasting Model) software to produce a detailed weather forecast for the required area before generating a series of images to provide a view of many different parameters. It is the WRF software that predicts real surface temperatures via

what is known as a Land Surface Model (LSM), which can use between two and nine factors, depending on which specific LSM is chosen. The WRF software can interpolate to a smaller grid size than the 0.25 degree GFS model. The old RASP servers have a 12km grid size. The new VSA server is running grid sizes of between 2km and 6km depending on how far in the future the prediction is for - the smaller the grid size, the more detail that can be seen, but the longer it takes to run.

WRF SOFTWARE

XCSkies is a commercial service that also uses the GFS model, but does not use the WRF software to create the actual forecasts, hence the predictions are at 3 hours intervals. It is my understanding that this predicts surface temperature by making use of satellite images and analysing the colours. This has been surprisingly good for such a simplistic approach, although it has some issues. Specifically, if the satellite images look very different to reality, the predictions will be inaccurate. This has been noticeable for the last 18 months in a band of square shapes that appear running from South Australia, through Western Victoria and Southern NSW.

As both SkySight and the new VSA system use the WRF, they could be viewed as being based on RASP, but that assumption is misleading. RASP is essentially a set of programs that control how the GFS model is downloaded, how the WRF programme are run and then how the display images are created.

Other information sources in use include BOM, WeatherZone, Windydyt, nullschool and so on, but none of these are dedicated to soaring. The latter ones also use the GFS model, but either do not run any forecasting over that, or they only provide for calculations at the three-hour interval model.

Over the last few years, RASP, particularly in Victoria

and NSW, has been getting less and less reliable. The key element is that the prediction of surface temperature has been much lower than the actual temperature, and also compared to what BOM and WeatherZone have been predicting. This has been because the WRF software, as configured, has not been working reliably, due to two related reasons. First, the WRF software is updated twice each year. Also, newer LSMs have been introduced that use more information and newer data files with key information, such as soil type, vegetation and ground slope.

The WRF software is open source, but needs to be compiled for the specific computer it is running on. That sounds easy, except that the most reliable compiler is expensive unless you are a university or a student. The alternative compilers work only with the right combination of hardware, operating system and compiler version. The alternative is to use pre-compiler versions of the WRF, which is what RASP provides for those wishing to create their own servers. The downside to this is that you are then reliant on others to keep the WRF software up to date.

The Dr Jack version is on Version 2 of the WRF and can only run on a single core. This means it is slow to run, creates fairly crude predictions and is very, very out of date - the latest version is 3.8.1

Paul Scorer, a meteorologist in the UK created an updated version that also overlays the images on Google Maps, and this uses WRF 3.6.1, now 2 years old. This can also run using multiple cores, so it runs faster on modern hardware, meaning that either a bigger area, or a smaller grid size can be used, or both.

In December last year, I created a RASP server based on the UK system to assist with the Pre-Worlds in Benalla. Because it was running on my desktop computer at home, it wasn't made public. This provided a greater level of confidence in the weather than was possible with either the existing RASP with surface temperatures frequently predicted 5 to 6 degrees low, or XCSkies with the band of odd predictions through the middle of the task area. There seemed to be some issues with the predictions not matching reality, although, after looking into the differences in detail, it was more the interpretation than the predictions that were out.

Based on this, the VSA recently agreed to fund the hosting of a publicly available server for their affiliated

clubs. For this, because of the developing inaccuracies of RASP over time, it was essential to be able to choose the WRF and LSM versions ourselves, which meant not using RASP for running the actual forecasts (WRF). The image creation is still based on the UK RASP version, but with a number of changes. The website display is also based on the UK RASP, but has been substantially re-written.

What is available? Twice each day, the latest GFS model is downloaded and forecasting is run for both Tasmania and Victoria from 9am to 8pm for the next six days. The first two days are done at a high resolution, the following four days at a lower resolution. The high resolution version, with grids of between 2km and 3km, is good enough to predict wave and convergences but takes between three and four hours to process for each day in Victoria, hence only two days are done this way. For each hour, 24 specific attributes are charted, as well as a predicted SkewT-LogP for each airfield that hosts a VSA affiliated club.

Also, each morning, a site specific weather briefing is created for each airfield. This contains a synoptic chart and satellite image from that day, a three-day overview for the site similar to XCSkies, a chart of predicted convection height against temperature, similar to the BoM soundings, and a table of wind direction and speed for each hour. The three day overview is updated with the latest predictions as later day forecasts are completed.

MOST USEFUL ATTRIBUTES

Thermalling Height - the lower of cloud base or where the thermal strength drops below 225fpm (typical thermalling sink rate).

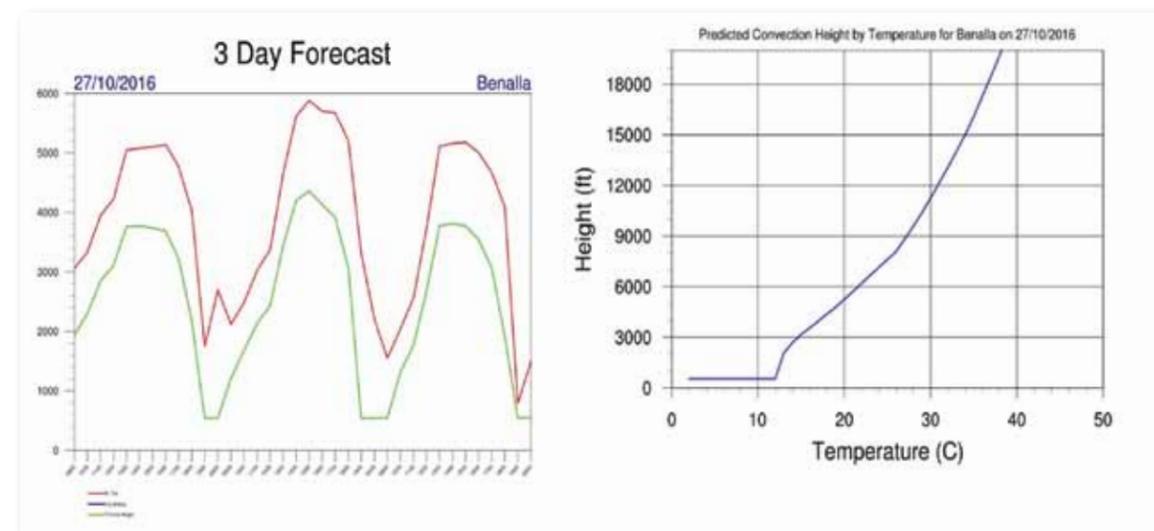
Cu Potential - measured in convection height feet above or below that required. From experience, any time this is above negative 1500, occasional Cu are likely to form, above 0, then Cu are likely to be widespread.

Thermal Strength - this is the predicted speed of the air mass, not your climb rate. Anything under 2 knots here is unlikely to be useful.

The colour scheme for all of these is consistent. Anything solid blue is no good. Pale blue through green is OK. Yellow to orange is good and red is very good.

THE NEW SYSTEM IS AVAILABLE AT

vicmet.gliding.asn.au/VIC and
vicmet.gliding.asn.au/TAS



LEFT: A three day soaring forecast with thermal tops in green.

TOWING BIG TRAILERS

Imagine driving along a country road, minding your own business, when suddenly a trailer separates from an oncoming vehicle. The 1 tonne, 9m long trailer lurches one way, then the other, the drawbar digs into the road surface, and it is immediately flung sideways right across your path just 20m in front of you. It travels at 80km/h towards you, and you're doing 100km/h towards it...

BY BOB DIRCKS

A trailer with no safety chain, no emergency brakes and nothing to restrain it - how could it happen? Well, just the other day, when exactly this incident was just a few seconds from happening, the driver of the towing vehicle felt that something wasn't right and decided to pull over and check the attachment of the trailer to his car.

The trailer was a brand new tandem axle Cobra glider trailer on its first journey, but without a glider. The towing vehicle was a late model Subaru Forester. All towing equipment was from approved manufacturers with appropriate standards tags. The towbar was rated for 1,600kg trailer mass and 100kg downforce. The safety chain and shackle were both over spec and properly attached. The cable to actuate the brakes in the event of a separation was also properly attached to the vehicle tow bar.

WHAT WENT WRONG?

The driver of the towing vehicle, on his way to pick up his glider, later reported a significant jittery, jolting feeling transmitted to the car, and wondered if the trailer override brakes were actuating in some sort of rapid cycle. After a couple of hundred kilometres he pulled over and checked the brakes. They were not warm and there was no sign of any abnormal actuation.

After about 500km on the journey, he thought the pattern of jitteryness had changed so he pulled over and stopped in order to inspect the towing attachments for any visible effect. When nothing appeared to be abnormal, he gave the drawbar coupling a little lift to check the fit on the towball and instantly the entire towbar assembly dropped from the car to the ground! He had stopped just an instant before it had come off at road speed. Who knows what would have happened then?

The steel attachment brackets had cracked completely through on both sides, so the lugs were still bolted to the car structure but the towbar had completely separated. The safety chain and emergency braking actuation cable were still attached to the towbar, but the bar wasn't attached to the car. The only thing still connecting the trailer to the car

We welcome this type of member contribution. Our National Safety Manager Stuart Ferguson is seeking more dialogue on safety hazards and risks that lie outside airborne operations. Our Executive Manager Operations Christopher Thorpe runs the SOAR reporting system and provides feedback on operations aspects. SOAR now has the facility to lodge three kinds of reports - operations, airworthiness and general. This contribution would fit the latter category.

The author makes telling points about pitch loads from glider trailers onto towbar attachments, and the wisdom of towbar mounting safety inspections. He provides estimates about the magnitude of such loads. Even if these estimates are inaccurate, we should note the frequency of those loads on attachments, the distances and road surfaces we have traversed, and think about the bad dips and potholes we may have encountered, with both laden and unladen trailers. Feedback on this risk issue will be welcomed.

DREW MCKINNIE CHAIR OF OPERATIONS cop@glidingaustralia.org

was the electrical wires for the trailer lights. The points of failure were hidden way up behind the plastic rear bumper, very difficult to see and almost impossible to inspect.

WHY DID IT FAIL?

Because of their mass, glider trailers have significant inertia. Not just longitudinally, vertically or laterally, but also because of their length and weight distribution, they have very high inertia around the pitch and yaw axes.

Most of us are aware of the yaw characteristics of our long trailers behind a light towing vehicle, and we are aware of the need for significant downforce on the tow bar - in other words, the trailer's centre of gravity needs to be ahead of the centre of lateral resistance, the axle(s). This provides directional stability to the combined vehicle.

However, I doubt that many of us have considered the possible effects of high inertia around the pitch axis and the effect of this on the towing vehicle.

Modern vehicles are designed for relatively smooth and even surfaces. Even SUV and 4wd vehicles, supposedly designed for the rough stuff, have all followed the trend towards short travel, stiff suspension. If we combine a towing vehicle with short travel and stiff suspension, with a long trailer that has very high inertia in the pitch axis, and add a relatively rough or uneven road surface, we can cause rapid and complete failure of the towing attachments.

This is because the rear of the towing vehicle, when it negotiates a vertical undulation, is made to rise or fall quickly with little absorption of movement by the vehicle's suspension. The restraint to movement comes from the pitch inertia of the trailer, transmitted through the drawbar, coupling and vehicle towbar. Although towing attachments are designed and rated for a downforce of around 60 to 100 kg, measured as a static load, I estimate that the combination described above could be subjecting the tow attachments to rapidly fluctuating loads of up to five times this amount.

We have seen glider trailers with drawbar failures, usually just ahead of the front panel of the trailer body. Trailer manufacturers have responded by making the drawbar assemblies stronger - and heavier. But what about towbar manufacturers and the standards they are certified for? I doubt they have ever considered this situation.

I suspect that the standards, design testing and certification of towbar mounts are a long way short of what's needed to give us reasonable safety.

I am writing this to urge all people towing big trailers, which is just about everyone in the gliding community, not to rely on approval tags when deciding that their towing system is safe for the job. Not only should we inspect the trailer drawbar, the coupling, the safety chain, the emergency brake actuation cable and the towball, but also the attachment of the towbar to the towing vehicle.

It is usually hidden from view up behind the bumper, and probably never gets looked at in its life. If you experience any jitters or jolting from the trailer, be aware that it is very likely to be severely overloading the vehicle towbar system, with forces and frequency that can rapidly cause fatigue failure. It really needs to be inspected quite often, looking for fatigue cracks, loose bolts or bent structure.

Please go out to your car now, and inspect the towbar mounts. Have a good close look, or get an expert to do it, before you next tow your glider trailer.

I would also advocate a review of the applicable standards and certifying procedures for vehicle towbars.

GA



Below is the text of an email I wrote on the GFA Forum regarding our membership recruitment and retaining issues. It attracted a lot of interest and comment so I thought I would put it here to reach a wider audience and hopefully provoke some thinking. With any luck, it will generate some plans and action by clubs and their members. Remember, GFA M&D is here to help, as are the State Association's M&D people. If your club wants assistance, contact us but be prepared to work hard and make changes to implement any program we agree on, lose the negative waves and only strive for success. With persistence you will succeed.

GFA FORUM EMAIL

We have had a range of views expressed on the current situation and ideas on how it can be improved. This is the GFA M&D view, which is not necessarily the GFA's broad view.

At this point there are no plans to change the current club system into a commercial system where you pay a fee to train and get a certificate or licence to fly, as happens in RAA or paragliding/hang gliding and general aviation. Why, you ask? Well, there are a number of features of the club system which I think most members would like to keep.

Social interaction - many clubs are, in effect, defacto Men's Sheds where people come together to work and play. I suspect this is an important part of the reason many people participate in gliding. I know people who have brought self-launchers with the idea of flying during the week, but then find that they do not because they miss the social contact that they don't get when flying this way.

If we move away from the club system, people would have to pay for their training, which in reality would reduce the total number of Instructors, as many would not be in a position to set up their own gliding school, especially if they are in full-time work that would pay a lot more.

The same would happen with maintenance. Many owners are not able to pay for this themselves and rely on the club system for people to help them.

As for setting up a gliding school to train people, this is just not a financial viability. To attract people you need modern equipment. For example, two ASK21 Mi's at \$500,000 plus hangar, office, instructors, ground crew, office staff and so on - would need a very high number of clients to even make a dent in the investment and ongoing costs. Nobody is going to be a full-time gliding instructor for a wage of \$40,000 a year.

So what is left? We continue with the club system and make adjustments, as I have been saying for the last three years, to accommodate the changing environment we find ourselves in. We are our biggest enemy - even though we know the result will be the same, we continue to do the same things as before blind to what is happening.

Why are we so stupid? In any other aspect of our lives we would not accept this and would look to find a solution just like in business.

So first, we need to get past our idea of what a club is, that is it a bunch of amateurs who are old/retired and have plenty of time on their hands and

no concern for time management and do everything on the cheap, while at the same time use the excuse that we are volunteers for not doing things in a professional and timely manner. No wonder new members leave all that time-wasting to get a few minutes of flight time.

Why would a young person join a gliding club? Sure, they are welcomed but they are often left to themselves for hours on end after the introductions, waiting for that elusive flight. Where's the fun in all that? People need to get over this attitude that it was good enough for me so it's good enough for you, sonny. It is really bullying and it takes a special person to put up with that in order to

learn to fly a glider, when the other 99% say, sod it - and go off and do something else.

Sadly, I agree wholeheartedly with Tim Shirley on making gliding fun. Gliding and glider pilots are boring, have an image of being boring, grumpy old men in dirty old clothes who like bossing people about. Just ask any paraglider pilot why they did not take up gliding. I have tried to rectify this but there is push back simply because people are so entrenched with how gliding is now, stuck in the 1950s, and so afraid of change that they cannot see any other way.

Now, some clubs have changed and been innovative and therefore successful. When I talk to other clubs and suggest things that could be changed and provide real life examples of how it has been successful at other clubs, what do people say? "Yes, but it won't work here" - and then go on to list all the reasons why they think it won't work because their club is special. They are not. All clubs are basically the same. They never list the reasons why it could work? All those negative waves!

So, what can we do to meet the changes in society? Well, your club could restructure its flying days to allow some flexibility for your members who don't have the time to spend all day at the gliding club, and remember, some may drive for one, two or more hours to get to the gliding club. It's a lot of time to put in.

The club could set up a booking system where its members could elect to attend in the morning or the afternoon. Some, of course, would stay all day. You can ask members to nominate when they are coming on a webpage, which would also help with instructor and fleet planning. That won't work, you say, but some clubs do it and it does work. The morning attendees set up everything and the afternoon attendees pack up everything. This system is a start and gives some flexibility to members.

What about attracting young people? You need to understand what younger people want - it is not the same as what a mature, retired person wants. Last year I tried to encourage members to work with the GFA and start a Gliding in Schools program as part of the Re Engineering Australia Foundation <http://rea.org.au/> which is part of a worldwide program but there was no interest in this - like so many other things. It would have made gliding, learning how a glider works and how to build one, a part of the school curriculum.

The clubs themselves need to forget the 'club' bit and start to operate in a more professional way. Does your club have a strategic plan, a budget? When I ask clubs if they have a budget, it's always the same answer. "How can we? We don't know how much flying we will do." Well, the same problem exists in business, but they still have a budget and have some way to measure their position. Plenty of club members are in business, so why not apply business planning to their clubs?

Club presentation - look at most clubs with open eyes and what do you see? People in dirty old clothes, gliders with holes in the instrument panels with wires hanging out where instruments should be, disorganized dirty workshops and clubs houses full of dirty old furniture - why do members think

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BEYOND 3000



that furniture that is unacceptable in their homes is somehow acceptable in the gliding clubhouse? All these attributes say one thing - gliding is an unprofessional and possibly risky operation, and people are turned off. People expect and demand a professional approach and we should provide it if we are serious about growing.

We also need to get past the way we currently sell gliding, which should be called soaring. We persist in presenting ourselves as a 'cheap' way to go flying, that somehow gliding is second rate to 'real' flying - that is, power flying. When a group of glider pilots get together with a beer, what do they talk about? Power flying adventures, never soaring adventures. Secretly, they still think they are inferior to power pilots and that somehow, not having an engine just does not cut it.

We have failed to understand that soaring is actually a sport, not a transport system like power flying, and fail to sell what we are really about - adventure into the unknown with nature.

Power flying is not soaring. It is completely different and trying to sell ourselves as some sort of poor person's power flying is only continuing to damage our sport.

We are a sport just like mountain biking, paragliding or sailing. Sailing is not sold as a 'cheap' alternative to power boating. It is promoted as an exciting challenge pitting yourself against nature. So we need to act like a sport.

Selling the sport of gliding - whether the personal challenge with nature or the challenge against your fellow pilots - that is what we need to do, as well as adjust our thinking of who we are and what we do.

Unless we can do this, we will never be able to achieve mainstream visibility just like other sports.

This ties in with the next issue. If we agree we are really a sport in our own right, then why is there a total disconnect between the glider pilot and the competition glider pilot? We seem to be the only sport where the day-to-day participant appears to despise those at the top of the sport.

We should be promoting our successes and be proud, just like all other sports. It is the right promotion of the pinnacle of our sport that will attract sponsorship and lead to increased presence in the mainstream. Only then will people who have the money and interest in a new adventure find us. Until then, we will be invisible. End of Email

WOMEN IN GLIDING

For the first time ever in Australia women are now the largest demographic representing 56% of the population and the way some clubs are structured along with old fashioned attitudes towards women by some backward thinking members we are effectively eliminating over half the population of Australia from gliding.

This needs to change, the age of the dinosaur is over and after all if young women can be fighter pilots and airline captains they can easily be glider pilots and it is our responsibility to ensure we have our share of this market and encourage them at every opportunity.

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

THE ART OF OCCURRENCE REPORTING

The Safety, Operations and Airworthiness Reporting System (SOAR) has been with us for some time now, so you would think that we'd all be pretty 'au fait' with the process, right? Well, to a certain extent the answer is 'yes'. Unfortunately, those of us on the GFA Operations Panel continue to encounter marked inconsistencies in both accuracy and content. Reports often lack important detail from those most directly connected with the incident or accident.

Every person directly involved with aircraft operations is entitled to raise a SOAR Report, either based on an incident or (preferably) a hazard observation. It is important for individuals to familiarise themselves with the guidance provided in the GFA's Manual of Standard Procedures and their Club's Safety Management System documentation. However, many members have never completed a SOAR report even though they have probably been in situations that could be classed as incidents. This is a common factor in gliding, primarily because of the misguided belief that the responsibility for raising SOAR reports rests with the Club CFI, which is a throw-back to the old days. The GFA SMS now requires that the narrative of the report is completed by the individual who is directly involved with the incident/hazard observation. The CFI has a supervisory responsibility in ensuring that a report is raised and may assist in completion and submission of the report. He should encourage the appropriate crew member to write the narrative particularly if he is not directly involved. Take this example:

"Undercarriage collapsed on landing just after touchdown.

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On inspection it appears from an outlanding the previous day the over centre gas strut has been fatigued and couldn't cope with the irregular grass strip surface at speed. It towed out fine (and back) but failed at landing speed."

At first glance, this narrative seems to relay all the information required. However, as the aircraft type involved is known for uncommanded wheel retraction during landing on rough terrain, a more detailed analysis of the 'fatigued' strut was required. After follow up action from the CFI, the narrative was changed to include more details, thus removing any ambiguity.

"Shortly after releasing from tow the pilot noted, by the excess noise, that one or both of the gear doors had not closed. Aware the springs had recently been replaced, the pilot suspected that one had let go. About an hour into the cross country flight and while the LS-3 was in a thermal, a pilot in a lower glider radioed the pilot of the LS-3 to advise that the LS-3's undercarriage doors were open and that it looked like the wheel was half down. The LS-3 pilot thought it was only the undercarriage doors and recycled the undercarriage. Upon completion of the flight and shortly after touching down the undercarriage collapsed. Subsequent inspection revealed the over centre gas strut had had lost pressure. The pilot advised that Annual Inspection during March identified the strut to be in good order and suspects that the damage may have occurred the previous day during an outlanding. The day earlier the pilot attempted to land short in a paddock to minimise the ground roll. The glider touched down heavier than normal in soft ground and quickly came to a halt. It is possible the

forces on the undercarriage during this outlanding may have overloaded the system. GFA AD 233, which relates to LS-1 to LS-4 type gliders, requires that a thorough inspection of the undercarriage system be undertaken after any landing the pilot believes may have excessively loaded the structure. However, because the shock absorbing nature of this type of undercarriage system is such that the pilot may not feel that the system has been overloaded, it is likely that some landings heavy enough to overload the system may go unnoticed."

This additional information allowed for a better understanding of this incident across a broader spectrum of Subject Matter Experts. When you submit a SOAR report, ask yourself the question, "Have I included as much relevant and detailed information regarding this report as possible?"

MEMBER PROFILE

Most members renewing their GFA membership in recent months were provided with a copy of their membership profile detailing all of the information that the GFA currently holds in their Member Record. Members are encouraged to let the Office know of any errors and omissions in the data and, where ratings and endorsements are incorrect, copies of logbook entries should be provided. Instructors and Charter pilots should note that only active ratings will be recorded.

Renewing members may also have noticed a new 'electronic' GPC attached to their Member Profile. The following operational endorsements can now be recorded

AIRWORTHINESS PROGRESS

We have made good progress on resolving the issues in the Airworthiness (AW) Department. As most of you know, a few years ago audits by CASA and GFA internally showed many items had been neglected for decades due to under-resourcing and we put in place a two year program to fix it all. We have completed all urgent issues and have all other matters in progress. We are pretty much back to business as usual and have CASA's confidence that we are on top of it. The ongoing issues are:

- MOSP 3 V7.2D has been published for use but we are still resolving issues and still working to get approval from CASA. We are still improving MOSP 3 together with CASA approvals, more delegations, exemptions, etc. In short, CASA have been asked for additional exemptions and delegations. Slowly, we are getting approvals and so change our MOSP to match. We will have V7.3 approved and issued shortly.

- Various unapproved modifications and repairs have occurred in the past. We are determined to resolve all these but we don't want to cause trouble for perfectly safe and, in some cases, safer gliders. Mostly, these modifications and repairs were done in the days when it was unclear what you could do, and were done wrong unintentionally. Bogus parts and unsafe modifications or repairs were never permissible but there are ways to get them approved. GFA has an exemption from CASA from the normal regulations on mods but this does not mean we can run amok. To resolve this we have been:

- Writing our own rules into MOSP 3 trying to be reasonable and allow whatever is safe in gliders. For example, we said that with some restrictions you can modify and install your own instruments.

on the new GPC:

- Carriage of Private Passengers;
- Charter Pilot - only if your club holds a current AOC;
- Self Launching Sailplane;
- Controlled Airspace;
- Cross-Country/Touring (Self Launching Sailplane);
- Independent Operator Level 1 or Independent Operator Level 2;
- Air Experience Instructor / Instructor Level 1 / Instructor Level 2 / Instructor Level 2 Ground or Instructor Level 3; and
- Low Level Finish.

MEDICAL STANDARDS AND CHANGES TO AUSTRROADS STANDARD

The GFA Medical standards are described in the Operational Regulations at Paragraph 3.2. Pilots who suffer from a medical condition described at paragraph 3.2.2(d), or who are Instructors or Charter Pilots, must hold either a CASA Medical Certificate or be examined by a legally qualified Australian registered medical practitioner and found fit to fly in accordance with the 'Austroads standards', certification of which will be evidenced by the completion of the GFA 'Medical Practitioner's Certificate of Fitness'.

The Austroads standard was recently updated and is contained in the new edition of 'Assessing Fitness to Drive for Commercial and Private Vehicle Drivers' that became effective on 1 October 2016. An electronic version of the standard, together with a summary of the changes in the new edition and other support materials, can be downloaded from the Austroads website tinyurl.com/h8qc7ky

- We also re-instated the Design Approval Group to enable cheaper approvals.

- But be clear that a certified or previously certified aircraft can only be modified by Engineer's Design approval, whereas Experimental Certificate aircraft can do more if they notify GFA and are restricted. (Note: LSA may only make mods and repairs under the manufacturer's approval.)

Please be sure all mods and repairs are approved on your glider. In particular, get them written up in the logbook in terms of the new MOSP 3 approvals. If approving them yourself isn't possible, please ask us for help on issues - you must have authority to approve it to GFA, or the manufacturer's data. We will have a campaign of finding and resolving the remaining issues. Remember you are liable even after the glider is sold if not done correctly.

- Basic Sailplane Engineering (BSE) has had a major update and has been published for use as Version 23. We intended that it not change the way we maintain gliders but hopefully that it improve the clarity and compatibility of the regs and MOSP 3. BSE still needs a lot of work. We will put out a V23.1 issue shortly to solve minor matters that came to light and then continue to improve it as our main reference document on carrying out maintenance and repairs. BSE Engines is also being finalized and will be republished.

- The training system has had major work done on it and we have provided many more courses this year. It is also a



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continued over page

work in progress. We recognise that our adult education methods needed changes and also that we need to allow people to have more flexible ways to study. But we cannot allow the standards to drop. So expect more improvements.

- We have the GFA ADs, AW Alerts and ANs published and the schedules improved. Many others are planned and will evolve. Please report (by SDR) if you find any errors.
- We had worked hard on the Maintenance Authority records. However, we still find errors in our data. If you do notice errors in your MA please let us know.
- Logbook Statements are a new process that we will soon be helping you to do. See below.

LOGBOOK STATEMENTS

We have written this new system into MOSP 3 and the RO Handbook. Originally we intended that all gliders be maintained according to the old GFA Form 2 system, but this does not suit everyone and is not essential. Most (95%) glider pilots will probably still elect to maintain according to the Form 2, but you have the option to change using the Logbook Statement.

The Logbook Statement is common in general aviation. Basically it allows a registration holder (the owner) to elect his own system within constraints - certain regulations limit this somewhat and we also don't want people doing poor maintenance - it affects future owners, reflects on the fleet and on Australian Gliding for doing the right thing.

It will mostly be useful to motorgliders and gliders subject to hours-based maintenance. Maybe you have already been operating on condition or doing annual maintenance rather than a 50-hourly. The Logbook Statement should allow this to continue and make it more transparent.

The main use of Logbook Statements is to clarify what system and which manuals you are maintaining your glider to. So eventually we will get you all to do a Logbook Statement for your gliders.

However, understanding what you can or have to do is not simple. We have been working this out ourselves. For instance;

- LSA CoA gliders have no option - they have to follow the manufacturer's system and get the manufacturer to approve everything.
 - Experimental Certificate gliders have more freedom but they have a complex system of rules.
 - Homebuilt gliders have more freedom but even they are restricted, especially once sold.
 - CoA gliders can take some freedoms but must stick to the certification or approved changes.
 - See the Registered Operator Handbook for more details.
- So if you want to deviate from the Form 2, or we see you

need to, we will help you with a Logbook Statement. In time the rest of you can fill in a simple version saying you will do the GFA Form 2. We will guide you in this. So continue maintaining according to the GFA Form 2 process as you did, unless your manuals state you must do hours-based maintenance or you have an LSA glider. If you think you need to change then send in a request.

Dennis Stacey, our Chief Technical Officer (CTO), is working on these and also improving Form 2 Appendix A for engine and prop maintenance, both 4-strokes and 2-strokes.

CALLING AERONAUTICAL ENGINEERS

Our Design Approval Group (DAG) has consisted of four volunteer engineers for the last two years. They have been fitting volunteer work into their busy lives to resolve your various Mods and Repairs at low cost. But it is a strain on them and we still have a lot of issues to resolve.

We are considering going to commercial suppliers because the system is not sufficient and too slow as it is. Consequently, owners would have to pay for engineering. Maybe this is more realistic in the modern world? You can do this now if you want a complex mod or quick service.

Please volunteer - the DAG is a useful and needed service within GFA. If you are or were a CASA approved engineer and you are prepared to do some volunteer Design Approval and hold a CASA delegation, please contact me. We need to spread this load and get more issues resolved quicker. We want to keep this going and improve the service.

THE WAY FORWARD

We try not to cause waves and angst. We don't have the resources to handle major upsets because we are keeping costs down by using volunteers. So we try to shuffle issues along and resolve them slowly. This does slow progress but we handle urgent matters and then gradually resolve the rest. Please be a bit patient or help but please let us know and if you don't get a reply please remind us.

We will issue GFA Airworthiness Alerts or GFA ADs if matters are urgent.

The best way to communicate with us is to email returns@glidingaustralia.org. The secretariat deals with these every day and assigns them to the best person. The secretariat is very good at resolving matters or getting help. Essentially any subject can be sent to 'returns'.

Also keep us up to date on your email or address via 'returns'. Registered Operators, you are legally required to keep us up to date.

ROB - THE CAD

AIRWORTHINESS DIRECTIVES

SERVICE BULLETIN MANDATORY

Within next 100 FH inspection or next annual inspection, whichever comes first, but not later than 31 March 2017.

GROB 109

G 109, all S/N G 109, alle W/N G 109B, all S/N G 109B, alle W/N GROB received two reports about a broken pivot of the tail mounting bracket, see

Figure 1. This led to a loss of rudder control in flight.

Ensure that the aircraft is safe for parking I.A.W. AMM

This Service Bulletin mandates an inspection of the tail mounting bracket. The configuration of the aircraft is not affected by this Service Bulletin.

1.8.1 Remove the rudder and the rudder drive-rod from rear lever 109-2807. Remove M8 self-locking nut from rear mounting bracket.

Remove lever 109-2807 with pull springs (refer to Figure 2)

1.8.2 Check the ball bearing in the lever

109-2807 for smooth running. If required, replace the bearing (item 1 of 2.2) and do repair instruction RI-817-15 before next flight.

1.8.3 Inspect the rear bolt of the mounting bracket for damage, especially corrosion and brush marks. If damage is found, do repair instruction RI-817-15 before next flight.

1.8.4 Assemble in reverse order. Tighten the nut (item 2 of 2.2) with a maximum torque of 16Nm.

1.8.5 Return aircraft to service.

productsupport@grob-aircraft.com

ACCIDENTS & INCIDENTS AUGUST & SEPTEMBER 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:	01/08/2016					
Date to:	30/09/2016					
Damage						
	VSA	QSA	NSWG	SAGF	WAGA	Total
Nil	3	4	1	3	2	13
Minor		1	1			2
Total	3	5	2	3	2	15
Injury						
	VSA	QSA	NSWG	SAGF	WAGA	Total
Nil	3	4	2	3	2	14
Minor		1				1
Total	3	5	2	3	2	15
Phases						
	VSA	QSA	NSWG	SAGF	WAGA	Total
Landing	3	3	1		2	9
Ground Ops			1	1		2
Launch		2		2		4
Total	3	5	2	3	2	15
Type of Flight						
	VSA	QSA	NSWG	SAGF	WAGA	Total
Local	2	3			1	6
Training/Coaching			2	1		3
AEF	1	1		1		3
Cross-Country		1		1	1	2
Total	3	5	2	3	2	15

6-AUG-2016 VSA RUNWAY INCURSION ASK 21

Gliding operations were being conducted from the main runway of this registered regional aerodrome as the grass runways were waterlogged and closed by NOTAM due to heavy rains. Around midday and just after a glider joined the downwind leg and while another glider was about to be launched by aerotow, the local Aerodrome Inspector drove a vehicle onto the active runway. The vehicle driver was not carrying a radio, and could not make or receive operational calls. The launch was aborted and the command pilot in the landing glider assumed control from the student as the runway was now occupied. The Aerodrome Inspector was under the mistaken impression that gliding operations could only be conducted from the grass runways and not the main runway. The Club CFI subsequently met with the Aerodrome Manager and the Runway Inspector now has a better understanding of his responsibilities. Runway inspections will be conducted before local flying operations commence and the inspector is required to carry and use a VHF radio when on movement areas.

12-AUG-2016 VSA FLIGHT CONTROLS XENOS

Under investigation. The spoiler actuating cable

pulled through the crimped fitting when the pilot operated the spoiler lever on base leg. The pilot made an uneventful landing without spoilers.



13-AUG-2016 NSWGA GROUND HANDLING PIPER PA-25 235

While the tow plane was being pushed backwards into the hangar at the end of the day's flying, the right wing tip struck a steel column supporting the hangar door, breaking the wing tip bow in three places. To assist crew to align the aircraft, two yellow lines painted on the floor mark where the mainwheels should be, and a red line between the



two yellow lines guides the tailwheel. The accident occurred when the crew repositioned the tail wheel of the aircraft on the yellow line markings instead of the red line. All persons involved in pushing the aircraft into the hangar were experienced glider and or towplane pilots. Factors contributing to the accident include:

- failure to align the aircraft on the hangar centreline before commencing to push the aircraft into the hangar (primary cause);
- attempting to correct original misalignment as the aircraft was being pushed into the hangar;
- aligning the tailwheel to follow the yellow line instead of the red line into the hangar;
- failure to ensure the wing tips were clear of the hangar door columns on both sides before pushing the aircraft onto the hangar;
- the red line does not extend outside the hangar onto the concrete apron, as the yellow lines do (see

- accompanying photos) making it difficult to see in low light;
- the red line was obscured by the tailplane and fin of the aircraft;
- the light was poor making it hard to see the red line; and
- fatigue was probably a factor in the accident.

20-AUG-2016 QSA RUNWAY INCURSION K 7

Under investigation. The student pilot had made a call on the CTAF advising a winch launch was about to commence as a powered aircraft taxied to the holding point about 250m ahead of the glider. The student pilot gave a rolling call as the winch cable tightened and, as the glider accelerated, the powered aircraft at the holding point gave an entering runway call and moved onto the runway. As the glider approached the top of the launch another powered aircraft was observed by the instructor passing below the glider. The winch driver stopped the launch early to prevent conflict and alerted the pilots of the powered aircraft of the hazard.

20-AUG-2016 SAGA RUNWAY INCURSION PIPER PA -JABIRU J170 25-235

Under investigation. Just after the aerotow combination became airborne an RA-Aus registered Jabiru commenced taxiing and entered the operational runway. The tow combination continued the climb and passed over the Jabiru by approximately 50ft. The Jabiru pilot had not sighted the towing combination and had not heard the departure calls made by the tow pilot.

26-AUG-2016 VSA CONTROL ISSUES ASK 21

Under investigation. The glider was under the command of a Level 3 Instructor and the handling pilot was a Level 1 Instructor being assessed for upgrade to Level 2 status. Prior to launch the handling pilot conducted the pre-flight checks, including confirmation that the airbrakes were closed and locked. During the flight the handling pilot activated the airbrakes but noticed the starboard airbrake did not deploy. Thereafter, the starboard airbrake would open and close intermittently without input from the pilot. The handling pilot returned to the airfield and a 'PAN' call was made during the downwind leg. The handling pilot flew a modified circuit and landed without further incident. The aircraft had been on static display at a local event the previous weekend and had been flown on seven occasions over the previous five days since being rigged.

27-AUG-2016 QSA PILOT INDUCED OSCILLATIONS ASK 21

The solo pilot flared for landing but ballooned slightly to about 2 metres above ground. The glider maintained that height for several seconds. The pilot then closed the airbrakes and the glider gained some more height. The pilot pitched nose down and then abruptly flared, and the glider touched down heavily on the nose wheel and

main wheel simultaneously. The aircraft experienced three pilot induced oscillations onto the ground before coming to rest. The pilot suffered minor back pain. Potential causal factors include inexperience on type, low currency, landing into the sun, crosswind and incorrect landing technique leading to over-controlling the glider in pitch during flare and hold off prior to ground impact.

27-AUG-2016 QSA RUNWAY INCURSION VAN'S RV-7

Under investigation by ATSB. The powered sailplane pilot made a lining up and departing call on the CTAF and, in the absence of any response to the calls, commenced the take-off run. As the powered sailplane accelerated down the runway a powered aircraft appeared over the crest of a hump in the runway. The sailplane pilot took evasive action by steering to the right onto the grass and came to a halt alongside the powered aircraft that had stopped on the runway. It is believed the hump in the runway prevented radio calls by both pilots from being heard.

3-SEP-2016 WAGA LOW CIRCUIT DG-1000S

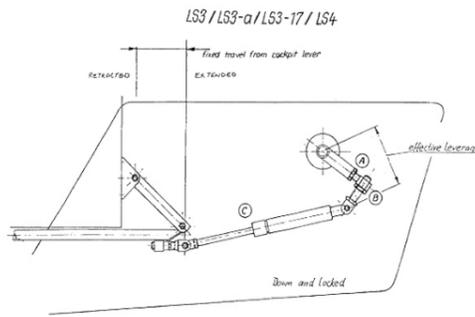
The pilot was conducting an air experience flight in pleasant conditions. Upon returning to land, the pilot approached the circuit joining area slightly higher than necessary and elected to conduct an orbit to the south of the airfield to lose height. During the orbit the pilot noticed a powered aircraft backtracking the operational runway (RWY 16). Once the orbit was completed the pilot joined the downwind leg further out and lower than normal. The pilot was now uneasy with the glider's position and modified the circuit by moving closer in, and then completed an uneventful landing off a short final approach onto the cross-strip (RWY 26). The pilot displayed sound airmanship by landing on an alternative runway rather than attempting to land back at the launch point.

8-SEP-2016 SAGA ROPE BREAK/WEAK LINK FAILURE DG-500 ELAN ORION

The tow plane had taken up slack and just started rolling when the weak link came adrift the tow rope. This occurred on the eighth tow of the day, and the same tow rope had been used all day. At the start of the day the weak link was swapped from one end of the tow rope to the other, and secured with a bowline knot. It is thought the knot was inadequately tied and came undone during the course of the day.

17-SEP-2016 QSA LANDING GEAR/INDICATION LS 3

Shortly after releasing from tow the pilot noted, by the excess noise, that one or both of the gear doors had not closed. Aware the springs had recently been replaced, the pilot suspected that one had let go. About an hour into the cross country flight and while the LS-3 was in a thermal, a pilot in a lower glider radioed the pilot of the LS-3 to advise that



the LS-3's undercarriage doors were open and that it looked like the wheel was half down. The LS-3 pilot thought it was only the undercarriage doors and recycled the undercarriage. Upon completion of the flight and shortly after touching down the undercarriage collapsed. Subsequent inspection revealed the over centre gas strut had had lost pressure. The pilot advised that Annual Inspection during March identified the strut to be in good order and suspects that the damage may have occurred the previous day during an outlanding. The day earlier the pilot attempted to land short in a paddock to minimise the ground roll. The glider touched down heavier than normal in soft ground and quickly came to a halt. It is possible the forces on the undercarriage during this outlanding may have overloaded the system. GFA AD 233, which relates to LS-1 to LS-4 type gliders, requires that a thorough inspection of the undercarriage system be undertaken after any landing the pilot believes may have excessively loaded the structure. However, because the shock absorbing nature of this type of undercarriage system is such that the pilot may not feel that the system has been overloaded, it is likely that some landings heavy enough to overload the system may go unnoticed.

17-SEP-2016 SAGA AIRCRAFT PREPARATION ASTIR CS

During a recent Operational Safety Audit it was observed that the aircraft had been flown a total of four days after the Maintenance Release had expired. A number of pilots had signed off the Daily Inspection without taking note of the expiry date and cleared the aircraft for flight when it was no longer airworthy. The Daily Inspector Handbook notes that the first step in the process is to check that the Maintenance Release is valid, and no Major Defects are recorded which prevent flight. Remember, a good Daily Inspection helps in avoiding incidents and accidents, by finding faults in or issues with the glider before it flies. It was reported that the club usually conducts its aircraft maintenance activities in the second half of each year. In the case of this aircraft however, maintenance had been completed earlier than scheduled in conjunction with an airworthiness refresher course last year. It is possible that confirmation bias may also have been a factor.

24-SEP-2016 NSWGA NEAR COLLISION GROB 103

Under investigation. On landing on RWY 20 grass, the instructor in the Grob 103 noticed a glider on very late finals for 32 grass. To avoid a collision the instructor put the glider into a slow ground loop to avoid the LS6 on the other vector.

24-SEP-2016 WAGA COLLISION GROB PILATUS B4-PC11 - PIPER PA-25-180/S

Under investigation. The pilot of the Pilatus was fixated on getting onto the runway and did not sight a tow plane established on final. The glider pilot turned final in front of the tow plane and in the tow pilot's blind spot. The ground crew broadcast on the CTAF for the tow plane to go around and the tow pilot complied. The tow rope struck the glider and wrapped around the tailplane but pulled free.

28-SEP-2016 QSA WHEELS UP LANDING NIMBUS 2

The pilot was launched by winch in nil wind conditions and found the thermals to be broken and difficult to centre. After some futile attempts to climb and stay airborne, the pilot elected to join circuit and land. The pilot lowered the undercarriage and joined downwind for a landing on the short cross-strip. The pilot observed the windsock had partially filled and was hanging at an angle of about 45 degrees, indicating the wind had picked up to about 10 knots. The pilot completed the pre landing check and set landing flap. During the base leg the pilot noticed the wind sock had gone limp, then the glider was turned onto final approach at a height of about 500ft AGL. The pilot recognised the glider was high and so extended full airbrake and employed sideslip in order to lose height. As the pilot recovered from the sideslip at about 100 ft AGL, he immediately questioned whether the undercarriage was down and despite looking at the undercarriage lever to confirm it was in the correct position, the pilot retracted the undercarriage (confirmation bias). The pilot then realised the error but it was too late to do anything about it and the glider landed with the wheel up and doors closed. The aircraft was undamaged save for some minor abrasion to the painted surfaces. The pilot commented: "I attended your Safety lecture at Gympie two weeks ago and here I am having to report on a SOAR (just done) that I have had the very thing you were stressing as the thing which is mostly unexplained as a happening, 'A Wheels Up Landing'... After your lecture and particularly the description of that Nimbus 2 Accident near Benalla, I have become very conscious of the 'wheels up' and indeed have spoken about it to some of the Members..... When I arrived over the fence a little bit over speed and a little bit high, my concern was a runway incursion. At that time, suddenly the question came into my head 'where's the gear?' even though I had done a FUST on downwind after previously lowering the gear. I switched hands and raised the gear but the Nimbus was too low at that stage for a recovery and settled very slowly onto the ground as the speed decayed. It is not a nice feeling. Conscious of a 'wheels up'? Yes. Thinking too much about it? Probably yes."

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