

GLIDING

AUSTRALIA

Issue 40 February - March 2018

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GRAND PRIX RACING AT LEETON

***MULTICLASS NATIONALS - SGP HORSHAM
1000KM NARROMINE - WAVE IN AUSTRALIA***

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GLIDING

AUSTRALIA

No. 40 February - March 2018

COVER: NICK GILBERT FLYING A STANDARD LIBELLE AT F 1.0 LEETON.
PHOTO BY AILSA MCMILLAN.

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www.store.glidingaustralia.org

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

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FROM THE PRESIDENT

THE FUTURE

I was driving a truck the other week and was held up on a hilly section near where I was to deliver it back to the owners. All sorts of vehicles were in my way - cars and another truck that was not in the right place - and I was riding the clutch to hold the truck on the hill. One of the firm's mechanics was standing near me and said, "Your clutch is on fire." I could smell it, but it was not on fire. It was just his way of saying, "You idiot, stop riding the clutch! You have been trained and should know better." He was right.

In gliding we are trained to fly using a set of standards, a bit like 'not riding the clutch', but occasionally we forget, or become overloaded, or just get confused because of the sheer number of obstacles in our way. Even rules that we are unsure of, or not sure if they apply, can impede our ability to fly as we were trained. It is those challenges that I want to address in the next part of this article.

STRATEGIC STRUCTURAL SAFETY

Wow, what a set of words that is, and what do they mean? How are we to implement them? I want to set up a new way of 'doing' safety, which I will try to explain after I make the following statement:

None of what I am saying below is a result of any recent fatal accident. There is no correlation between these ideas and what has happened to our sport, our friends, our fellow pilots. The results of the various coronial enquiries will come out in time. We cannot and will not pre-empt the results that are determined by these separate and independent investigations.

Having said that, I am pleased that the ATSB has decided to investigate one of our accidents and I sincerely hope that between the various investigations we will come out with some meaningful and reasonable actions that can be taken to minimize our future risks, both personal and organizational at all levels.

Some will say our recent accidents show that the safety system has

failed and we need more rules. I strongly disagree. Now is not the time to set up knee jerk reaction type rules. In fact, it is the time to carefully consider the rules we have, and ensure they are applicable and actually enhance safety.

OPERATIONS AIRWORTHINESS AND SPORTS

Operations, Airworthiness and Sports operate separately, rarely involving each other in their considerations. Each group considers the risks in their areas of expertise, and then decides on actions to enhance outcomes through appropriate rules and regulations. Historically, this has worked well. Our sport is generally safe, considering the risks in the activities we undertake, and each area has generally attempted to limit the number of new rules and regulations.

Some time ago, CASA effectively required us to incorporate a Safety Management System (SMS) into our federation. The Responsible Officer of GFA is the President, so we set up a GFA Safety System based on a GFA Safety Manager who reports directly to the President. Setting up a completely new system was not something we were practiced at.

To the credit of the Safety team, they have done a great job in initially setting up safety officers in each region and incorporating SMSs into the GFA. The clubs have also put effort into coordinating and training to ensure SMSs became real, and supported those that were implementing and incorporating these new systems. Safety Management Systems are now an effective safety tool in both the GFA and each club - appropriately sized, with minimal impact except where needed.

These Safety officers now have the relatively small job of supporting the club-based SMSs, and assisting the Australia-wide, multi-aspect (Ops and Airworthiness) safety seminars that are now being held.

MOVING SAFETY FORWARD

I believe it is now time to move



forward with the Safety team. In that light I have spoken to the team via a link-up, written a draft outlining my thoughts to them, and now I am trying to explain the aim to our larger membership. There will be those who disagree with what I propose, for what they see as valid reasons, but I respectfully say they are wrong.

It is true to say that what was considered safe 40 years ago may not be acceptable now. However, the same applies to the rules that maintained that safety - are they still applicable? I remember seeing photos from competitions many years ago that show silos from below their height to prove a turn was made. Is that acceptable now? No!

Fortunately, technology has advanced and taken that aspect of competitions away. We should review rules that were made in that era and make sure they are applicable and are not in place just because 'they have always been there'. We should also seriously consider if they enhance safety in the modern era.

QUESTIONING THE RULES

Many times, I have been driving on the road only to come to a 40km/hr roadwork sign and find myself travelling at 60km/hr or more because there is clearly no road works happening. What effect does this have on us? Well, first we start to ask, "Is that rule reasonable?" or "Should I obey it?" Honestly, I think most of us have said that to ourselves at some time.

Often, in this situation we consider if there is a police presence and then decide to take a chance or not. But we are not taking a chance on real safety - we are concerned about getting a fine for speeding. One of the consequences of questioning this type of rules is that we start to rationalize all rules, not just road rules, and start to question the reasonableness of any rule.

As pilots, we must have confidence that the rules and regulations that govern us are reasonable, or we will start to self-select the rules we obey - and that is a very bad place to be.

Occasionally we find that there are so many rules, or that they change so much, we just start to self-select those that are appropriate. Again, that is a bad place to be. This is the problem with overregulation or too many rules. What happens is that we choose something that is difficult to follow and one day decide it's probably OK not to do it. If it works, or doesn't cause a problem, or we simply get away with it, next time we do it again. Each time it becomes easier, and then it's part of the normal way of doing things until it goes wrong. This process is called justification of deviance.

SAFETY OUTCOMES

I don't want this situation to happen to us, so I have asked the Safety group to find a way to review any changes to rules and regulations and identify the real safety outcomes, using data, statistics, financial and time constraints as part of their reviews. This will inevitably lead to serious reviews of current but long-established rules and regulations, and some disputes. The real question is - what are the unintended consequences of these rules to Operational (including Airworthiness and Sports) safety? Younger members of our organization are often turned off by the ease with which we put rules in place for no obvious, practical reason.

This will require good, clear-thinking minds. However, while the Safety group is well suited for this, their members are too few and reviewing rules is a big, ongoing task. We will need

more people who are willing to throw out their fixed opinions and look for real safety outcomes. Such outcomes need to be embedded in the three areas of our organization - Operations, Airworthiness and Sports. To be fair, this has already started with the safety seminars.

REAL SAFETY

Let's make safety real, ensuring that our accountability is documented, datafied (is there such a word?) and carefully thought through with cost and effort included in our considerations. Luckily, some people have historically done this - Bob Hall, a previous President of GFA and a person well thought of in other aviation circles, is one who comes to mind.

I believe we should question new or changed rules and regulations, especially if technology or techniques have advanced, and if unintended consequences may have changed people's understanding or approach. Indeed, if others in aviation are allowed to do things that we cannot, we need to question why, and whether it is applicable to our needs and wants.

Some readers may think I am trying to change our three operational areas, but this is not the case. I simply feel that we have to have a safety system that is not held back by the current silos and one that can evolve to include and maximise those procedures that truly increase safety, and minimize those that don't. As a bit of my history I have been an Instructor, RTO (now RMO) and Chairman of the Operations Panel, an Airworthiness Inspector for over 40 years and conducted occasional airworthiness training courses. I also fly in competitions at least every year. I believe I have a vested interest in

'real' safety and understand its limitations. If you are interested in helping this new approach please contact Stuart Ferguson, the GFA Safety Manager.

SOCIAL MEDIA AND NEGATIVITY

We often see a lot of negativity on social media. People complain about problems that in real life are trivial or not really life threatening decisions. Social media has a place in our communications, and adds excitement and knowledge. But in fact, we set up the GFA Facebook and Forums specifically for members so that they are partially shielded from poorly-informed opinions or those people who are continual complainers.

I have seen some great questions and discussions on both these outlets, and they have advanced the knowledge of members as well as serving as great social platforms. All I ask is, if you don't like a post, just say so in a respectful manner and include why you believe it's not correct. We all have different opinions on many and varied subjects. Our sport should draw us together, not divide us by poorly thought out belligerence.

THE FIRST F1.0 GLIDING RACE

Talking about social media and excitement, did you see the F1.0 glider race in Leeton? The amount of social, print and visual (TV) media around it was awesome, and the excitement was intense. It was even better for the pilots. It was just like the 'old days' - it was fun, with kids and families everywhere. Is this a glimpse of the future? I hope so.

PETER CESCO
PRESIDENT

president@glidingaustralia.org



FROM THE EO

GLIDING CONDITIONS IN DEC/JAN

After a slow start to the soaring season, it is pleasing that December and January saw some really great flying opportunities. Many clubs have held camps in some of the hotter regions with a corresponding jump flying hours and badge flights, and a significant number of 750 to 1,000km flights achieved in all states.

Several formal coaching events took place in all states and the participation in State and National championships has been great. I trust that you have all enjoyed the soaring available in your part of the country.

Events that I am aware of:

- Flying Further Coaching, Benalla
- WAGA State, Narrogin
- NSW State, Temora
- Narromine Women's Coaching
- Leeton Formula 1.0
- SA Coaching Week
- Waikerie Nationals
- Joeyglide
- Horsham SGP
- VSA Coaching week

OO APPLICATION IS NOW FREE

As mentioned on the GFA Forum, it is now easier to become an Official Observer (OO), and we have removed the fee, so there is no charge to take this step.

The application form, which includes a short test on your knowledge of the Sporting Code, is available on the web page www.glidingaustralia.org - look under docs/forms and then forms. We plan on making this an online application in the near future, but for the time being you need to print and post or scan the paper to the FAI Certificates Officer, Beryl Hartley.

The OO is an important role, in that it ensures we have a group of members who know the rules, and confirms that pilots have met the standards set for this international recognition.

ON-LINE AEF APPLICATION

The current process for Introductory memberships (Air Experience Flights) is for clubs to pre-purchase a book of membership forms and then sell these to the visitor prior to their introductory flights. We are now trialling an online

application/purchase for the form which will save clubs from having to pay large amounts up front. It also means that the club and GFA have contact information for the visitors so that we can continue to promote our sport once they have had their flight(s). Once we have verified that this process is working, we will make it available to other clubs. Clubs may continue to pre-purchase paper forms if they wish.

INSTRUCTOR TRAINING FOR S2F

As part of the S2F program we are looking at further or increased education for Instructors in the area of teaching and learning techniques. This is based on a CASA program - Principles and Methods of Instruction and will be offered initially to the S2F trial clubs and then be more broadly available to other clubs around the country.

WORLD TEAM SELECTION

With the National championships now concluded except for the 20m Two-seat Nationals, 11-18 February at Narromine, the International Teams Committee (ITC) has been making offers to pilots to compete in the two world championships later this year:

- Ostrow, Poland. 8 - 21 July - Club, Standard, 15m Classes.
- Pribram, Czech Republic. 28 July-11 August. 18m, 20m, Open Classes.

The pilots selected so far are:

- Club - Allan Barnes, Jim Crowhurst
- 15m - John Buchanan, Adam Woolley
- 18m - John Buchanan, Adam Woolley
- Open - Scott Percival

SUGGESTIONS FOR S2F

With improvements in technology and communications and the increasing lack of volunteers, we have an opportunity to modernise the way we manage our events in Australia.

I welcome feedback and additional ideas on the following suggestions as to how we may do things better going forwards.

ENTRY AND REGISTRATION

GFA could set up a centralised registration and payment system for events. Organisers should be encouraged



- Standard - To be confirmed
- 20m - To be confirmed

ACCIDENTS AND INCIDENTS

I cannot avoid making a short comment about the fatal accidents over the past four months, in which five of our members were killed. I knew four of them very well, which makes it quite personal. I will leave it to the people making the investigations to advise outcomes and lessons learned, except to comment no apparent systemic issue exists. All of the accidents were very different with no common thread, except that all pilots were quite experienced. It shows that our sport does have dangers and we all have a responsibility to monitor our own capability and currency and to look after our friends. I send my condolences to the families and friends of all five pilots.

TERRY CUBLEY
EXECUTIVE OFFICER
eo@glidingaustralia.org

CATERING

We are gliding clubs, not catering clubs. Members do not join GFA to cook, they join to fly. Clubs could be encouraged to outsource these roles to professionals, or to consider other options such as a grant to install an industrial kitchen or upgrade existing facilities. Talk to local pubs and

restaurants and arrange for them to deliver meals to the club, or get pizzas delivered.

Regarding bar sales, installing payWave/iPad units for bar sales and evening meals maybe an alternative. Many institutions will give you a free one month trial.

CLUB FACILITIES

Make the club house a pleasant destination for crews and families. Hire a pool table, a paddling pool or hire movies. Apply for a grant to install effective air conditioning. The recent Formula 1.0 event was a great example of a family-friendly event. We saw children cleaning gliders and running wings, which meant pilots were able to invite family members knowing they would be comfortable.

Many grants are available to improve facilities to increase female and youth participation, which fits well with our S2F agenda. Sports Community are ready and able to assist clubs with grant applications - contact me for an introduction.

COMPETITIONS

There are a number of regatta and competition-specific activities that could be pursued.

BRIEFINGS

Tasks could be published early on line. Pilots look at the forecasts themselves, so the briefing only needs to explain the organisers' thoughts regarding task-setting.

Prepare Power Point presentations for pilots showing airport and emergency procedures. This job only needs to be done once and the presentation then becomes a resource for all visiting pilots.

MEDIA

Invite Year 10, 11 and 12 media studies students to come along and produce videos to post on Facebook. Horsham GP does this very successfully.

SAFETY OFFICER AND OPERATIONS DIRECTOR

Consider using one of our increasing pool of Level 2 Ground Instructors for this role.

SCRUTINEERING

At the recent Horsham GP, we received pilot agreement to use the Waikerie Nationals weighing results from the previous week, rather than re-weighing all gliders in 39°C heat. There should be a way to extend and repeat this. At the Waikerie pilots meeting, all pilots indicated that they knew what their weight should be. The weighing process is a huge impost on organisers that could be removed by Sports Committee with some suitable rule

changes and pilot co-operation. Scales would be made available for any pilot to weigh themselves, removing the onus from the organisers.

GRIDDING AND LAUNCHING

When launching competition gliders, it should not be necessary to record every individual flight time and assign a tug to a glider. The launches are a fixed price, the tug pilots know how many minutes they flew, and how many launches they did. No more information is needed to calculate charges. For SAR purposes we need to know who took a launch but nothing more.

At several recent events I have challenged the need for someone to complete a full detailed flight sheet but have never been successful in persuading a change in procedure. "We have always done it this way"... Think about the manpower needed to do this every day

plus the time taken in data entry and tell me why a pilot must do this rather than go flying.

Tug pilots are not occupied before launching and can be put to use to assist with gridding - I have seen this done successfully at several events now.

SCORING

Scoring can easily be done remotely nowadays to reduce volunteer commitment. Collecting complete pilot information before the event greatly reduces workload.

WEATHER

Weather could also be analysed remotely using modern equipment to reduce volunteer commitment.

MANDY TEMPLE CHAIR S2F
s2f@glidingaustralia.org

THE END OR A NEW BEGINNING?

With an aging GFA membership, it is inevitable that in the coming years many of our members will be faced with the decision to relinquish command flying. For many, gliding will have occupied a huge chunk of their lives and the transition to ex-pilot will be daunting. While some will leave flying permanently, opportunities still exist for those who wish to continue participating and contributing to the sport well beyond their command-flying days. Opportunities exist to fly in a two-seater as a co-pilot, or for coaches to continue in-flight coaching while flying with a competent person. Level 2 Instructors can also continue to

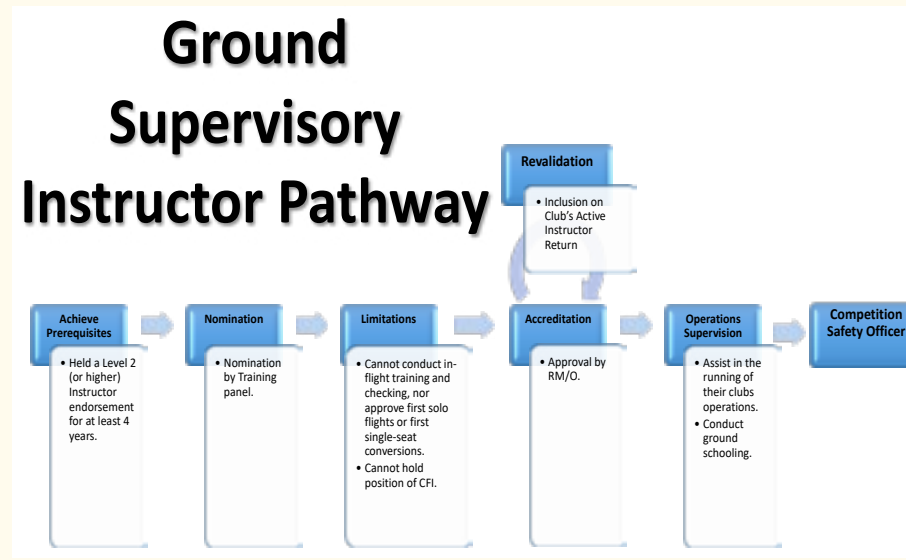
contribute by taking up a Ground Supervisory Instructor role.

I therefore encourage all clubs, committees and CFIs to actively encourage their elder statesman to remain within the system and contribute their lifetime of learning and expertise to the club and its members.

A Ground Supervisor Instructor can provide a valuable role as a DI mentor, briefing AEFs, act as a Competition Safety Officer, conduct ground schooling and, increasingly in the future, run simulator training sessions.

This diagram summarises the process.

MANDY TEMPLE



GFA CALENDAR

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

HORSHAM WEEK COMPETITION

3 – 10 February 2018

www.horshamweek.org.au

AUSTRALIAN NATIONAL 20 METRE CHAMPIONSHIPS 2018

11 – 18 February 2018

Narromine Aerodrome

For further information: Contact Beryl Hartley 0407 459 581

www.narromineglidingclub.com.au

KEEPIT REGATTA - LAKE KEEPIT

24 February – 3 March 2018

All pilots are invited to the Lake Keepit Regatta for a week of fun, friendly competition and coaching. Ideal for beginner and intermediate cross country pilots that want to start competition or

improve XC skills, as well as seasoned pilots who want to take it easy and share their knowledge. Daily talks and briefings by experienced coaches and seasoned competitors on topics of interest and, of course, we will finish Saturday evening with the traditional extravaganza dinner at the Dirck's. We have eight new cabins and lots of camping sites but make sure you register early as the cabins get booked very quickly. Bring your glider, borrow your club dual seater, or rent one of ours (limited availability). Come have fun at the gliding paradise. Entry fee only \$180 per glider and \$50 per additional passenger if paid prior to 31 Jan, late entry \$230 per glider and \$70 per additional passenger post 31 Jan. More information and registrations at www.keepitsoaring.com or email Jacques Graells jg.gliding@gmail.com

VSA ALPINE REGATTA

3 – 9 March 2018

Please contact Ian Grant, ian.grant.gliding@gmail.com or VSA website www.gliding.asn.au

BUNYAN WAVE CAMP 2018

15 - 23 September 2018

Canberra Gliding Club - Bunyan

NSW Contact details - Club

Captain David McIlroy

dmcilroy@me.com

20TH FAI EUROPEAN GLIDING CHAMPIONSHIPS

11 - 25 May 2018 in Turbia,

Poland.

18m, Open and 20m Classes.

35TH FAI WORLD GLIDING CHAMPIONSHIPS

8 - 21 July 2018 in

Ostrow Wielkopolski, Poland.

Club, Standard and 15m

Classes.

35TH FAI WORLD GLIDING CHAMPIONSHIPS

28 July - 11 August 2018

Pribram, Czech Republic

18m, 20m and Open Classes.

WOMENS WORLD GLIDING CHAMPIONSHIPS LAKE KEEPIT

3 - 17 January 2019

Date change The change should make it easier for competitors with leave and family commitments to attend the championships.

FAI GLIDING BADGES

TO 25 JULY 2017

A BADGE

YUEN SIN TUNG 12311
O'SULLIVAN KEENAN 12315
MARSCHALL JENNA K 12317
STOJANOVIC DENIS 12319
LEGG-BAGG GREGORY J 12325
JI WU JUN 12326
LUI WING SZE 12329

GYMPIE SC
DARLING DOWNS SC
DARLING DOWNS SC
DARLING DOWNS SC
BYRON BAY GC
NARROMINE GC
GYMPIE GC

REARDEN RORY C 12323
CURD JORDAN S 12324
ELLIOTT GERRY 12327
AIRD ROHAN J 12331

SILVER C BADGE

BRASSIER DOMINIQUE 4935
DE REZENDE ZACCARI 4936
VAN SCHALKWYK
ALBERTUS J.B. 4937
REARDEN RORY C 4938
HILL TONY 4939

CABOOLTURE GC
BUNDABERG GC
GRAMPIANS GC
GC OF WA

BATHURST SC
STH RIVERINA GC

BALAKLAVA SC
CABOOLTURE GC
STH GIPPSLAND GC

B BADGE

WHITE ANDREW 12273
BRED A VITO 12280

LAKE KEEPIT SC
DARLING DOWNS SC

A, B BADGE

LOFTUS PETER E 12316
BARRINGTON GREG 12320
BOTES DAVIE 12322
WHIDBORNE STEPHEN J 12328

KINGAROY SC
BUNDABERG SC
NARROGIN GC
ADELAIDE SC

GOLD C BADGE

CRAWFORD ROBERT W 1737
RAMMELT SIMON H 1738
MORRIS CARL E. 1739

NARROGIN GC
KINGAROY GC
ALICE SPRINGS GC

B, C BADGE

CREAM GREG 12298
POZORSKI-PASCOE
ALEKSANDER 12301

NARROGIN GC
KINGAROY GC

DIAMOND GOAL

JACOBS CARL WARWICK GC
DAVIES LLEWELYN LAKE KEEPIT SC
CRAWFORD ROBERT W NARROGIN GC
WHITTLE ROSS F LAKE KEEPIT SC

C BADGE

SCHUSTER NATANÉL G 12293
REGAN JESSE MI 12303
REBBECCHI BRIAN 12251
WHITE ANDREW 12273

BUNDABERG GC
NARROGIN GC
BENDIGO GC
LAKE KEEPIT SC

DIAMOND DISTANCE

HELBIG DANIELA K BATHURST SC
NOVAK EDDIE SYDNEY GLIDING
DAVIES LLEWELYN LAKE KEEPIT SC
FERRIER RODNEY J SOUTHERN CROSS GC
BRACKLEY ROGER HUNTER VALLEY GC

A, B, C BADGE

MATTHEWS RANDALL R 12310
EVANS TEAL G 12312
DE REZENDE ZACCARI HELENO 12313
VAN SCHALKWYK ALBERTUS J.B. 12314
JURASZ JAKUB Z 12318
LIVINGSTONE DYLAN 12321

G.C.V.
ADELAIDE SC
STH RIVERINA GC
BALAKLAVA SC
ADELAIDE SC
QLD ATC 200

DIAMOND 600 BADGE

DU PENG (ANDREW) 114 NARROMINE GC

DIAMOND 750 BADGE

SMITS ROBERT 163 ALICE SPRINGS GC

It has been a successful season with many badge flights achieved and I find I am busy with question on the sporting code. It is a huge document and many seek simple answers to badge flight attempts. Here is a short list that may be helpful.

SILVER C: 5 HOUR DURATION FROM RELEASE

50km DISTANCE FROM RELEASE (Declaration – Name of pilot, aircraft, Official Observer)
1000m HEIGHT GAIN

GOLD C: 5 HOUR DURATION FROM RELEASE

300km DISTANCE (Declaration – Name of pilot, aircraft, task, Official Observer)
(Straight distance, Out and return or not more than 3 turnpoints shape) 3,000m HEIGHT GAIN

DIAMONDS:

GOAL – 300km OF A PREDECLARED CLOSED CIRCUIT OUT AND RETURN OR TRIANGLE (Declaration – Name of pilot, aircraft, task, Official Observer)
Note – The start and finish point must be the same 1km line.
DISTANCE – 500km DISTANCE (Declaration – Name of pilot, aircraft, task, Official Observer)
(Straight distance, Out and return or not more than 3 turnpoints shape) 5,000m HEIGHT GAIN

Send to Beryl: COMPLETED CLAIM FORM, IGC FILE, GREEN GLIDING CERTIFICATE BOOK
PAYMENT TO BE MADE THROUGH THE GFA SHOP ONLINE UNDER THE FAI SECTION
PILOTS MAY MAKE THEIR FLIGHT DECLARTIONS ON LINE IN THE GFA WEB SITE. LOOK FOR THE BLUE BUTTON ON THE FRONT PAGE
SAFE FLYING BERYL HARTLEY

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.

BADGE DECLARATION

Click the [BADGE DECLARATION](#) button on glidingaustralia.org to go straight to the form. Or use this address inyurl.com/hsp4h7p

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. tinyurl.com/hsp4h7p

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



The holy grail of 1,000k has been eluding me for some time now. I did 830km in the ASW28 and then 905km (970km OLC) in the ASG29 a few years back. I eventually decided it is OK to do it in stages – any shape in the ASW29, FAI triangle in the ASW29, any shape in the ASW28, then the ultimate FAI triangle in the ASW28. To this end, last Easter Jenny Ganderton and I decided that after the NSW Comps we'd come to Narromine and try for 1,000k till we made it or got sick of trying!

A very experienced coach recently said doing a 1,000k is just a matter of being in the right place at the right time. Granted, that's a necessary condition, but not sufficient. A few other stars need to align as well – the right weather, a serviceable aircraft, a serviceable pilot, an early launch and a modicum of luck.

WEATHER

The one thing I've learned about weather in 35 years of

flying is that I can't predict it. But for me the 'right' weather for such a flight is a long day, rather than a strong day – and not too windy.

AIRCRAFT

Your aircraft needs to be up to the task - Andy Pybus suggested an LS4 or better - and rigged, and have everything working, oxy filled, batteries charged, 10hr logger, points loaded, 3L+ of drinking water, food and pee system. Many pilots have been delayed by things like arriving late or outlanding the day before, and having to rig, fix things, fill oxy, charge batteries or load points.

PILOT

The pilot must have general experience, enough currency on type to be happy thermalling low for the early morning drift off downwind, attention to detail with declarations, experience rounding turns etc, some speed skill in the middle of the day, adequate physical condition (well rested, fed, watered and oxygenated), the ability to pee in flight and a great deal of persistence at the end of the day when a wise man would go home! Bigger and better pilots than I have been defeated by poor declarations, missing turns/finish, feeling unwell or giving up when hope was there.

On Saturday 23 December, some of those stars aligned. The forecast was for an early start, good climbs and cu up to 10,000 ft in a corridor to the north, a light northerly and a late finish. Skysight's experimental projected task distance for 18m Class was around 800km. Clearly the '29 is up to the task – in fact 18m Class is cheating! It was rigged and fully operational with water, full oxy, charged batteries and logger with Narromine record points.

Having flown the Women's Training Week at Narromine, the NSW comps Temora and 750km the day before, I was

current in the '29. The said 750km left me feeling a bit tired and not welcoming reports that "today is the day, not tomorrow". However, because we had believed Sunday to be the day, I hadn't been burdened with thoughts of '1,000k tomorrow', so I had actually slept well and long. I clearly lack the ideal speed skills, but have more than my share of bloody-mindedness to make up for it – and pedantry to get the task details right!

An early launch can be somewhat problematic on a big day with others jockeying for position. Mac had marshalled Akemi's LS8 before briefing and was towing his V2CXA as I ran from briefing towards my car and glider. Being third in line behind two high tows of 4,000ft delayed my launch till 11am, potentially much too late for 1,000k. Meanwhile, Jenny self-launched at about 10.40am and was underway when I launched.

Luck entered into the factors determining task and weather. Because the Narromine record points did not include either Mac's out/return point near St George or Jenny's points of Lightning Ridge - Koorawatha, I had to use other points in the same good task area to the north. What's near Lightning Ridge? Walgett. What's south, but not too far into the poorer weather? Forbes. What's far

enough north again to make 1,000k? Collie? No, not enough. Coonamble? YES. 1,021km – that'll do!

Regarding weather, the late start was not a huge disadvantage, as cu's were already popping, so I was able to tow to 2,000ft, climb to 4,000ft and go. The haphazard task setting worked well because Forbes was near the edge of the cu - sheer genius, I say! The blue to the south caused Jenny to abort her declared task and revert to an OLC thousand. And again, the late start and sometimes slow going were only a small penalty since the day lasted till stumps.

A critical point was the second passing abeam Narromine. There were many reasons why a sensible being should give up and land. Heading away from home into a dying sky with 280km to run at 5.30pm – you're kidding, right? If I go on, I'm putting all my eggs in one basket - with a high risk of outlanding and spoiling any chance of another go tomorrow. But one reason remained for a bloody-minded fool to go on – how many times will I have under my belt at around 750km, at this hour, with the possibility, however remote, of making 1,000km? I'm going till I make it or outland trying! So the day goes like this

The Girls From Narromine

*There was movement at the airfield for the word had passed around
That the day had come to fly 1,000k.
It's the holy grail for soaring dreamers anchored to the ground
So all the pilots gathered to the fray.*

*There was Makoto in the V2 and Akemi in the 8
And Jenny put her 26 on line
Still recov'ring from a big task that finished rather late
Kerrie finally towed out her 29.*

*Mak declared an out/return task way up to the north
And Jenny set the Ridge then way down south
But Kerrie didn't have those points so searched the whole list through
Walgett-Forbes-Coonamble will have to do!*

*As Mak 'n Akemi towed up high,
the tug was gone a while
While Jenny launched cu's popped around the sky
So Kerrie loaded in the task, Beryl nodded with a smile
Then close the canopy, hook the rope on, fly!*

*The time was now 11, pretty late for 1,000k
But the thermals were already working high
So tow to 2 and climb to 4, now start and on your way
Don't think about how far you have to fly.*

*Seemed a slow trip up to Walgett,
is that wind just in the mind?
Jenny kept her 40k lead all the way
Around the turn and climb to 9,*

*enjoy the wind behind
The Altair seemed to gobble up the k's.*

*"Tango One 'beam Narromine, heading down to Forbes"
Was easy when the time was just 3.30
But with more kilometres to go than those already forged
The thought of finishing was just a flirting!*

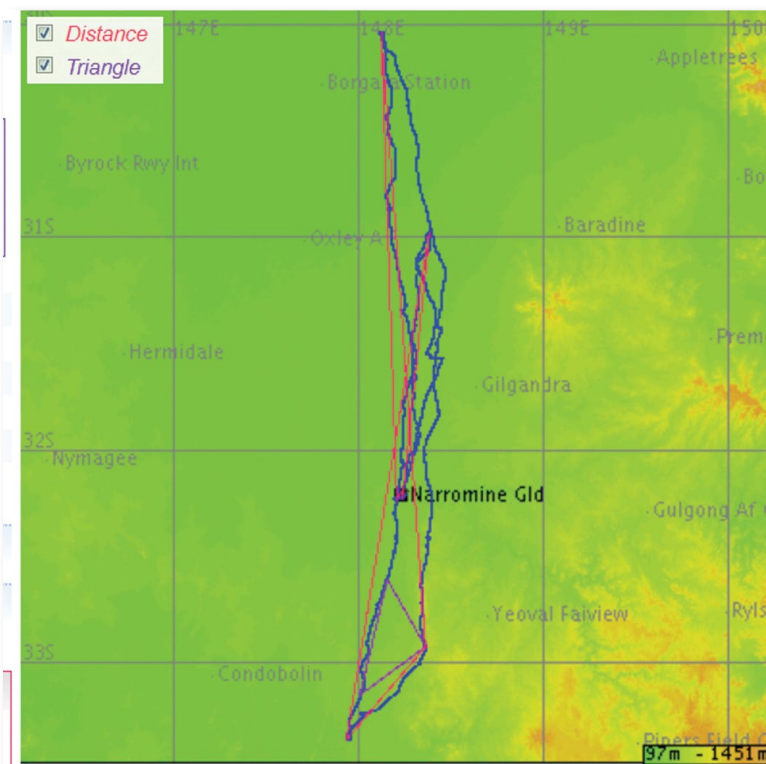
*Forbes field was on the edge of cu
so tip toe in and out
Back into wind but climbing ever higher
Cruising up round 10/11, certainly is no doubt
Oxy is the drug for every flyer!*

*"Tango One 'beam Narromine,
heading for Coonamble"
Was harder when the time was now 5.30
And the sky was looking flatter with 280k to amble
But how often do you get the opportunity?*

*The leg up north was not so bad,
good climb before the turn
But heading south it started to blue out
Go back to where you climbed before
& take it to the moon
But leave when it was starting to drop out*

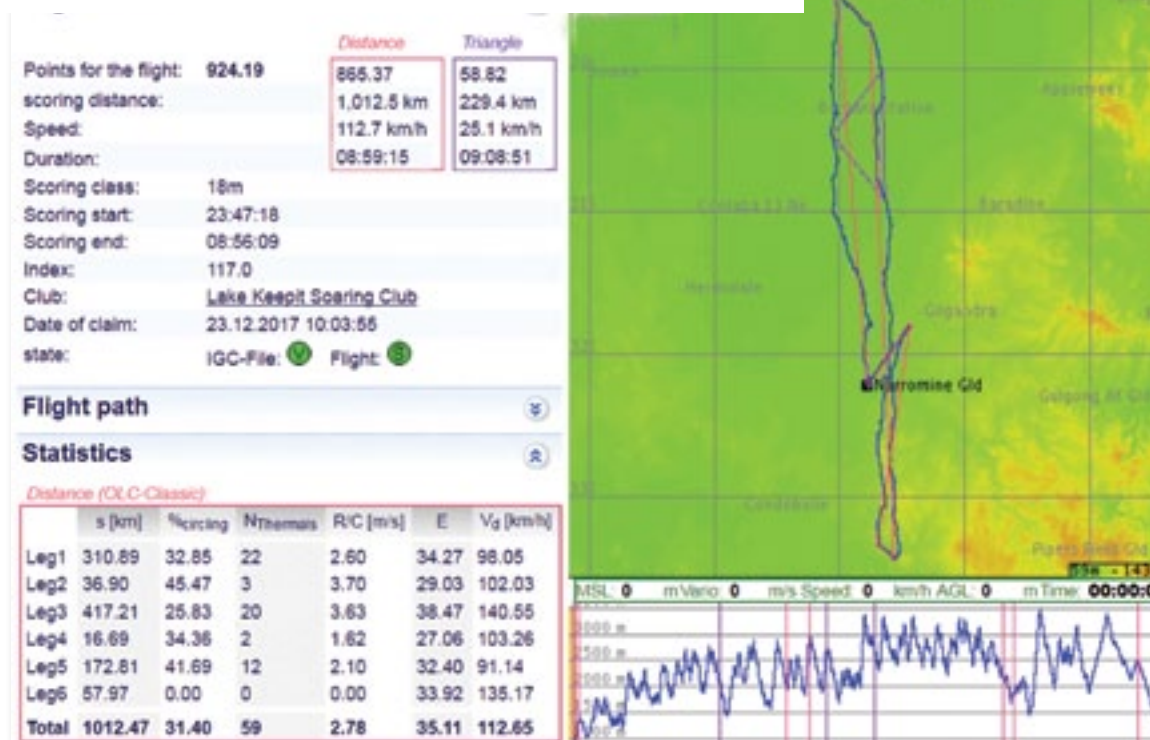
*Oh dear I wish I'd stayed in that and taken it to glide
Still 2,000 ft below, just one more chance
Take 1.5, then up to 2, be grateful for all you find
At last a final glide, tempting to dance!*

*Overfly the finish point, left downwind on 22
It's 8.15, one minute after sunset
Jenny's there to meet me, she's done 1,000 too
We celebrate the bestest Christmas yet!*



THE 1,000KM GOAL!

BY JENNY GANDERTON



I am not very good at going fast in a glider, so I tend to specialise in going far instead. The trouble is that you get to a point where you have to go faster in order to go further, or you run out of daylight. Everyone says you get faster if you fly in competitions, so I have been flying a few comps in order to get faster.

I have known Kerrie Claffey for years, since my hang gliding days. We met up at the Queensland Easter Comp at Darling Downs Soaring Club last April. We made a pact that after the NSW State Comp, we would go to Narromine and attempt a 1,000km flight – she in Tom's ASG29, and me in my half of the ASH26E. The thinking was that I would definitely get home as I have the engine, and could retrieve her if she landed out. My syndicate partner in the 26E agreed, so the plan was on!

After Temora, Tom flew the ASG29 to Narromine. I had to swap my Standard Cirrus for the 26E. I was able to fly the 26E from Keepit to Narromine thanks to Robert Smits, who drove the car and trailer.

The flight across was awful – 5,000ft, hot and blue, but I managed it without starting the engine, albeit as slow as the car! This experience proved useful on later flights, starting early in low blue conditions.

On the first good day, 22 December, we declared Coolabah Rankin Springs for a 770 km FAI triangle and managed to more or less fly together until the first turnpoint. After that, Kerrie deviated east to stay under the cu for longer, and I charged on into the blue! Kerrie uncharacteristically aborted that task, but still flew 750 km. I managed to complete the task but it took me nearly 9 hours!

The talk was that Sunday, Christmas Eve, would be THE DAY, but looking at the forecast on Saturday morning, I thought that Saturday would be the better day. As a first attempt, we tried a YoYo type task, rather than a triangle, but nevertheless I picked Lightning Ridge - Koorawatha - Narromine. I still had triangles in my head, and didn't think to

add a third turnpoint. Kerrie didn't have the same turnpoints in her logger, and was racing to get launched. She chose Walgett - Forbes - Coonamble and back to Narromine.

With the self-launcher, I was able to get into the air earlier, just before 11am, and set off for Lightning Ridge. I was about 40km ahead by the time Kerrie got going. It seemed slow-going to Lightning Ridge, and I turned it at 2pm, with another 700km to fly – it didn't seem possible. I contemplated aborting the task and doing a triangle instead, but pushed on for a while to see what would happen. This is the danger of listening to radio chatter – it can make you give up!

Kerrie had turned Walgett, about 50km before Lightning Ridge, and was well south of me by this time. With some streeting and very good climbs, it was much faster going south and so I kept going. The clouds all stopped at Eugowra, and I had to take some weaker climbs even to get there. At 5.30pm, I still had another 275km to go, including 70km to Koorawatha in the blue. Kerrie was passing Narromine on her way to Coonamble at this point.

I calculated that if I turned Eugowra, and went back past Narromine to somewhere near Gilgandra, I would get an OLC 1,000km, but I didn't think I would make it back to Narromine if I persisted to Koorawatha. I aborted the declared task and headed north.

The climbs improved and I went almost to Gilgandra and made it back to Narromine about 15 minutes before Kerrie – both of us having flown 1,000km at the first attempt, but Kerrie has her diploma, and I do not!

Never mind, the days are still long so we'll do it again as a triangle...

So far we are still at Narromine, trying for the 1,000km triangle. Kerrie has achieved two 750km speed records on days when it wasn't quite good enough for the 1,000km, and I have achieved a couple of 900km+ FAI triangles, but not quite the elusive diploma! But that is the joy of gliding – there is always more to strive for.

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Test Instruments

Conrod Bearing Clearance Tester (CGCT) required for 50 hour maintenance of 2 stroke engines

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Bert Flood Imports david@bertfloodimports.com.au 03 9735 5655



MULTICLASS AT WAIKERIE

PHOTOGRAPH BY BRYAN HAYHOW

The 2017/18 Multiclass Nationals were held at Waikerie in SA in the first two weeks of January, and saw eight competition days with a range of weather conditions and a strong field of 46 competitors. The previous Nationals at Goondiwindi in October was plagued by poor weather and was only able to deliver three competition days for the 36 competitors. Fourteen pilots flew both championships.

There has been a drive to reduce the period of National competitions to a single week – Saturday to the following Sunday - and make travel prior and after the event the responsibility of the pilot. The aim is to reduce the amount of work leave required to attend. For most sites, the proposed schedule will require one week's holiday plus another two to four days of travel, depending on where you live - not really a major saving compared to the two weeks holiday required for our typical arrangement. I am sure that argument will continue for some time.

If the Waikerie competition had been held during the first week we would have only flown three days, in poor conditions at that. If it had been flown in the second week, then we would have flown seven days. The combined 2-week competition flew eight contest days out of a possible 10 days. The one week option can be very good, but it just has a little more risk of not getting enough flying days. If the Goondiwindi comp had been held over one week, it would not have qualified as a championships due to lack of flying days.

CREW

Many pilots attend the competition with no crew, usually arranging with another crew-less pilot to come and get them if they outland. This means that at the launch, the competition organisers are having to find extra people to run wings, collect ropes and so on. Comps organisers are finding it harder to get volunteers to stand out in the sun and dust to do these launching tasks and we will need to find a solution in the future. On the main outlanding day at Waikerie, some of these volunteers who had been running

ropes at the launch then had to head off to retrieve pilots who did not have crew. Maybe a future solution would be for pilots without crew to have a non-flying day to act as ground crew, or pay an extra charge to cover the cost of paying people to do this task.

A GREAT CLUB

Waikerie Gliding Club is only a small club but has a wonderful site, a great clubhouse and is relatively close to town. The club provided a professional caterer to prepare meals in the evenings, which were well attended by competitors, and people could go to the pub in town or the pizza shop for a change of scenery. The club is keen to attract competitions. However, while the bar does have a large turnover, it is hard to understand how they make much profit now that they have subcontracted the catering, which previously the members looked after.

THE GLIDERS

A reasonable mix of gliders challenged for position in the four classes.

- Open Class only had eight entries - four big two-seaters, two JS1C, an ASH31 and a Discus 2c 18m, which was rather outclassed.

- 18m Class had 14 entries, mainly comprised of a mix of ASG29, JS1, Ventus 2cx. People were keen to see the three new JS3 gliders that had arrived just before Christmas, giving their new owners limited time to get them ready and learn to fly them. Observation revealed that they appear to be a slightly better glider, but only Norm Bloch was able to benefit from this performance, coming second overall. Lumpy Patterson had to return home to Tasmania with a family issue, and John Buchanan, who flew in 15m Class, damaged his JS3 in an outlanding early in the comp and was unable to continue.

- Standard Class had 14 competitors with five LS8, four Discus and three LS4, although Don Woodward won the contest flying his ASW24E.

- 15m Class became known as the O'Donnell class, with five members of the O'Donnel family competing out of a total of 10 entries. Stephen, Joseph and Tom were placed 1st 2nd and 3rd, thus protecting the family reputation. Two Ventus, three ASW20 and three LS3 were the predominant gliders in this class.

WEATHER

The first week brought blue conditions, with maximum heights of around 5,500ft. Some reasonable speeds above 120km/hr were achieved on Day 1.

Only a handful of pilots across all classes completed the task on Day 2 due to high cloud coming through late in the afternoon. Many of the outlandings were within 60km of Waikerie, and Renmark once again had a significant number of gliders, with three tugs required to do the aerotow retrieves. The turbo engines and jets from the self-retrieve crowd in 18m and Open Classes generated a lot of noise.

The Open and 15m Classes had to go north across the NSW border just west of Mildura to their last turn point, resulting in a few outlandings as they darted back south of the Murray to get to more hospitable terrain, some 140 to 160km from Waikerie. It was here that John Buchanan had a problem with starting his jet and ended up landing on a road, causing significant damage to his new JS3.

The next two days were spent visiting the local tourist spots – Banrock Station and Overland Corner Hotel had a major influx of talkative glider pilots. A few travelled down to the Barossa Valley, about an hour from Waikerie.

The second week of the competition can only be described as HOT! Temperatures of 38 to 45°C degrees meant hard work for the launch crew and tug pilots, but luckily the poor pilots could then cool down at 8 to 14,000ft. They seemed surprised that the ground crew were a little grumpy when they finally came back and landed, complaining that “it is a little warm down here”.

We flew every day of the second week. Predominantly blue conditions prevailed through to the Friday before the last day brought wonderful high cumulus. The week started with heights of 4 to 5,000ft, which limited the task area to a 100km square east and south of Waikerie. Further south went into colder southerly airflow with an even lower height. West of the Murray River, which turns south at Morgan 40km west of Waikerie, is scrub through to the hills of the lower Flinders Ranges, and the eastern border is the scrub line at the Victoria/SA border. To the north of Waikerie is just scrub to Broken Hill.

As the heights came up to 7,000ft and higher, the tasks became more adventurous - first east into Victoria with a turnpoint at Sunraysia Gliding Club at Mildura, and the next day heading west to the Lower Flinders Ranges, with turns at Peterborough.

THE FLYING

You can see the full set of results on Soaringspot.com

Standard Class - Tasks from 300-550km

Don Woodward won four days with a dominant display. Other day winners were John Orton, Lisa Trotter, James Nugent and Tobi Geiger.

15m Class - Tasks from 300-550km

Steve O'Donnell won the first five days. Other day winners were Bjorne Reichinger, Leigh Stokes and Joseph O'Donnell.

MULTICLASS CHAMPIONSHIPS

18m Class - Tasks from 330-600km

Pete Temple won three days.

Norm Bloch won three days.

Other day winners were Adam Woolley and Terry Cubley.

Open Class Flew tasks from 330-600km.

Andrew Georgeson won three days.

Scott Percival and Brett Potter won two days.

Other day winners were Bernard Eckey and Theo Newfield, Arnold Geerlings and Grant Hudson.

WOMEN

With the Women's Worlds at Lake Keepit in two years' time, we are getting a lot of interest from our current and previous women competitors. At Waikerie we had three women – Lisa Trotter in Standard Class, Cathy Conway in 18m and Diane Schuit in Open Class.

At Goondiwindi we also had Kerry Claffey, Lisa Turner, Jo Davis, Jenny Ganderton and Catherine Conway.

INTERNATIONAL VISITORS

We had a number of international visitors at Waikerie.

- Benno Beesten from Germany flew an ASH25 in Open class and finished 3rd.

- Bjoerne Reichinger from Denmark flew the Waikerie Discus in Standard Class and finished 4th.

- Theo Newfield from New Zealand flew with Bernard Eckey in the ASH30 in Open Class and placed 6th.

- Bill Snead and Charlie from the USA flew a Nimbus 3D in Open Class and placed 8th.

A CONTROVERSIAL FINISH

The last contest day provided some controversy. It was an Assigned Area Task where pilots are given a set minimum time, in this case 3.5 hours, to fly as far and/or as fast as they can through a series of allocated area. In 18m Class on that day, the maximum distance possible using the areas allocated was roughly 606km - between 595km and 614km, depending on which start point was used. Pilots could fly up to 175km/hr within the allocated time, which is quite fast and the task setters were confident that it would be OK.

Unfortunately, the day was VERY good with climbs to 13,000ft at more than 10kts with great streeting, and it became apparent to competitors that they may 'max out the task' at less than the allocated time. If a pilot comes home early, then instead of calculating the speed based on distance and the time he or she flew, they calculate it based on the distance and the 3.5 hour set time.

Norm Block did not quite fly the maximum distance - 587km against a potential 611km - but he was home after 3 hrs 16 min with an actual speed of 179km/hr. This would be fast enough to win the day and also win the competition. Of course, this is outside the rules of the task and he was credited with 3.5 hours task time, which brought his speed back to 167km/hr and put him at 4th place for the day and 2nd overall.

Consequently, a discussion proceeded on why a pilot should be penalised because the task setters had underset the distance available. Alternatively, though the pilot had the opportunity to fly more distance and therefore take more time, he did not go to the extremes in any of the four areas. A protest arose, but since no rule exists to enable adjusting the time, the published score remains.

Discussion continues about what the criteria should be to allow people to use their actual speed rather than the calculated speed. Watch this space.

TERRY CUBLEY

continued over page

THE O'DONNELL INVASION



The idea for a family get together at the Waikerie Nationals germinated in the days after my mid-air collision at the Benalla Worlds last January. The whole family had been involved in the aftermath and we thought it would be a good approach to putting some fun back into flying.

I am the oldest of six boys, only two of whom don't fly. Pete, Tom, Bernie and I, along with my parents John and Margaret and grandfather Len, all learned to fly at the Sunraysia Club at Wentworth, NSW, near Mildura in the mid 1970s. All of us boys soloed on our 15th birthdays and were soon active cross country and competition pilots. John Buchanan was active in the club as well and we all picked up on his competitive spirit and received plenty of coaching from him.

FLYING AGAIN

By 1988 we were all busy raising families and pursuing various careers, but Bernie and I started flying again in the mid-nineties, on and off until 2010. I joined the Kingaroy Club then and started flying Nationals again. Bernie, Pete and then Tom all bought aircraft and started cross country flying and competing again more recently. Along the way, my wife Mary and I had five sons and a daughter, four of whom are solo pilots. Luke and Joe have been regulars at Joeyglide and the Nationals.

For the Waikerie Nationals, Pete, Tom, Bernie, myself and son Joe all entered in 15m Class. Bryan Hayhow decided to blend in early on and entered as Bryan O'Donnell. Tom's wife Ronnie, Bernie's wife Bernadette, my wife Mary along with daughter Gabby and her friend Chanel and local Phil Hollick made up the rest of the crew.

We were lucky enough to rent a nice house on the river, which made a good base for us. At the last minute, Adam Woolley very kindly loaned me his Ventus 2a to give me something to help me keep up with Butch (John Buchanan)

in his new JS3. Pete had his ASW20b, Tom flew an LS7 and Bernie and Joe were in LS3s.

We arrived at Waikerie on the Saturday before, finding 47°C temperatures and a late squall line. The weather for the practice day was poor but I took the opportunity to take my first flight in the Ventus 2a and found it to be the quietest glider I've ever flown. The cockpit is a tight squeeze for my size but I ended up feeling pretty comfortable.

ROUGH START

The first week of the comp was a fairly stop-and-start period. We flew only two out of the first five days, due to poor weather. The second contest day was carnage and saw mass outlandings. Only a few gliders in any class got home without the use of engines. I outlanded at Renmark airfield with five others and got an aerotow retrieve, while the rest of the O'Donnells ended up in the same paddock near Lake Cullulleraine.

Pete was the first to land and was handed a beer by the farmer soon after landing. When he announced that fact on the radio, the lure of refreshment was too much for the other three, who soon made a beeline for the same paddock, suddenly convinced there was no chance of getting home.

The girls were pressed into service along with Phil for the late night retrieve, something we were told was not part of the deal! We lost Butch from the comp on this day when his undercarriage collapsed while outlanding. As a result, he had to withdraw from the competition, to our great disappointment.

SIX DAYS STRAIGHT

Once the weather settled down we flew the last six days straight. Most days were blue and 5 to 6,000ft with fairly

long tasks. The O'Donnell mob all flew well and got home every day after the Day 2 debacle, to the great relief of our faithful crews.

I flew fairly well with a mix of good fortune and a fair bit of experience flying in the area from my Mildura days. I managed to win the first five days, but things could have been much different.

The fifth day was predicted to start at 5,000ft and break through to 8 or 9,000ft by about 2pm. We were set a 370km fixed task. It was tricky even getting up to start and it became obvious that some cirrus moving through the area had kept temperatures down enough to prevent any improvement.

ROLLER COASTER

The whole field had started and I found myself at 1,500ft downwind of my start circle and out of glide range of the airfield. After a lot of messing around I eventually got up to 4,000ft and started at 2.45pm, 45 minutes after most of the field, wondering if the task was even possible now. However, first glide into the wind was 35km for almost no loss of height, and suddenly it all seemed easy.

Halfway around the task I found Pete in his 20b, down low, when we hit a 10kt climb that burst through to 8,000ft. It was straightforward from there and really showed the up and down emotional rollercoaster of our sport.

The weather on the last day was incredible. Cloudbase was near 15,000ft and, even with a huge blue hole in the last quarter of the task area, speeds of over 170km/hr were achieved. Lots of big smiles at day's end were great to see.

In our class it was great to see Bjorn Rechinger win a day, not his first day win in our Nationals. Straight from Denmark into 47°C heat, the poor bloke nearly melted but never complained.

YOUNG TALENT

A feature of this Nationals was the performance of some of our Juniors. It's fantastic to see some more young talent coming through. In 15m Class, Leigh Stokes won a day and performed well throughout. Joe O'Donnell won the last day in 15m and finished 2nd overall. James Nugent won a day in Standard Class and also finished 2nd overall. Ailsa McMillan was flying in Open Class every second day in a two-seater, gaining great experience. These guys are the future and they are getting harder to beat!

The end results were a mix of fortunes. In Open Class, Scott Percival and Brett Potter won well in the ASH25 showing that it's still possible to challenge in older generation aircraft under our handicapping system. In 18m Class the very consistent Peter Temple held off a fast-finishing Norm Bloch in his new JS3.

Standard Class saw a rollicking win go to the very impressive individual pilot, Don Woodward, surely our best pilot never to have won a Nationals. Watch out now that he's broken his duck!

FAMILY PRIDE

In 15m, I couldn't have been more proud of my family. Pete and Bernie battled on for the whole comp, learning plenty and keeping the humour levels high. Tom finished 3rd in his first Nationals after a break of over 30 years from competition. Well done, brother. Son Joe came home a solid 2nd and has the old man firmly in his sights! I held on for the win, my second Nationals win 32 years after the first one at Gawler in 1986.



ABOVE: Steve O'Donnell, centre, receives his award for 1st place in 15m Class at the Nationals. His son Joe, on Steve's left, achieved 2nd place. His brother Tom, to his right, took 3rd place.

I want to especially thank my wife Mary for her continuing support of me and our boys in pursuing this sport we love in the aftermath of my accident and the year that our sport has endured. Thank you to all who support loved ones in our sport. In return, it's our responsibility to continually assess our approach to safety and risk.

For those of us who have been flying for a long time, we should be looking at how current we are. Do I fly regularly enough to maintain the skills required for all aspects of competing or whatever form of flying we participate in? Are we allowing for the effects of other factors like ageing, heat and hydration, illness, fitness and stress?

Do we see worrying signs in a fellow pilot that are being ignored? An open conversation may be all that is required to keep a friend safe.

STEPHEN O'DONNELL

GA

MULTICLASS NATIONALS WAIKERIE

9 19 JANUARY 2018

STANDARD

1	XJG	DON WOODWARD	GC VICTORIA	ASW24	7,610
2	SO	JAMES NUGENT	SUNRAYSLIA	DISCUS A	7,052
3	HDL	TOBIAS GEIGER	GC VICTORIA	LS4A	7,007

15 METER

1	G1	STEPHEN O'DONNELL	KINGAROY	VENTUS 2A	7,715
2	WUR	JOSEPH O'DONNELL	KINGAROY	LS3	6,989
3	3	TOM O'DONNELL	SUNRAYSLIA	LS7	6,793

18 METER

1	PT	PETER TEMPLE	ADELAIDE SC	ASG29E	7,466
2	N1	NORM BLOCH	BEVERLEY SS	JS3 18M	7,366
3	FA	ADAM WOOLLEY	KINGAROY	ASG29E	7,043

OPEN

1	1W	PERCIVAL & POTTER	SRGC TOC	ASH25	7,168
2	AG	ANDREW GEORGESON	KINGAROY	JS1C 21M	6,809
3	KG	BENNO BEESTEN	SG FALLERSLEBEN	ASH25E	6,697

soaringspot.com/en_gb/56th-australian-multiclass-nationals-waikerie-2018

10-9-8-7-6-5-4-3-2-1 THE START LINE IS NOW OPEN!

BY MANDY TEMPLE GP REFEREE

PHOTOGRAPHS BY LACHLAN ELLIS

A 10 to 1 countdown is the radio call that starts a Grand Prix glider race. Hearing this, the pilots all line up and race towards the start line together. They must be below a specific height and below a specific speed when they cross the line, which makes quite a spectacle for those watching from the ground.

The Grand Prix is an international event, sanctioned by the FAI, and Australia holds a qualifying Grand Prix each year to select pilots to send the International GP Final. This year's qualifying event was held at Horsham in Victoria. The members of Horsham Gliding Club, a small club, did an excellent job in hosting the Grand Prix with limited resources.

The week of competition saw a variety of conditions from low blue days to booming days with thunderstorms causing the day's task to be cancelled and, finally, two days with cumulus of over 10,000ft. Tasks were typically 1½ to 2 hours long in the best part of the day. The racing was close and was watched by many people around the world via the GFA trackers that are now being used for all Australian competitions. gtracklive.com

ABOVE: Mark Patterson in his new JS3 competing at SGP Horsham.



Grand Prix racing is a newer form of competition and some are wondering if it may eventually replace the traditional competition in which the pilots start in their own time and are scored based on relative task speeds, rather than GP-style first-past-the-post scoring.

I know that many clubs run small Grand Prix tasks on the weekends and they are very popular. I have even heard a rumour that next year the Queensland State Comps will be run in Grand Prix format. It will be interesting to see how competitions change in the future. I remember rounding turn points with a chandelle to take a photo, and then the introduction of GPS to Pilot Option Set Tasks (P.O.S.T.). Even earlier, people stood at turn points with binoculars, sighting gliders.

So it's hard to know which way racing will go in the future. After the Benalla World Comps, I spoke to many pilots who were disillusioned with the traditional racing format, which perhaps doesn't measure what pilots feel should be measured.



ABOVE: The competitors - (back row L-R) Terry Cubley, Geoff Brown, Brad Edwards, David Pietsch, Mark 'Lumpy' Patterson, Andrew 'Georgo' Georgeson; (front row L-R) Pete Temple, Brian DuRieu, Catherine Conway, Graham Parker, Scott Percival.

It is currently a very tactical competition and often relies on leaving last and catching those that left before you. This favours the larger teams with more resources and more information. This effect was particularly pronounced at the last World Championships in Europe, where the Open Glider Network (OGN) allowed people at ground stations to lead the pilots around the task and direct them to the best thermals and or other gliders.

There were 11 pilots at this year's Horsham GP, and the organisers are keen to find a way to encourage greater numbers at future events. Several suggestions were made, perhaps changing the dates or possibly having a second 15m Class that starts 30 minutes after the 18m Class. This would increase the numbers and make the event more worthwhile for the organisers without requiring many more resources.

A new initiative the club implemented that worked well was to ask for sponsorship from local restaurants. In return, we were invited to dine at each one on a particular day. This was a win-win situation – we all got to catch up in the evening, the restaurants received publicity and the club received extra funds to offset against costs.

The club did a great job with promotions, considering their limited resources, achieving two ABC news reports with over 200,000 views each. They also enrolled a couple of local media study students. They came along everyday with their microphones and cameras and although only 14 and 15 years old, and quite nervous initially, they became



quite professional by the end of the week. Lachlan Ellis, son of contest director Selwyn Ellis, graciously took a week from work to manage the trackers and produced a daily video digest of the event.

From a safety perspective, David Pietsch introduced 'Honest Confessions', an opportunity for pilots to describe their actions and mistakes for others to learn from. This was well received and several pilots used the opportunity to alert others to traps they had fallen into - a great initiative.

GA

FAI SAILPLANE GRAND PRIX SERIES IX - AUSTRALIA, HORSHAM

22- 28 JANUARY 2018

1	PETER TEMPLE	ASG29	42
2	GRAHAM PARKER	ASG29E	37
3	ANDREW GEORGESON	JS1C	32
4	MARK PATERSON	JS1C	27
5	GEOFF BROWN	JS1C	23

sgp.aero/australia2018/results-sgp/results.aspx



MY FUN DAY WITH THE GUNGELLAN CFS

BY GEOFF WOOD



RIGHT: Geoff Wood and his 'Old Timer' Pilatus.

WHAT A PERFORMANCE!

Was it my performance? No, I do my best but can't claim anything special. Was it the performance of the mighty metal monster? Well, I love my Pilatus but let's face it, this is the Holden Kingswood of gliders - an icon of the 1970s but definitely not the Lamborghini Diablo of the sailplane world.

No, it was the surreal performance on the ground at the end of my flight on Sunday 28 January, which involved something like a merger of 'Apocalypse Now' and 'McLeod's Daughters'.

But back to the start... My glider is of modest performance by modern standards, but what does it matter? Life is all about personal goals. My Pilatus fits into the Old Timer category in the worldwide On Line Contest (OLC) and I set myself the objective of topping the Australian ranking in this class. Incidentally, I hate the term Old Timer - it's about the glider, not me. OK?

I sometimes reflect on the words of one of our late, great and revered gliding instructors Gordon Redway, who used to say, "If you always get back you haven't set your targets high enough." That's true.

In following this idea, every cross-country glider pilot stretches him or herself and outlands from time to time, and every one has an outlanding story - "Found the glider, couldn't find the pilot." (You at the back there - I'm looking at you. You know who you are!) "Plied with scones all afternoon by the farmer's family. Boy, am I full..." And the notorious, but true, case of the long retrieve where, on opening the back of the trailer to start loading the outlanded glider, the crew found they'd brought a trailer with an identical glider already inside.

So after a number of reasonable flights this year, I was Number 2 on the OLC ranking for my class, headed at the time by Jenne Goldsmith who had done a number of great flights in her Ka6. So I planned The Big One - get to Number 1.

After looking at the very prescient SkySight I determined

that I should do a 425km flight to around Whyte-Yarcowie-Jamestown and back. Took off at midday (thank you, John Whittington, for toiling in the Pawnee in the heat) and after the usual delicate tiptoeing early in the flight, contacted clouds near Riverton. I then had a magic run to Burra and beyond, maintaining around 10,000ft most of the time. Beautiful wedge-tailed eagles thermalled with me on two occasions, their dark bodies and golden wings set off by white stripes. I wondered what was going on in their minds as they circled around looking at me.

It was going so well that I determined to go past Peterborough, then across to Jamestown and home, this track being calculated to maximise OLC scoring points.

North of Yongala it started to become a little concerning with rain to the north and overdevelopment to the south. I pressed on, gained a good height just south of Jamestown and set off for home, trying to follow the trail of decaying cumulus. Frank Johann in UIT called from Farrell Flat and warned me it was deteriorating fast.

By Tarlee it was clear I was not going to make it - I needed another 2,000ft. With nothing to lose, I veered away from track towards the east, over ground where the sun was still shining. By this time it was 5.30pm and my glide computer showed a much stronger headwind component than earlier. No lift, no joy, and so after a couple of last-minute tries, I made a successful landing in a good paddock between Freeling and Kapunda.

Immediately I stepped out, it was obvious I had never been going to make it - a cool southwesterly wind of about over 20kts was blowing. Drat! I was immediately able to contact the club, where the ever-considerate Andrew Wright had been watching and waiting. He organised the retrieve.

Meanwhile, I wandered over to the Freeling-Kapunda road and walked up and down to find the gate. No fewer than four cars stopped to offer assistance, rides and so on. Then an ominous development arose - two persons with cars

stopped by the road and approached me, mobile phones in hand. The determined looking young lady spoke to me.

"Are you injured?" she asked.

"No, I'm fine," I replied, mystified.

"You don't have to worry. I've phoned the ambulance and they're on their way."

"I don't need an ambulance, I'm fine."

"I've phoned the police too, so we can report the crash."

Getting exasperated, I said, "There is no crash. This is a normal operating procedure for gliders. It can be expected to happen occasionally, and we are trained for it." This information was glossed over - it emerged that my visitors did not know gliders existed and presumed that this was a light aircraft that had crashed.

Unfortunately, everything I said was taken not as fact but as the ramblings of a dazed and confused person who was beyond understanding. While this was going on - weeeo-weeeo-weeeo, red and blue lights flashed and the fire brigade turned up, three trucks in all. Then more sirens, more lights - the SES. All quickly found the entrance to the paddock and rushed to the scene of me and my 'crash'.

A few minutes more and at last the ambulance turned up with more lights and sirens. They asked a number of questions about whether I had had any blows to the head and did I need to go to hospital? By this time I was getting pretty frustrated and when asked if I ever had memory lapses I said, "I'VE GOT A SENIORS CARD. OF COURSE I HAVE MEMORY LAPSES." In retrospect, this was probably unhelpful.

Next came the police - just the flashing lights, no siren this time. The policeman took a statement and I think I persuaded him that this particular event did not need to be reported to CASA. My mantra about "normal operating procedure" was becoming well-practiced by now. The local newspaper appeared but stayed well back, just using a tripod and a telephoto lens.

Finally, my crew of Andrew Wright, Frank Johann and Tony Lewis turned up with my trailer. Imagine the sight they were greeted with - six emergency services vehicles and at least 20 brightly uniformed people milling around

the Pilatus and its hapless pilot.

Gradually most went off with, I think, a faint air of disappointment, but the great crew at Freeling CFS stayed on to help with the glider. Incidentally, this crew starred as the Gungellan CFS in 'McLeod's Daughters'.

My trailer is not the best and it can normally take a bit of a struggle to get the glider on board. But trust me, when you've got 12 big guys lifting, it's no trouble at all!

SO WHAT WAS THE BEST BIT?

Was it the fact of actually achieving my objective? I did achieve it and enjoyed my moment of glory as Number 1 on the slippery pole of the Old Timer rankings. If I hadn't heeded dear old Gordon's advice and set an ambitious goal, this would not have been achieved.

Was it the 6 hours and 1 minute of stimulating and challenging flying?

I feel truly privileged to be able to fly at all when, for almost all of history, so many people have looked skywards and yearned to fly with no hope of doing so. To be one of the few who have been given the means to soar high in the sky for hours, held aloft only by forces of nature and application of knowledge and training, is a privilege indeed.

Actually no, it was neither of the above. It was finding that after a wonderful day's flying we have so many community volunteers who are always out there waiting to help when tragedy strikes - although it hadn't actually struck in this case, if you see what I mean - and, best of all, we have a club where members stand ready to help each other unexpectedly, with grace and even enjoyment. Thank you, Andrew, Frank and Tony.

Later as I left our aerodrome with the glider tucked away in its hangar, the sun was just sinking below the horizon and only three things were moving - me and two of the airfield hares lolloping across the runway. As I watched, they stopped, turned and looked at me, and then looked at each other.

I could have sworn they were laughing.

You can see Geoff's flight at
onlinecontest.org/olc-2.0/gliding/vintage.html



RACING IN STYLE AT LEETON F1

BY PETER CESCO, LIBELLE PILOT
PHOTOS BY AILSA MCMILLAN

I recently visited the Multiclass comps at Waikerie, just for the day, and heard people complaining about the dust – ha! Compared to Leeton, of course, there was no dust, but did anyone at Leeton complain? No! It wasn't about sheep stations and the last little decimal point of a score, either. Leeton F1.0 was simply fun, and everyone was involved. Who cared if it was a bit dusty? Everyone got some of the dust and everyone was equal.

HANDICAP OF 1.0

As a result, the gliders are included based on a handicap of 1.0, which is where the F1.0 comes from. To even up the field, gliders with .98 handicap have a larger 'variable' at some of the turnpoints, those with 1.0 had a slightly smaller variable and those with 1.01 were smaller again. Typically, Libelles had a 2km turn radius, Standard Jantars, Hornets and Cirrus had a 1km radius, and LS1s and Standard Jantar 2s and 3s had a 0.5km radius. In effect, a Libelle that was slightly behind could turn earlier and have a chance come out of the turn ahead of an LS1. It worked well and was so much fun... everyone was in the game.

Basically, in this race - for that's what it is, a race - if anyone is in front of you, they are winning, and when you got home you could simply count your position by the gliders that had already arrived. If you outlanded, you did not get any points, and at least one glider from each of the two groups had to get home.

In one of the first days, two pilots made quality decisions to land one and two paddocks short rather than try to scrape over the fence. The competition Director made an example of them and gave each a special prize for quality airmanship. In fact, every pilot, some supporters and most of the people running the competition got prizes ... didn't I say it was FUN? I love getting prizes.

I was flying in my Libelle one day, along with a Jantar. He beat me in the glide, my pullups gained me more height, and it was a hoot. In fact, the whole concept and running of this event was FUN - yes, FUN in capital letters.

The concept had supposedly started a year before over a beer. The idea was to gather everyone with the same glide ratio to fly together. The Americans do it with their Schweizer 126 competition, so why not us?



ABOVE: Ben Loxton followed by Reuben Lane after crossing the finish line.

BELOW: Reuben Lane enjoys the attention of a WIN news reporter.

ENTREPRENEURS

Families were there as well, just like the 'old days', bringing the average age down to somewhere near 35 or so. In fact, some of the kids were running the wings and doing a great job of it. I said they could run mine and they were superb. They were switched on, capable and fun to have around.

A group of the kids, already entrepreneurs at such an early age, formed a team and offered to wash gliders for a fee. I suspect some will be millionaires before too many years go by.

Did I say that each glider was given its own pilot name for the pilots to put on their gliders? It was just like air force aircraft and racing cars, and still more fun.

I have decided not to use any names in this article because I would miss someone and I don't want to spoil it for anyone. Anyone reading this, you can put your own name in wherever you want.

NO GAGGLES

I have to admit that before I went. I was a bit concerned about gagging immediately after the start and also about the competition finishes, thinking that the gagging would be huge and the finishes potentially unsafe. Nothing could have been further from the truth.

The start was limited to 2/3 of the convection height and 90kts maximum speed through the start line, with a decision after Day 3 in the competition to make it 3/4 of the convection height, and a 'minimum/maximum' start height of 3,500ft. This eliminated the problems of large



groups of high level gaggles before the start, and showed the flexibility of the organization. Again, no one complained at the changed rules.

Some limited, high-level gagging persisted, but really, why waste time on it? I remember in the old days people would go through at very high speeds unsafely - not the case here. It also eliminated the start games of current competitions. When they said go, your time had started. The timing would be called 10 minutes, 5 minutes, 3 minutes, 2 minutes, 1 minute, and 10, 9, 8, 7, 6, 5, 4, 3, 2, 1 - GO!

COMPETITION FINISH

You would see everyone lining up to startit was a hoot to look around and see 13 gliders all jockeying to

ABOVE: Salutes (?) as the day winners are announced. The F1 was a lot of fun.

BELOW: Nathan Johnson is the F1.0 champion, winning 48 points in his Hornet.



continued over page



RIGHT: Eric Stauss finished in 4th place.



RIGHT: Adam Webb flew his Standard Cirrus.

BELOW: Claire Scutter with her Astir CS.

BOTTOM: Veteran competition pilot Tom Gilbert flew a DG100 in the F1.



start exactly on time. You then targeted your selection of where the next thermal was and raced for it. Some gaggles formed, but they were not huge. Remember - if anyone is in front of you, you are losing.

You would fly the task as fast as you could. The last leg was the same 10km each day. This gave consistency and good quality competition finishes with options of straight ahead if you misjudged, or a left hand circuit to the other runway if you did a good job of it. You were advised if it was a good finish from the spectators point of view. This was partly what made it fun - it was also fun for spectators, and the safety level was high.

I remember talking to the Competition Director on Day 4, I think. We had lost a couple of days and when I asked him to look around and tell me what he saw, he was confused. Then he realized everyone was smiling. This was FUN for everyone.

MEDIA MASH-UP

Sponsorship and social media were also big hits, we had more facebook hits than the whole GFA facebook page. The team really pushed the sponsorship in every way. Not for them the ho hum promise to say their name. This was real sponsor support, displaying their names in every media bite. Lots of videos featuring the sponsors' names, as well as hats and so on, were in use at all times. When one sponsor even paid for the final turnpoint to adopt a specific name, everyone used it every day - with lots of smiling and happiness with the sponsors.

Three television teams, I believe, and a number of newspapers covered the event, each on different days to avoid conflicts. As well as using their names, the sponsors' banners were always present and visible during coverage. This was what sponsors wanted and was superbly handled in a FUN and friendly way.

There were nine Libelles, three Hornets, five Jantars, five Standard Cirrus, two LS1s, one DG100 and an Astir CS. Many high quality photos were taken and sent out with the social media output. Huge telephoto lenses were in use, especially for the finishes. How they kept in focus is a skill I will never master. It was another aspect of the FUN. My computer now has one of my finishes as its wallpaper and I show it to as many people as I can get interested.

SCORING WITH A TWIST

Competitors were divided into two groups named A and B, strangely enough, that received different points and started 30 to 60 minutes apart. Pilots moved between these groups to maximise their score, although it wasn't a matter of choice. Your competition score gives you your group. The groups are moved between first and second launch and everyone does the same task on the day. Only the time of the day was different.

This was a no-water competition and it didn't matter. On the last day I did over 100kph in my



TOP: Andrew Maddocks took 2nd place in a Standard Jantar.

ABOVE CLOCKWISE: Andrew Horton, Nathan Johnson with Reuben Lane, Ben Loxton, Heath L'Estrange.



Libelle and came 16th, getting no points, but did it matter? No, because it was FUN. It was different in so many ways. For example, bonus points were offered for the first pilot of each group to be at a specific turn point, but you had to claim it on the radio and it was verified by your tracker. These bonus points were awarded on some unknown basis by the competition organisers, and certainly not every day. It just added to the fun.

REMOTE INTERVIEWS

The organisers also interviewed the pilots while they were flying, checking the trackers to minimize the risks and conduct the interview by remotely controlling the video and sound, which meant no extra workload for the pilot.

I was particularly impressed with the pilot lookout during these interviews. Again, it was more fun, and enabled people around the globe to be involved.

The competition was opened by a multiple world

TOP LEFT: Ben Loxton took 3rd place overall in his Standard Cirrus.

LEFT: Steven Cesco came sixth in his Standard Libelle

LEFT BOTTOM: Todd Sandercock and Adam L'Anson enjoy some off-competition time.

ABOVE: Scott Lennon finished the competition in 2nd position in his LS1F.

RIGHT: Mark Goodle in his Hornet.

RIGHT BOTTOM: Last but not least, Justin Couch was flying his Standard Jantar 2.



champion who operates out of Tocumwal. He also did one of the pilot interviews, but I said I would not use any names so readers will just have to wonder who that was. The same person gave a talk on the final presentation night. I wonder who it was...

Anyway, the group of suitable gliders has been expanded slightly to enable some new types to join. These are aircraft with a handicap of 0.97 and includes Club Libelle, Salto and Twin Astir.

Look for the competition next year. The dates have been set. I challenge the Libelle crowd to fill all the positions available. The concept will have a number limit eventually. Will you be one of those pilots?

Oh, and did I say it was FUN? I like FUN and will definitely be there next year. Will you? **GA**



FORMULA 1.0 GRAND PRIX LEETON

28 DECEMBER 2017 - 5 JANUARY 2018

CLUB

1 AE	NATHAN JOHNSON	HORNET	48
2 KYX	ANDREW MADDOCKS	STD JANTAR	40
3 W3	BEN LOXTON	STD CIRRUS	35
4 CT	ERIC STAUSS	STD. LIBELLE	31
5 EB	SCOTT LENNON	LS 1 F	30

https://www.soaringspot.com/en_gb/formula1point0/

WAVE FLYING IN AUSTRALIA

Part 2

BY BARRY WRENFORD



Below are highlights of the first club wave camp held in Australia in 1971. The descriptions are based on notes from long ago memories.

Our wave camp was at Berridale, 2,800ft ASL, from the same site used for the wave trials the previous year, and ran from late August to early September. The first two days were taken up with check flights and briefings, with no wave operating.

Frosts were the curse of our mornings. Minus 10°C was common, and a snowfall on one night provided

an inch-thick layer on the wings that hardened to the consistency of concrete in the subsequent freeze. Of course, the ice had to be removed by exposing it to the feeble, early morning winter sunshine, wiping the moisture off smartly before it refroze, and rotating the glider to expose the next section to the sun. In later years we used black plastic sheeting to accelerate the process. Someone tried hot water on the wings once, which immediately froze to solid ice and took most of the morning to remove.

Morning ablutions involved ceramic toilet bowls without a lift-up seat. Very hygienic for maintenance, but there were bitter complaints of frozen bums stuck to the ceramic until body heat was able to thaw out the contact areas.

On Day 3, rotor clouds were visible before sunrise. It was still dead calm on the ground. As CFI, I felt obliged to check it out while the others were preparing. So, after dressing frantically, I roused the tug pilot and raced to the glider. On the

way, I yelled out to the pilots, warm and comfortable below their blankets in their vans - "It's ON! It's ON! Get moving!"

AIRBORNE HELL

I DI'd the Open Libelle, clearing off the light frost and wiping the wings down to dry them. The tug was DI'd, hooked up and we became airborne. We flew upwind into lift over the edge of the Jindabyne Lake. Well, oxygen on, I climbed and climbed - 12, 15, 18,000ft in a steady 400ft/min to 19,800ft, when a large hand grabbed the aircraft and flung it skywards. The rate of climb suddenly accelerated past 1,000 feet per minute, the vario shrieked and I thought that I was on my way to heaven and a height record!

But it wasn't heaven - it was hell. The aircraft was just as quickly swatted downwards, then bashed up again, and all hell broke loose with me fighting just to keep it upright with a flyable airspeed. This kept up, and I was going nowhere but kangarooing around at this one height. It was too much to be passing from silky smooth air into a washing machine, with the ground so distant, and far above my comfort level, so I chickened out and reached to open the divebrakes to get the heck out of it. Enough was enough.

Unfortunately, the brake handle wouldn't move. The divebrake caps warped a bit, but they were frozen shut from traces of moisture under the caps. So I turned downwind and cleared the turbulence, with great relief. The airfield was at some 45° below me and 15,000ft down, so I figured I would use the tail parachute instead. However, this was also frozen closed and wouldn't deploy either. So I sawed away at the divebrake handle for a while and managed to get them about a third open, to help get down before lunch. At lower altitude, the brake caps defrosted and a normal circuit was carried out, with the conditions still calm on the ground.

LAYERED INVERSIONS

I landed and looked around



for the mob supposed to be preparing the gliders, but not a soul was in sight. Back at the caravans, they were all still warm in their beds. So why, I asked, wasn't everyone out and about after the call out, and the noise from the tug? They replied that it was dead calm outside, so obviously no wave was possible, and I was just stirring them to get up. So why bother? They were told that I had been to 20,000ft and would they like to do the same? Well, breakfast was forgotten, and the ant's nest was duly stirred!

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It took much study in later years, observing other pilots having similar experiences in high altitude turbulence, to learn that the turbulence that I encountered was caused by out-of-phase wave systems converging. There was an inversion at 19,800ft. The lower wave was a secondary wave, and had a shorter wavelength. Its primary wave triggered another wave system above the inversion, which had a longer wavelength. Downwind, the rising crest of the lower wave happened to meet the descending trough of the upper wave, and the resulting turbulence is as bad as any that can be encountered in the mountains.

This effect was later noted to be prevalent in NW winds, with sometimes two inversions at increasing heights causing this effect. If I had penetrated upwind into the primary, then who knows what height could have been achieved, but after studying my 8mm movies, they showed a solid wall of cloud to the west probably moving in, with blowing snow beneath, and a strange cloud over the Thredbo Valley curving forwards with height, with its top a thin layer, stretching upwind.

HIGHEST LOW POINT

The next flight as I recall was in the Blanik. By this time, the ground winds were starting to pick up, and the wave that I used over the edge of the lake had formed a secondary wave almost overhead at Berridale. The turbulence at the lower levels was now becoming appreciable, and the pilot in the Blanik was

flat out trying to hold station on the tug in the turbulence. He was so fixated on watching the tug that he failed to notice that the combination was rocketing upwards at far over 1,000 feet per minute, and after a few minutes the tug had to wave him off at 10,500ft.

This is a bit of a bummer when used as a low point for a diamond height. However he got enough height over 20,000ft to just record his Gold C height on his barograph. This must still stand as an Australian record for the highest low point for anyone to achieve Gold C height.

The next flight was Barry Blinstrub, who is still with us, in the Libelle. Barry's article from the Southern Cross Journal is on the opposite page. One has to remember that it was rare for a glider to fly above cloud and over 10,000ft in those days, and just to fly in silky wave above cloud at dizzy heights was a novel and memorable experience for a glider pilot. Barry's article gives an insight into a pilot's first venture into this little known field of flight. The following notes explain some of Barry's references.

HIGH AND LOW TOW

* Commenting on high and low tow, trials in later years during club visits at Jindabyne, endorsed by all those present, indicated that high tow with the Pawnee was much safer and more reliable in rotor conditions than the low tow, which we used in those early years. The reason for this was that in high tow, the tug was positioned in line with the horizon, and

gave an accurate reference for the glider to align to. This cut out the slight lag in accurate response always present in the low tow position.

In rotor turbulence, if the tug hit sink and fell down in front of the glider, the pilot had to instantly follow and maintain the alignment. And of course, the same applied if the tug reared upwards. If this was done, the tow rope basically remained in tension. If there was a delay in response, then the glider tended to overtake the tow rope in the descent, and slack developed. With the constant buffeting and changes

'THE 22ND STOREY, OR LOOKING DOWN ON CLODBASE'

BY BARRY BLINSTRUB

At one o'clock in the afternoon of Sunday 29th August, I shoehorned myself into the efficient cockpit of the Open Libelle to embark on a flight that turned out to be the high point of my short soaring career. At last, with the Super Cub straining in the thin mountain air, I was on my way.

Balanced daintily on its wheel, the Libelle flexed its wings eagerly until two notches of flap released it to skim above the Berridale paddock. Ken Johnson, our worthy tug pilot started towing upwind towards the primary wave over Lake Jindabyne, until violent rotor turbulence forced me to abandon the tow.*

I headed back towards the nearest crop dusting strip, discarding gloves, hat, oxy mask and lap rug to avoid hindrance while landing. Pushing through heavy sink at 100 mph, I realized on arriving at the strip that it would involve a dead crosswind landing of probably 30+ knots. I scanned the area for an alternative, noticing that Berridale was on the other side of a sprawling ridge. I steamed off, hoping to find lift beyond the ridge.

Then, just downwind of the ridge, I felt a kick in the pants and the vario screamed its jubilant message! I turned into wind - the recommended manner - and explored the lift. It was roughly 400 fpm - certainly not a wave, but not a round thermal either - and it saved me the trouble of beating the tug back to the field.

Then the radio crackled, and Barry Wrenford alerted me to the lenticular above and downwind from my position. I scooted off downwind at some incredible groundspeed to establish a beautiful lowpoint of 2,000ft above the terrain (5,000ft ASL).

I started crabbing backwards and forwards in front of the monster. The rate of climb improved steadily as I contoured back and forwards along its smooth flanks. Soon, with the vario needle bent against its top stop, we were rocketing up, the altimeter giving silent proof as it whirled dizzily around to keep up with the powerful lift. The wave started pulsing in wavelength, causing the cloud to jump upwind and fall back again, making it difficult to cut the wall with a wingtip, as had always been my ambition.

For 5,000ft of climb, I enjoyed the closeness of this fantastic, blinding sight. Then we were above it, and I watched it recede steadily and the PZL vario still remained hard over, locked at 1,000 fpm. I lost all sensation of movement as the eerie smoothness propelled us upwards. Only the instruments convinced me of motion, 45 mph, vario jammed, altimeter

in the relative position of the combination, this could easily cause the glider or tug to release the tow.

In the reverse sense, if the tug shot up, delay placed a heavy downwards pull on the tug's tail, which also slowed the combination when a safe speed was needed to counter the G loadings in the turbulence.

The ultimate proof of this came one deceptive day when the ground winds were 15kts due to an overhead rotor giving a back flow component to much stronger winds above. The launch was

passing through 15,000ft. At 18,000ft my feet had frozen so I tried closing off the vents, but exhaled breath from the oxy mask fogged up the canopy and quickly turned to ice crystals.**

I endured the cold, grateful for my fur-lined flying boots, two pairs of wool socks, two pairs of thick trousers, jumper, feather down alpine jacket, laprug, fur-lined gloves and the sun above. At 19,000-odd feet, the climb rate slowed to zero, so I explored a little but could find no more. The oxygen system must have been working OK, because I was able to add a 5,000ft ASL lowpoint to the 17,000ft needed for a diamond height to get the 22,000ft needed. So I headed to the primary, McReady ring set to zero to minimise height loss, and arrived at 16,000ft.

Once again, the eerie smoothness. The primary seemed colder, so I was forced to suffer the icicles for a longer period. The machine was beginning to show its distaste for the cold, guessed at about -30°C. The electric vario moaned about zero, the radio chatter grew faint, and the dive brake caps bulged out at the ends.

At 20,000ft the ascent slowed to just above zero as an awe inspiring view of a sea of clouds 10,000ft below and to the west distracted me from the task in hand. I began to search upwind and after some time, the rate of climb began to improve. First 50 fpm, then 75 and, with concentration, 200 fpm. At 21,000ft I began to shiver all over as the nose release of the Libelle sprayed a jet of icy air into the cockpit. In the incredible loneliness I kept scanning the sky for the Blanik or Reggie Ansett, but nothing! A bulge in the clouds looked like wave was operating at Tumbarumba some 60 nm to the west.

My favourite heading was northwest as it let more sun in than when facing southwest. Then, with the vario nearing 300 fpm, I reached 22,000ft, so I turned downwind into the sink area to descend. The Libelle soon warmed up as we descended at 100 mph with the brakes and the wheel out. I flew back into the lift in the secondary wave and was pushed up in that configuration at 600 fpm, then through this, back to Berridale.

The strong wind in the circuit required some allowance as I turned close final at 900ft and descended rapidly towards the upturned faces. After 2 hrs 15 min the Libelle was once again on the ground, ready for the next pilot, but the gaps in the lenticulars had rapidly filled up.

Celebrating the diamond height, we stood out from the skiers at Thredbo, as we talked loudly of flying and aimed the champagne cork at the waitress ... not high enough.

continued over page



uneventful but the turbulence above was otherwise. We all watched the combination stationery in the sky at 80kts, pitching violently around just behind the leading edge of the rotor cloud above, trying to reach forwards into the lift.

At one point, forever fixed in my mind, was an instant of time when the combination was directly in line, but the tug was at 45° facing down and the glider at 45° facing up. Then they reversed their attitudes, then corrected them, all while still on tow, and finally crept into the zone of lift. The glider reached 8/8ths cloud base at 23,000ft just 20 minutes after takeoff and, because of the violence of the local conditions, we sent the pilot off downwind towards Cooma to land, rather than risk local circuits.

CLEAR VISION PANELS

** In later years, we developed a way to place clear vision panels on the canopy to cope with ice formation by sealing lengths of clear polyester film (Melinex) to each side of the canopy, and along the centre, with tape. This creates a sealed air gap between the film and the canopy, which remains clear when the rest of the canopy is opaque with ice. The top length provides forward vision, and the sides provide a view of the horizon to keep the aircraft level. See the image included.

From the subsequent Southern Cross wave camps at Berridale came the enthusiasm for our family to form a gliding centre for high altitude flying in order to provide for diamond heights in Australia rather than having to visit New Zealand. This would also allow me to indulge my love of gliding on a full-time basis. This was achieved in 1977 with the lease of the Old Snowy Strip at Jindabyne, after obtaining the initial reluctant permission of the Department of Civil Aviation to operate only gliding there.

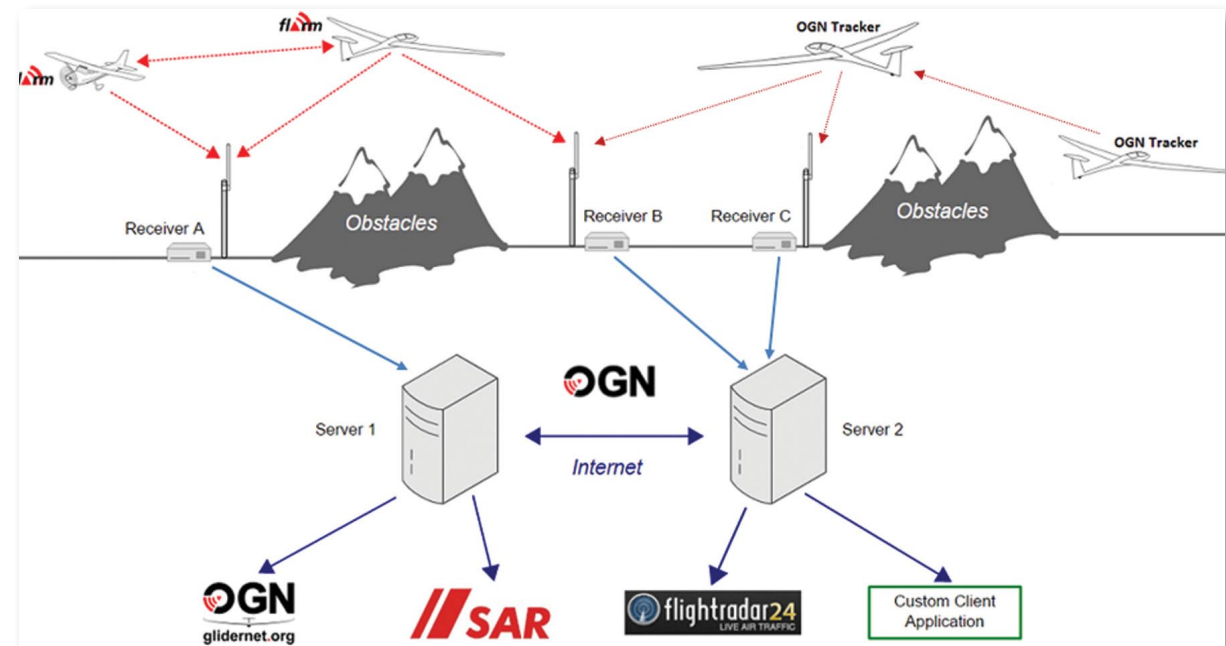
The old Snowy Scheme pilots claimed it to be the most dangerous strip in the mountains, and powered operations including tugs were initially banned. Calling the gliding centre 'Alpine Soaring', we started with a German Tost winch, and over its 13 years of operation we studied the airflow over the Snowies. Using our gliders and powered sailplanes, with the input from those that flew there, we found characteristics of this complex airflow and wave that had not been recorded elsewhere.

We documented all this, but were unable to publish it ourselves, defeated at the time by the cost and an inability to produce diagrams of the necessary quality. I propose to remedy that situation, and to offer some interesting stories from this period to Gliding Australia, as time permits.

GA

WE ARE NOT ALONE

THE NEW WORLD OF NETWORKED GLIDING



Emerging technologies, the internet and projects including the Open Glider Network (OGN) glidernet.org are changing the very nature of glider competitions around the world. In World Gliding Championships team flying and communication with ground crew is permitted and teams are making full use of these new resources. Allan Barnes shares what he learned while crewing for the Australian team at the JWGC Lithuania in 2017.

OPEN GLIDER NETWORK

Europe now has a large network of FLARM receivers. These ground-based receivers may be set up and linked to the network at very low cost - typically 100 EUR per installation. They are linked to several publicly viewable websites such as glidertracker.de where the data is presented graphically.

Consequently, all FLARM devices may now be tracked pretty much anywhere in Europe in real time.

The 2017 Junior WGC in Lithuania required all competitors to identify their FLARMs by registering on the Open Glider Network (OGN) glidernet.org

The organisers arranged a specific web page that filtered just those gliders that were in the competition, and overlaid the map with the task details. The position, speed, height and climb-rate of all competitors could therefore be viewed in real time by ground support, and relayed to pilots in the air. This webpage also provided the ability to show at a click the competitors sorted by any of those parameters, including height above ground. jwgc2017.onglide.com

GROUND CREW

Consequently, the role of ground crew changed enormously. The Australian ground crew notified our pilots as competitors in their class started the task, how their run was going, and whether any were returning for restarts. We advised pilots about which end of the start line was working best, and where pilots were getting the best or

highest climbs. En route, for each competitor, we had one person fully committed at all times to notifying them of any nearby competitors who were in reach and climbing. With a snail-trail of every competitor's track overlaid on Google Maps, we could also advise exactly where thermals had been coming off the ground, and steer them into those thermals by radio.

We could advise them of which routes were working best, where competitors were turning in AATs, and how well pilots were doing on their final glides.

This groundwork was extremely stressful and tiring, but absolutely critical to providing our pilots with a level playing field. Other teams with more personnel were better placed to provide more thorough information. The British, for example, had brought their own mobile ground antennae and set them up in areas of poorer reception. They were therefore able to guide their pilots through those areas, where we were blind.

TEAM ADVANTAGE

In competition terms, pilots with a strong support team on the ground had a large advantage. Pilots were even more reluctant to start when they knew no other pilots had done so. This made pre-start gagging much worse, to the extent that pilots would delay until a land-out was inevitable rather than start before others.

TECHNOLOGY IN THE COCKPIT

It is only a matter of time before this technology transfers directly into the cockpit. Pilots can already present these websites on their mobile devices in the aircraft. But an enhanced FLARM receiver, mounted in the tail, could provide the same information directly, without using the mobile network. The desirability of these advances is debatable.

This is the first year that this technology has been widely used in competitions.

ALLAN BARNES



RIGHT: Current rules encourage crowded pre-start gaggles where gliders hang around for someone else to lead out first. Pre-start tactics determine results.



GFA IS LOSING MEMBERSHIP

We train hundreds of new pilots every year, joining them up as members only to see them lose interest and disappear. Why? Can't gliding capture the new pilot? Is it boring? Lacking challenge? Not fun?

Flying competitively with your mates can be wonderful fun, and to get bitten by the competitive bug is to add another dimension to flying. Having club pilots enthused, involved and interested in competitive flying is one sure way to reduce club membership dropout rate. It may not be for everyone, but if we could make comps more fun, less threatening and give a chance to all, we'd keep a lot more members in our sport.

THE SAME FACES AT EVERY COMP?

Why don't we see more new faces at comps? How do we develop new comp pilots if no one new ever turns up? I fear that very gradually, but steadily, competitive flying in Australia is dying.

Comps have a reputation for being dangerous - accidents happen, flying is close and gaggles are fierce. Furthermore, pre-start tactics seem to determine results, tasks that outland a high percentage of the fleet are considered OK, and newbies get left behind and straggle in late. Comps appear to be platforms for elite competition pilots who use the events for their international representative aspirations.

Why would a new pilot go to a State or Nationals comp in

Australia? Or for that matter, to an International one? Where is the fun for a newbie? Why worry?

Technology is overhauling the sport and creating new issues. FLARM reports of gliders flying ahead display their rates of climb, while tech-savvy pilots following behind get the benefit of this info. It's hardly fair for the guy who started early.

So how can we make comps more fun for everyone?

GRAND PRIX STARTING

First, we must get rid of the pre-start gaggles and start-time 'games'. Top pilots never lead out from the start - go five minutes ahead of the bunch and they'll all overhaul you while you mark thermals for those behind. I've been in pre-start gaggles waiting for half an hour for someone to make the first move. Meanwhile, the thermal dies and everyone in the gaggle steadily sinks - everyone goes down, until finally some sucker loses patience at the stupidity of the situation and starts on task.

A Grand Prix start solves this problem. Everyone starts over an extended line when the gun goes off. The situation is the same in yachting.

A limit is set for start height, lower than convection, so there is no need to hang around in a gaggle at the top of the nearest thermal - everyone must lose height to start within the height limit. So the fierce pre-start gaggles don't develop. Problem 2 solved.

To prevent congestion and large gaggles, GP starts are limited to a maximum of 20 gliders. A smaller number of, for example, 12 or 15 maximum could be set to further reduce gagging. If more gliders enter the competition, then the fleet can be broken down into a number of tranches, each starting 20 to 30 minutes apart. The tranches can be seeded and regrouped daily to ensure fair competition.

HANDICAP CIRCLES

Introduce circles around task waypoints, to accommodate differing glider performance. Fastest gliders turn in a 500m beercan, while slower gliders turn short of each point at a larger circle. Computer programs exist to calculate the size of handicap circles. Boffins Computer Workshops in the UK has created a program that has been used by the BGA to handicap competitions. See handicaptask.uk At my club, Lake Keepit, Jacques Graells has developed a similar script for handicapping GP tasks. It works well!

SCORING

GP scoring is so simple. First over the finish line wins and scores 10 points plus one extra as winner. Following gliders progressively get 9, 8, 7 ... easy. The pilot with the most points at the end of the comp wins.

THE RADICAL BIT

Golfers are familiar with personal handicaps. You've probably been bored to death by an average golfer enthusiastically recounting how he won the weekend championship with a Stapleford score of 40 points. How can the average glider club pilot possibly ever be enthused by a win like this, with gliding comp rules as they are?

So why not handicap the pilots? There is enormous difference in the speeds achieved by the 'guns' and the average, competent comp pilot, let alone someone new to the game. Not only do our top pilots regularly achieve speeds 10% better than the second rung pilots, but the same faces also win every day. Although new club pilots are much slower, they can be encouraged to join in by setting tasks that allow them to get home, and occasionally share in the glory. I remember that my first 300km XC task in a Club Libelle took me over seven hours. A good pilot in a modern glider would be three times faster. We need to find a way to include slow pilots like this, and give them a 'chance' to win. Handicapping pilots is the only way to make this possible and to enthuse and encourage them.

But I hear a chorus ... "You can't do that!" "But you can't have the worst pilot winning!" "How can you possibly create a fair handicap?" "Who maintains the handicap?" "How can you possibly select Australian representatives from a handicapped comp?" ... and so on. But I ask, "Why not?"

At our Club, after a lot of input from Jacques, we now run regular 'Mini GPs' where club pilots fly GP tasks. Pilots are handicapped according to assessments of ability. This causes plenty of jovial challenge and good-natured banter, but it gets people involved. If you win a day, you get slapped down with another 5% handicap. If you don't win, your handicap is relaxed by 1% for the next day. Eventually, everyone will win a day.

Tasks are flown in GP format with handicap circles at each point, based on the combined personal and glider performance handicaps. It's good fun.

NATIONAL, STATE COMPS AND REGATTAS

These principles could be extended to all competitions within Australia, including Nationals comps.

- Grand Prix starts along a 10 km line - max. start height 1,000ft less than convection
- Split the field into tranches of, say, a maximum of 15, starting 20 to 30 minutes apart.
- Use circles around turnpoints to adjust task distance according to handicap.
- Simple GP finish scoring.
- Initial handicap based on previous competition experience - something like Table 1 below.
- Adjust handicap after each race - similar to Table 2 below.
- Carry forward adjusted handicaps to ensuing comps and regattas.

CHANGE WILL BE CONTENTIOUS

No matter what is done, if change is introduced, it will be contentious. Remember when glider handicaps were first



ABOVE: Bob Dircks reckons it's about time he shared in the glory and beat Bruce home.

introduced? The conservatives like flying the way they have done forever, those who pack away countless bottles of wine from day wins will be disadvantaged and the cliques will be disturbed. Whatever is done will be argued about, and no matter what system we employ at comps it will never be 'fair' - whatever that is.

The most important existential issue for our sport is not fairness, or the winning, but the enjoyment. Flying gliders needs to be fun, companionable, inclusive and rewarding so that people keep coming back. If we make our competitions fun and inclusive, we will grow our numbers and develop more pilots into highly skilled contest players and enthusiastic members.

The future of our sport requires us to innovate and change. Otherwise there'll be no gliding movement when all us old-timers die off.

PS "Believe it or not I truly look forward to the day when Bob thrashes me across the line!" - Bruce Taylor.

Highest Experience Level	Handicap
Placegetters - International Comps	1.20
Competitor - International Comp	1.15
Placegetter - Aust. Nationals Comp	1.10
Competitor - Aust. Nationals Comp	1.05
Placegetter - State Comp	1.00
Competitor - State Comp	0.95
Competitor - Regatta	0.90
No Comp Experience - 300km XC	0.80
No XC Experience	0.70

Table 1 - Initial Handicap

Day Placing	H'cap Adjustment
1 st Place	Plus 5%
2 nd Place	Plus 2%
3 rd Place	No Change
4/5/6 th Place	Minus 1%
7 th Place or more	Minus 2%
10 th Place or more	Minus 3%
Outlanding	No Change(?)

Table 2 - Handicap Adjustments

HOW CAN YOU DETERMINE THE BEST PERFORMER TO SEND OVERSEAS TO REPRESENT OZ?

This has been a principle objective of National Competitions in the past, and an issue that still needs to be addressed. National Competitions Committee (NCC) should be up to the task of assessing pilot performance and capability without needing a competition placing to do that. If a formulaic method was required, the results points multiplied by handicap may do, or an assessment using raw speeds achieved could be another approach. I think the NCC members are very capable of knowing who among us have the potential for a podium finish overseas. Moreover, podium possibilities should be the only ones warranting the organisation's support.

BELOW: Simple scoring - first over the finish line wins.



VINTAGE GLIDERS AUSTRALIA ANNUAL RALLY

BY DAVID GOLDSMITH



Wow! What a way to start a rally! The forecast for Saturday 6 January of 43°C with catastrophic fire danger was followed by a pall of smoke approaching Bordertown Airfield from the northwest. Evacuation plans were considered BUT, thankfully, the south-westerly wind change arrived about 90 minutes early, diverting the fire to our north, much to our relief! The pall of smoke over airfield and town remained for some time to remind us of our close escape. Oh - and no flying was done due to the high fire danger preventing winch operations.

All together, nine vintage gliders and over 30 VGA members and visitors attended the rally, with the emphasis on social as well as flying activities.

ES52 Mark IV Kookaburra VH-GNZ with Brian McIntyre
Cherokee II VH-GPR with Peter Raphael
ES-60 Boomerang VH-GQO with David and Rosie Howse
ES60 Boomerang VH-GTL with Mike Renahan
Ka6-CR HNA with John Mackley
Ka6E VH-GGV with Erik Sherwin
Ka6E VH-GEA with Jenne and Dave Goldsmith
Chilton Olympia VH-GFF 'Yellow Witch' with JR Marshall
Woodstock VH-GBR, self launching, with Peter Champness

Other members and friends visiting included Noel Matthews, Alan Bradley, Ged Terry who popped in from England, Gary Crowley, Emilis Prelgauskas, Bob Hickman, Kim Van Wessem, Peter Fietz, Ian Caldwell, meteorologist Peter Bannister, Geoff Hearn, Sylvia Sharman, Tim Svenson, Alan and Margaret DeLaine, Bailey Roberts, Leigh Bunting, Ruth Patching, George and Helen Buzuleac and Colin Collyer, who was unfortunately taken to hospital with a torn hamstring after tripping on a wayward trolley. In addition, Bordertown Keith members included Peter Brookman, Trevor Carter, Marcus Trnovsky, Brian and Jack Gerhardy, Terry Ryan, Adam Howell, Anthony Quilter, Damien Van De Velde and Gary Williams.

Sunday's weather after the change was



much more pleasant but thermals were only going to about 4,000ft. We rigged our aircraft and had a relaxing day as some winch problems interrupted flying. There were two Kookaburra winch launches and a Ka6E soared for a while after launching behind a friendly Super Dimona that dropped in - thanks to Cath and David Conway.

By Monday the rally was in full swing with lift available to 4,500ft and everyone keen to fly! Each day improved up until Thursday, including many flights of up to 8,000ft, and over 3 hours, were recorded.

On Wednesday, an information evening about the Angel Flight was presented by Owen Crees, supported by Lucianne Van Gelder, and Denis Grosser. This wonderful voluntary organisation takes up where other emergency services leave off by providing air and ground transport to patients and family of those adversely affected by health issues, when recommended by a health professional.

Rain on Friday effectively brought the flying to an end, however, the VGA AGM at morning tea time brought some lively entertainment as issues and projects were discussed. Winds on Saturday were good for kite flying with Leigh Bunting getting the best height and weatherman Peter Bannister recording best distance as his weather balloon disappeared interstate over the border into Victoria on a downwind dash.

continued over page

TOP LEFT: Ged Terry prepares to fly the famous Olympia 'Yellow Witch', assisted by Brian McIntyre.

BOTTOM LEFT: The threatening bushfire approaches the airfield.

ABOVE: The Woodstock self-launcher built by Alan Bradley and now owned by Peter Champness.

BELOW: David Howse (left) assists Peter Bannister to launch the morning's weather balloon.





ABOVE : John Mackley's Ka6CR won the Best Single Seater trophy.

Saturday evening's Annual Presentation Dinner was very well attended and lots of fun. The Bordertown Boys provided a delicious dinner, followed by the awards presentation:-

The VGA League 2 Trophy for the best League 2 flight during the rally was won by Peter Raphael in the Cherokee with 77 km.

The Geoff Gifford trophy for the longest flight between rallies was awarded to Jenne Goldsmith for 360km in the Ka6E.

The Renmark Trophy for the longest flight of the rally went to Dave Goldsmith for 213 km in Ka6E VH-GEA.

The best single seater was awarded to Ka6CR VH-HNA with John Mackley.

The best maintained Schneider Glider was won by Kookaburra VH-GNZ with Brian McIntyre.

The Feathers Encouragement Award was also won by an enthusiastic John Mackley.

The VGA Raffle was then drawn and the winner of

Martin Simons' fabulous book 'The World's Vintage Sailplanes 1908-1945' was won by Lyle Whitfield of Goulburn, who was delighted when informed of his win. Other contributed local prizes were also included in the raffle. Thanks to all those who bought tickets.

Then followed the inaugural 'Patching Address', named in remembrance of the Patching family contribution to Vintage Gliding. This year's interesting and sometimes spine-chilling presentation was by Tony Mokunas about his many years flying in the wilds of New Guinea for regional airline Talair. Tony swears it is all true, and this was backed up by Noreen, the young bride he took with him!

So, on Sunday morning we reluctantly said our goodbyes and started the journey home, vowing to keep in touch with our wonderful friends in vintage gliding until we all meet again for the next Bordertown rally to be held from 5 to 13 January 2019.



SO, YOU WANT TO BE CTO/A ? PART 4

Mike Burns' influence is worldwide and he has a high reputation. This is the fourth of six articles he has written, looking back at his experiences and GFA's history.



The CTO/A position provides the opportunity to see how gliding clubs operate and how they manage finance, but it's not all about airworthiness. I recall taking a G109 around South Australia with the South Australia RTO/A, flying into almost every gliding site in the state, netting a wealth of information about clubs and their problems.

The predominant challenge seemed to be the cost of an aero tow. High fuel costs, high engine overhaul costs and significant maintenance costs were all issues, due to the LAME requirements. This literally had the ability to break some clubs. When a well-known gliding figure knocked on my door wishing to discuss a lower cost aero tow possibility, I was all ears.

YANK HYPE

An American company had been getting a lot of press about fitting auto engines into General Aviation aircraft with what appeared to be phenomenal results. We looked over several magazine articles and correspondence from the US company and even allowing for the 'Yank Hype', it certainly had an appeal. This was right up my alley in terms of Design and Development, having re-engined a number of General Aviation types during my work in GA, the prominent one being the Lycoming O-320 into Chipmunks. I suggested I would be happy to work on the project on a part time basis so that it did not interfere with my CTO/A work.

The proposition was to buy a Ford V6 engine from the US company and fit it into a Pawnee 235 glider tug. Their sales pitch was an engine modified to aircraft standards, delivering 260 HP. The advantages were lower fuel consumption, using auto fuel, low

cost parts, and low cost overhauls. The sums on paper were very impressive. Why V6? There were no V8s at that time that seemed suitable without a significant empty weight increase for the Pawnee. Plus, of course, the American company had done all of the hard work in terms of design and development - a perfect situation.

The first thing was to get CASA on side, because it was clear that full certification would not be on the table and the Experimental Category was still a long way off. I prepared a briefing document, circulated it to CASA staff and arranged a meeting on my next visit to Canberra. I normally met with CASA three or four times a year.

THE AUTOTUG PROJECT

There were three parts to the proposal:

- 1 Fit a V6 auto engine into a dedicated glider tug.
- 2 Allow trained GFA members to do the tug maintenance.
- 3 Allow trained GFA members to fly the tug without a GA license.

At the meeting, I sat in with five senior CASA staff, each a specialist in different areas. The Airworthiness Manager chaired the meeting. "Before we start I want it clearly understood that CASA fully supports this proposal, so all we have to do today is sort out how to do it." I nearly fell off the chair!

"We consider that with close to 7 million of these engines built by Ford, their quality control is far superior to Continental or Lycoming. Provided the engine has minimum modification and genuine Ford spares are used for maintenance, we have no problems. The other proposals will depend on GFA setting in place adequate training procedures."



So started the Autotug project, but it definitely got much harder as time went on.

INTO THE WORKSHOP

Raising some private funds, an engine was ordered from the Javelin Aircraft Company, based in Wichita, Kansas. We received manuals and drawings by mail that were used to build a work stand for setting up and working on the engine, and to manufacture an engine mount to mate the engine to a Pawnee. The Gliding Club of Victoria agreed to provide a Pawnee 235. By the time the engine arrived we were all set to get stuck into the project. GCV wanted to strip out the existing engine but it was suggested they wait until the engine arrived and was checked out properly.

A big blue box turned up at the GFA office at Essendon Aerodrome and moved to a bit of workshop space we borrowed in a nearby hangar. Opening the box, we found a small, compact V6 with tags tied to various bits. 'Fit ignition here.' 'Connect fuel here.' A one-page note said to connect the dots and fit it into the Pawnee. The most obvious parts of the 'Aero Conversion' was a huge Holley carburettor and a single rubber belt reduction drive unit. Unseen but assumed fitted was a custom camshaft, the only mechanical modification.

The engine was set up in the work stand, allowing access for inspection, before moving it to Benalla. My curiosity got the better of me and I started to look at the detail of the engine, starting to find aspects I did not like. For example, one head gasket fitted back to front, blocking a coolant gallery. Removal of the sump revealed a 3/8" bolt just lying there - and much, much more.

PIPE DREAM

In the paperwork the Javelin Aircraft Company sent was a burst about the engine being 260 HP in the Aero Configuration, against 139 HP in the original auto configuration. They provided details of dynamometer testing done in a dyno they had designed and made themselves. This did not feel right. Doing some sums on the back of a stamp showed that the 260 HP was most likely a pipe dream. We contacted the company to ask questions, resulting in some pretty abusive responses.

A decision had to be made. Fit it into the Pawnee or not? We bit the bullet and decided to find a dynamometer in Melbourne and have the power checked. It was going to cost money and blow out the budget, but better to be safe than sorry. We found a small business in South Melbourne that specialized in modifying stock auto engines for racing purposes and they had a certified dyno. They were very keen to help and had a lot of expertise to offer.

The V6 sat on the floor of the dyno room and we hooked up a battery and some fuel. It started first go and ran, sitting on the concrete, as smooth as. Very impressive. With a bit of work, we had it set up and the dyno testing started, with stub exhausts fitted as we expected them to be part of the final installation.

The results soon became very clear. As received, the engine had a maximum output of 139 HP at around 5,000 rpm exactly as it performed in the Ford vehicles. So much for the Aero Conversion. We had been sold a pup. It's best use was possibly as a boat anchor.

BACK TO WICHITA

We made contact with a Ford dealer in Wichita, who knew the Javelin Aircraft Company and considered them to be borderline con men. He wanted to help us as much as possible, offering engine spares at wholesale prices and any other help we needed. For instance, a full set of Ford exhaust valves, delivered, cost less than one Lycoming exhaust valve. His interest was such that over the next two years he rang regularly from Wichita, usually about 4pm our time, just to see how we were going and what we needed.

The dealer had contacts at Ford and was able to supply us with a document that outlined in detail how Ford had designed and developed the V6. This was a very specialized engine made primarily for front wheel drive Ford vehicles.

The primary feature of the document was the section that showed how they had experimented with six different intake manifolds. The developed power of each manifold was significantly different, depending on the manifold efficiency. It turned out that the one eventually used in production was the least efficient, but was also the only one that would fit under the bonnet line of the front wheel drive Ford vehicles. That was what we had bought.

That information gave us a few clues about where to start if we wanted to turn this heap of junk into a usable engine. The one thing that possibly spurred us on was the opinion of the boys in the dyno shop that the engine definitely had potential to go over 200 HP without too much modification. The fundamental aim was to make the least number of modifications, and keep it as stock standard as possible.

MORE TESTING

We sent a very detailed report back to the Javelin Aircraft Company outlining our results. From that point onward we were known as "those lying bastards in Australia".

One usually thinks of Design and Development work as highly technical, calculated and scientific. Well, sometimes Murphy gets involved, as we found out. After many iterations a new intake manifold was created, aimed at maximum efficiency. We used clear Perspex panels in the initial manifold to see what the vaporised fuel did, finding that with the Holley carburettors, the vapour re-formed into large droplets before reaching the intake valves. As one of the dyno staff said, "You might as well pour it in with a bucket."

Two Stromberg-style carbies were finally fitted after experimentation with other carbies and fuel injection. Because the aero tow profile would be largely full power, then back to idle, fuel injection showed no advantage at all. That work got us into the 180 HP plus area.

We had set a design aim to take the original Pawnee 235 metal propeller and turn it on the V6 at the same RPM for takeoff as the original 0-540 engine did. That was around 2,550 rpm. If we achieved that, the V6 would match the 0-540 in power and the Pawnee would have approximately the same climb performance. Our sums showed that the V6 would need in the order of 194 to 198 HP to achieve that goal.

BALANCING THE CARBIES

Twin carbies need to be balanced. Look at the Rotax 912 or 914 and you will see a balance tube between carbies allowing the engine to balance. Our new manifold had a wide plenum chamber fitted with a central dividing wall, with a carby at each end of the chamber. The idea was to provide a breathing hole, or holes of the right size and position in the dividing wall to get the balance correct. We tried many variations of hole size and position, but nothing gave a power increase. We reached a point of total desperation. It looked like after all the work and money spent that we simply would not get the extra power needed.

We fronted up at the dyno shop one last time to try our luck. We tried a few ideas, but still nothing worked. By morning tea time, the dividing wall in the chamber had been patched up and an electric drill was lying on top of the engine. The proprietor of the dyno shop sat with us having coffee. He looked over at the engine, and muttered, "Stuff it." He got up, grabbed the drill and, at random, pushed a hole through the dividing wall. Coffee over, we bolted the two carbies back on and started the dyno.

Murphy! The note of the engine was totally different. It actually purred. As the throttle was increased, we immediately saw 190 HP, 200 HP, 210 HP, 220 HP. With a rush of blood to the head, we had what we wanted. Looking at the results, it was also obvious that we could get 198 HP at 2550 propeller rpm.

The biggest plus was that the measured fuel consumption at 198 HP was HALF of the Lycoming 0-540. That comes to approximately 32 litres/hour against 64 litres/hour. Do the math on those savings! Now we could confidently fit the V6 engine to the Pawnee, creating GFA's first 'Eco Tug'. But that is a different story.

THE DOWN SIDE

Between our advice to the Javelin Aircraft Company about the lack of horse power and our success at getting the power needed, there was a fatal accident in the USA. A homebuilder, based in high country, bought a V6 from Javelin, probably seduced by the 260 HP claim, fitted it and commenced flight testing at the local air strip, which was well above sea level. Observers saw the first flight start with a protracted ground run then a sluggish climb rate. The aircraft turned to possibly avoid rising terrain ahead, but in doing so impacted an adjacent hill - a fatality that, we felt, could have been avoided.

NEXT: The big Nimbus is missing.

GA

OPERATIONS

PILOT EMERGENCY PARACHUTE INFORMATION

It has come to GFA's attention that a former APF Parachute Packer number A30 (having last held APF membership 18 August 2017) may have packed a number of emergency parachutes and erroneously declared them as airworthy.

The packer, working from his Caboolture location, may have approved the parachutes as airworthy in conflict with the Manufacturer's maximum recommended service life requirement. A copy of the packing slip signed by the Packer is available from the EMO (emo@glidingaustralia.org) upon request.

National Parachutes Inc. has recommended a 20-year maximum life for their harness, containers, parachutes and pilot chutes and as such any National Parachute equipment that has exceeded this 20 year period may not be deemed as airworthy. An excerpt from the current National Parachutes Packing Manual follows: "The Parachute Industry Association (PIA) has visited this issue without conclusion to date. Until the PIA specifies otherwise, it is the recommendation of National Parachute that the maximum service life is 20 years from date of manufacture (this includes the harness, container and pilot chute)." It is unknown how many, if any, pilot's rigs may be affected by this situation.

While the packer is based in Caboolture, it is possible that a pilot from another area or interstate may have used the services of this packer.

Pilots who discover any irregularities with their parachute packing should report the matter to the EMO.

CONVERTING PILOTS TO THEIR FIRST SINGLE-SEATER

On 1 May 2016, a PZL-Swidnik PW-5 glider crashed on Tauranga Aerodrome and the pilot received life threatening injuries from which he later succumbed. The pilot was conducting a first solo flight on a single seat glider. Observers witnessed the glider over fly the intended runway for landing, commence a left turn and descend at a high rate, striking the ground. The safety investigation found that the accident occurred as a result of the pilot losing control of the glider during a steep left turn after a discontinued landing approach to the intended runway.

Due to the low altitude when the loss of control occurred, the pilot was unable to effect a recovery before the glider struck the ground. The investigation identified that the pilot had minimal solo flight experience prior to the first flight in the single seat PW-5 glider. A lack of guidance material available in the Gliding New Zealand Instructor's Training Manual with regards to single seat glider conversion was identified as an issue. The full report can be downloaded from the New Zealand Civil Aviation Authority website at: <https://tinyurl.com/ydymqbm8>.

Following the accident, the gliding club involved introduced a peer review process with a panel of gliding instructors to evaluate a student's suitability for progression onto a single seat glider. Gliding New Zealand updated their Instructor's Manual with additional information to provide guidance with regards to conversion onto single seat gliders. This guidance follows:

continued over page

CONVERSION TO SINGLE SEATER AND TYPE CONVERSION

Converting pilots to fly a single seat glider for the first time or to a higher performing glider is not something that should be treated lightly. It is a significant step that requires an instructor's first-hand knowledge of the pilot's flying skills, temperament and ability to cope with the different handling characteristics of something very new to the student.

All students/pilots are different and therefore it is imprudent to impose set minimums for a first conversion to a single seater. A pilot that has a background in flying multiple different powered aircraft will be very different to a student who has only ever flown one type of dual glider. Also, the first type of single being converted to is a factor and ideally it should have handling characteristics that are consistent with training aircraft. As a general rule of thumb, 10 to 15 solo flights and around 1½ - 2hrs solo time would not be unusual for someone that has only flown a limited number of 2 seat glider types.

If the club has high performance single seat gliders, then they should establish through their SMS minimum qualifying criteria for club pilots to fly.

FLIGHT MANUAL

The first step to any conversion is for the pilot to read the flight manual. If the club has any briefing notes relating to the glider, these also must be read.

BRIEFING

A thorough briefing on the type must be given. The only exception would be for an experienced QGP for whom there is no other person in the club familiar with the type. Even in this situation, every endeavour to obtain a type briefing from a more experienced pilot or instructor should be made. Particular attention should be paid to the pre-flight inspection, type handling, weight and balance, location and operation of all controls, normal operating speeds, the placard speeds and general handling characteristics in the air and on the ground. Concentrate particularly on the differences from previous types flown.

Time must be given to let the pilot sit in the glider for a period of time before lining the glider up for launch. This not only gives time to ensure that the seating position is comfortable, but also to try out the controls and become familiar with the layout and instrument positions.

BALLAST

It is a good idea to ensure that all early flights are ballasted with a Centre of Gravity set reasonably well forward. This may give more benign stall characteristics.

AIRBRAKES

Airbrake performance is unique to the type of glider being flown. Some will stay out when deployed and are very powerful. Others are light, less powerful and have tension to want to close or open. Different gliders may require a change of pitch to maintain a constant speed and others not. Some have air buffet and increased sound when deployed and others will be very smooth and quiet.

Briefings on airbrakes should also include the wheel brake, which on some gliders is on the end of the airbrake. The over centre closing lock can differ on all gliders, so

CHRISTOPHER THORPE
Executive Manager,
Operations
emo@glidingaustralia.org



should be tried and tested on the ground. Discussion on the performance of airbrakes is an essential part of any conversion.

FLAPS

Ideally training should be given on the use of flaps in a 2-seater first, but if this is not available, then a full briefing on their use must be given with full reference to the flight manual. Familiarity of which lever is flap and which is airbrake is to be emphasised. Use and effect of flaps will be different for each glider, during launch, cruising and landing, so briefing on each of these should be given.

AEROTOW

If pilots are converting to a single that has a belly hook only, emphasis should be made of what to do in the event of an aerotow upset or PIO's (pilot induced oscillations). The pilot must be prepared to release immediately in an emergency situation and be able to deal with the circumstances they then find themselves in.

The first several flights in a new type should be done in ideal conditions and it would be prudent to restrict to local flying. As the glider becomes more familiar, the pilot will be able to handle more difficult conditions and better able to cope with emergencies. The rate of progress will be different for each pilot depending on their previous experience and skills.

TOW PILOT TRAINING AND ASSESSMENT

The transition of tow pilot endorsements from CASA to GFA has gone relatively smoothly, and over 320 tow pilots have been issued with a GFA Glider Towing Certificate. Pilots who hold a Glider Towing Certificate may exercise the privileges endorsed thereon to tow in any approved tow plane for which they are licenced or certificated to fly. Tow pilots who do not hold a GFA Glider Towing Certificate can no longer tow GFA gliders but can still apply to have their existing qualifications recognised by using the appropriate form.

Application forms for initial and further towing endorsements are available from the GFA Forms Library under the section 'Tow Pilot Endorsements' at this link: <https://tinyurl.com/y9sqfsl8>.

All applications for an 'Initial Glider-Towing Endorsement' must be accompanied by a legible copy of the pilot's CASA Flight Crew Licence and/or RAA pilot certificate, together with a copy of the Medical Certificate applicable to that Licence or Certificate. These documents are required to be maintained on the pilot's file for audit purposes. A current 'passport style' photograph - head and shoulders against a light, plain background - should also be provided for inclusion on the Glider Towing Certificate.

GA

accidents & incidents

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

You can read the full SOAR report at <http://tinyurl.com/ltmk056>

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.



The Gliding Federation of Australia Inc
SOAR Accident and Incident Occurrences
General Statistics
Date From: 01/08/2017
Date to: 30/09/2017

Damage	VSA	WAGA	GQ	SAGA	NSWGA	Total
Nil	9	1	2			12
Substantial			1		1	3
Minor	1			1	2	6
Write-off	1			1		2
Total	11	2	5	2	3	23
Injury	VSA	WAGA	GQ	SAGA	NSWGA	Total
Nil	10	2	4	2	2	20
Fatal	1		1			2
Minor					1	1
Total	11	2	5	2	3	23
Phases	VSA	WAGA	GQ	SAGA	NSWGA	Total
In-Flight	4	2		1		7
Landing	3			3	2	8
Ground Ops	1			1	1	3
Launch	2			1	1	4
Outlanding	1					1
Total	11	2	5	2	3	23
Type of Flight	VSA	WAGA	GQ	SAGA	NSWGA	Total
Local	5	2		1	1	9
Training/Coaching	3			4	2	9
	1			1	1	3
Cross-Country	2					2
Total	11	2	5	2	3	23

8-AUG-2017 GQ AIRCRAFT CONTROL TWIN ASTIR

Under investigation While conducting a simulated launch failure the command pilot misjudged the roundout from a very steep approach and the aircraft landed heavily with some sideways drift. The tail boom broke off just behind the wings.

20-AUG-2017 VSA AIRCRAFT SEPARATION DG-1001 - PIPER CUB/PACER

On early downwind the command pilot identified a powered aircraft climbing from the left on a collision course and took avoiding action to prevent a collision. The pilot of the powered aircraft also took avoiding action and passed about 50-100m in front of glider. The glider was on an instructional flight and returning to the airfield to join circuit. It was late afternoon, and lighting conditions were dull due to an overcast sky. Just after the decision to break-off the flight, the crew of the glider heard a departure call over the CTAF from the pilot of a visiting Piper Tripacer. The gliding instructor visually acquired the Tripacer lifting off about two thirds down the operational runway. Nearing the circuit joining area the gliding instructor scanned the airspace for the departing Tripacer but did not see it.

As glider became established on the downwind leg and at about 900ft AGL the glider instructor saw Tripacer in in the 10 o'clock position climbing on its crosswind track on a path that would conflict with the glider. The gliding Instructor assumed control of the glider and rolled left to pass behind the Tripacer. Shortly after the glider rolled, the Tripacer pilot also turned left to avoid the glider. At the closest point, the two aircraft were estimated to be 50 to 100 meters apart. It is considered that had neither pilot taken avoiding action a collision was likely. No radio communications followed the incident, and the Tripacer departed to the south. The glider instructor suspects the Tripacer may have been obscured from view by the Clear Vision Panel on the left-hand side of the glider's canopy.

Investigation revealed the Student pilot, who is not solo standard, did not sight the Tripacer as their attention was directed at flying the glider. An inbound call was not made by the glider pilots as they had been operating within glide range of the aerodrome. The glider pilots also did not give a positional broadcast upon joining the circuit but this was considered a timing issue rather than an oversight as the incident occurred around the time a call was due to be made by the student.

8-SEP-2017 WAGA AIRCRAFT CONTROL SZD-48-3 JANTAR STANDARD 3

Under investigation During the test flight after maintenance the elevator pushrod disconnected. The pilot was able to land the glider using weight-shift techniques to dampen the phugoid oscillations. The pilot was uninjured but the glider was substantially damaged.

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19-SEP-2017 TERRAIN COLLISIONS ASK-21

Under investigation Fatal The glider, which was returning from a training flight, was observed on a stable final approach with about half airbrake deployed. When at a height of between 30 and 50 feet the glider was seen to pitch down suddenly by about 65 degrees with the simultaneous deployment of full airbrakes. The aircraft impacted with the ground within a fraction of a second of its attitude change. Both crew members suffered fatal injuries. Evidence collected suggests the student, who was on their eighth or ninth flight, pushed forward on the control column using more force than necessary to maintain speed in response to the airbrakes being fully deployed. Subsequent flight testing revealed that the instructor would not have had sufficient time to react to such a manoeuvre from that height. This accident highlights the importance of instructors ensuring their students are not on the controls at low levels until competence in smooth and reasonably accurate co-ordination has been acquired. Additionally, the student should have some idea of anticipation in the use of the controls.



22-SEP-2017 NSWGA AIRCRAFT CONTROL DG-1000S

Under investigation. During a training flight the student flared too high resulting in a decaying airspeed. The instructor took control but was unable to prevent a heavy landing.

23-SEP-2017 GQ AIRCRAFT CONTROL ASK-21

Just after becoming airborne, and at a safe height, the instructor commanded the student pilot to descend into the low tow position. As English is the student's second language, the command was misunderstood and the student climbed higher and the tow plane disappeared from view. The instructor took control quickly and restored the glider to the normal low tow position and the rest of the flight was conducted uneventfully. The student pilot had power flying experience but was on their 11th flight in a glider. The instructor reported that they were

surprised just how quickly the glider got out of station. If the glider is allowed to climb rapidly behind the tug, it can very quickly become impossible to prevent it accelerating upwards in a slingshot action (rather like a winch launch), and tipping the tug over into a vertical dive. Once that has happened only height can save the tug pilot from disaster. Downward displacement of the glider to a position below the slipstream is quite acceptable, but upward displacements are much more critical. The glider pilot must release immediately if the glider is going high and the tendency cannot be controlled, or the pilot loses sight of the tug. The trainee should not attempt the take-off and early part of the launch until he can maintain position successfully during the latter part of the tow. The demonstrations and the trainee's early attempts shouldn't begin until the tow reaches a height and position from which landing back on the airfield poses no problems.

30-SEP-2017 VSA AIRCRAFT CONTROL LS 8-18

Under investigation Fatal It was reported that the glider departed controlled flight while attempting to land in a paddock. The sole witness described the aircraft being in a turn when the into-turn wing dropped and the aircraft impacted the ground. The police speculate the glider stalled and spun on the turn. The pilot had recently acquired the aircraft and was on his first flight in it.



GFA CLUB LIST

Please send any corrections, updates, additions for inclusion in the club list to sean@glidingaustralia.org

716 FLIGHT GLIDING CLUB

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

2 WING AAFC

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

ADELAIDE SOARING CLUB

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

ADELAIDE UNIVERSITY GLIDING CLUB

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

AIR CADET GLIDING CLUB

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

ALICE SPRINGS GLIDING CLUB

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

AV8 FLIGHT TRAINING AV8 FLIGHT TRAINING SOUTH AUSTRALIA 0429 803 705 AV8.net.au

BALAKLAVA GLIDING CLUB

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

BALLARAT GLIDING CLUB

15 members operating from the Ballarat airfield. Airport Road Ballarat. 47.5 E Tel

5339 2444. Aerotow operations most weekends or by arrangement. Single club two seater. Access to hangarage and airport facilities for Bar, showers and rooms.

BAROSSA VALLEY GLIDING CLUB

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

BATHURST SOARING CLUB

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

BEAUFORT GLIDING CLUB

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

BENDIGO GLIDING CLUB

Borough Rd, Raywood. Own airfield. Operates weekends and public holidays. Hangars, workshop and club house with cooking and ablation facilities. Aerotow with Eurofox tow plane. Club fleet a PW6 two seat trainer and a PW5. Approx 20 private gliders. Tel 0459 485 281. www.bendigogliding.org.au

BEVERLEY SOARING SOCIETY

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

BOONAH GLIDING CLUB

The club is one hour south west of Brisbane and sits adjacent to the Great Dividing Range in the Scenic Rim. Thanks to our location and climate we have year round soaring, with thermal, ridge and wave conditions. We are a student friendly (ab-initio and intermediate students) club. Three single seat and two dual training aircraft are available to members. Aero and auto tow operations available. Our clubhouse has full amenities, hanger and bunk house. Operations take place on weekend & public holidays. Boonah Airport, Degen Rd, Boonah QLD 4310

Boonahgliding.com.au 0407 770 213 info@boonahgliding.com.au

BORDERTOWN-KEITH GLIDING CLUB

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

BUNDEBERG GLIDING INC

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

BYRON GLIDING CLUB INC.

Tyagarah Airfield (council owned) - E side of Pacific Hwy, 5 kms N of Byron Bay. Entry off Gray's Lane then 2nd left into Old Brunswick Road passed the blue hangars to club white hangars at the eastern end of this dirt road. Telephone for bookings and info clubhouse 0256148650. Operations are 4 days a week, self launch only. The club Club fleet: 1 Motorfalk 1 Grob109A 2 Dimonas (some available for hire). Facilities include: Clubhouse with kitchen and bathroom, 2 hangars, with only basic camping on grounds. www.byrongliding.com

CABOOLTURE GLIDING CLUB

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

CANBERRA GLIDING CLUB

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

CENTRAL COAST SOARING CLUB

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

CENTRAL QUEENSLAND GLIDING CLUB

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

CORANGAMITE SOARING CLUB

Kurweeton Pastoral Co, Kurweeton

VH - IPL DG 400

4 - 100 Excellent condition, 1927 hrs. airframe, 214 hrs. engine. BEA auto engine retract, EGT, PU refinish, Mountain High oxy, Cambridge 302/303, Tasman flight computer, DG service contract, Jaxida canopy cover, fresh Form 2, parachute, charger, spares etc, metal trailer inc. one man rig/de-rig. \$85,000 Contact **John 03 9876 2808**

VH-GFU SUPER XIMANGO.

Two seat side by side . 32:1 L/D . Rotax 912 Liquid cooled 4 stroke. Engine time 1015 hours. Hoffman 3 position prop. Wings fold to fit in standard hangar. Retractable undercarriage. Always hangered. Western Australia. A great touring motor glider for the morning glory. \$70,000 .Contact **Bill on 0428 513 911**



VH-GFF, Nimbus 3T 25.5m

Total hours 2900. Engine hours 40. Tilt-up panel mod and full instrument panel rewire completed by Maddog Composites. Panel configured for Ixnav V7 + Oudie IGC + Flarm and Dittel Radio fitted. Cockpit fitted with Mountain High Oxygen system and bug wipers also available. Fully set up for competition or distance flying. Pfeiffer trailer has been fully refinished and reconfigured (by Maddog Composites) with Cobra style wing dollies stabilised with side bearing runners and hydraulic lift for the fuselage. Comes with full IMI one man rigging system and tow out gear, including tail lift. No heavy manual handling required with this setup. Glider also comes with full all-weather covers and wing and tail ballast tanks all fully operational. Also comes with 24.5m and 22.9m wingtips and various spares.

Sustainer is fitted and fully operational with min pilot weight 78kg and maximum weight with full fuel 100kg. Glider is fully sorted and in very good condition inside and out. Full PU refinish in 2012. Genuine 1:60 glide performance in a very elegant and capable package. Glider is



currently hangered at Bathurst Soaring Club and a package with T-hanger is also possible. Price: \$85,000 negotiable Contact **Adam Gill, Phone 0417 770 084**

VH-GUE DG500M

1/5 SHARE. Based at Boonah. Built 1995 always hangered. Immaculate condition. New Solo engine factory fitted in Germany by Binder 2014. Equipped for solo independent operation. Australian Agent for Solo Engines is one of the syndicate members. Dual Mountain High oxygen system. Flarm and Mode C Transponder for safety and CTA transit Full avionics panel, flight and engine controls both cockpits, Low utilization. Price reduced \$32000. **Jim 07 3821 1246 hjrgrant@iprimus.com.au**



INSTRUMENTS AND EQUIPMENT

VHF RADIOS - Icom ICA-210, Becker AR3201 and AR4201, Funke ATR600.

Becker AR4201 - \$700

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