

CLUB & SPORTS CLASS NATIONALS SHEAR WAVE - 1999 KM - JANUARY AT TEMORA



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No. 46 February - March 2019

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RETURNS

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

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

GFA OFFI

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

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

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LIDECDIDTIONS

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FROM THE PRESIDENT

GFA AND HOW WE HELP

I attended the F1.0 GP again this year, which I describe below, and one of the things that occurred to me was "How would this happen if GFA didn't exist?" I mean to say, if CASA were in charge, I can just imagine the applications, rules and impediments that would be involved. We often forget that.

Sometimes I hear members saying GFA doesn't do anything to help, but it's simply not true. Often the various volunteers and staff bend over backwards to help, to find they have been given only part of the necessary information, or worse still, the wrong information. Yet they keep trying. But how many people even say thank you? Not many. At times, I almost despair when a member says we need to establish a rule to address a problem. Whatever happened to the idea of pilots as rational beings who are capable of making good decisions? Creating extra rules 'because it seemed like a good idea at the time' is not a way to help anyone, least of all a self-managing organisation.

SAFETY TEAM

In fact, readers may remember that my aim for the safety group was to review changes and potential changes to rules, to ensure a realistic, ongoing improvement in the legislative framework of GFA in the future.

Unfortunately this has not happened.

The safety team are experts in SMS and are focusing on this area. Yes, SMS needs to be monitored, but I believe each club now has an SMS, scaled to its needs, and each can request support in this area if needed.

Recently the airworthiness group had a great initiative they wanted an independent group of people to look at, and the safety group seemed to be the most appropriate. Unfortunately, the group's members thought it was out of their area of expertise, some members were overloaded at the time and, consequently, they did not review it. As a result, the Airworthiness group are seriously thinking of not going ahead with this great idea because, quite reasonably, they wanted an independent review outside of their knowledge base as a pub test.

The concept of an independent group that can review any new rules and look at long standing rules to confirm they are still relevant, was one of the reasons I

agreed to form the safety team, notwithstanding the initial need to set up an SMS system. I am thinking we may need to restructure the safety group to support what is really needed in the future, which is, in my opinion, a real understanding of safety and the implications of changes using common sense and statistics. I will be very happy to get feedback from our members with their thoughts on how we can future-proof our organisation in this area. My email is president@glidingaustralia.org.

CASA FUNDING

This dispute has gone on for a little over six months. It has been difficult and emotional for all concerned. We, the Sports Aviation Organisations (SAOs) have all attempted to stay together under the simple notion that divided we fall, and that we all want the best for our organisations. However, CASA also has to be accountable, and much as we see everything we get financially from them being easy to account for, that isn't the same as the governments bean counters agreeing with us, or the Senate oversight Committee agreeing with our view.

One result from the negotiations was a parting of the ways on this matter with RAAus. The other eight, including us, treated them with the utmost respect, but it was obvious that they were only after the money and we felt they were undermining a reasonable outcome.

That is not what you will hear from them, of course. I am also a member of RAAus, and I am not happy about the respect they have lost from this situation.

Our proposal to CASA leaves GFA dropping \$24,385.22 per year in overall funding, going from \$136,032 to \$111,647. Some of the smaller groups are losing proportionally more than us, some are gaining. CASA now has the final call on whether to accept this or go another way. There is no doubt RAAus will be pushing for a different model, since in our model they only gain \$3,609.23/year.

My final letter to CASA is copied below for member information:

This letter is to advise of the results of our discussions with RAAus regarding the presented SAO funding model, as requested by Shane in his letter of the 20th December to myself.

We have discussed the latest model



with Michael Linke through email, to an unsatisfactory outcome.

We went to great lengths to include 'real' aspects into the model presented, including situations that we considered represented RAAus reasonably, and have also treated RAAus with the utmost respect, which, in this writer's opinion, has not been reciprocated.

We believe that our model is as defensible, equitable and as fair a model as is possible under the circumstances. Yours Faithfully

Peter Cesco, President
The Gliding Federation of Australia Inc

For and on behalf of the Australian Warbirds Association Ltd, the Australian Parachute Federation, the Hang Gliding Federation of Australia, the Australian Rotorcraft Association Inc, the Sport Aircraft Association of Australia, the Model Aeronautical Association and the Australian Ballooning Federation.

Lest members think I am trying to start a war with RAAus, this is not the case. We will work with them on attempting to gain more funding from the Federal Government through the Economic Assessment package they had started to prepare and that we have now joined. Just because we do not agree on one thing does not mean we can't work together on others.

F1.0 GP

Innovation breeds innovation, better processes and outcomes.

This year's F1.0 GP was as good, if not better than last year. There is always the potential that as something grows it loses the flavour of the original, and in this instance there was a little of that as some people jockeyed to be the winners.

The intent of the F1.0 GP is to have a fun and safe competition - yes, it's still a competition - but without the 'win at all cost' approach that has become part of the various National Championships.

Overall, however, it was as good as last year, with the following specific innovations:

- An automatic tracking and scoring system has been developed, ensuring that tracking and scoring were automated. This minimises the workload of both pilots and organisers, and after a little tweaking was working well. This 'Skymate' device creates fun and simplicity. In fact, as aircraft were towing back to the tie-down area immediately after landing, pilots were able to check their position and score
- One of the reasons hardly anyone has crew at any of these events is that the crew don't fly and just get to sit around not doing much unless their pilot outlands. The F1.0 group formed a crew team - I'm not sure what they called it that ensured that non pilot team members and families were welcome and engaged in doing 'other things', such as a trivia night, movies etc. It was embraced and welcomed, and I heard one potential team member who dropped in for a day or so, say, "This is great, I will be here next year." This was clearly good fun and meant no one was left out.
- At the launch point, it was possible to pay for your launch by card on the grid, or in the clubhouse beforehand, simply by using your credit card. This initiative keeps the poor treasurer from having to track down those who didn't pay or overpaid for their launches another great idea that saves effort, time and worry and brings us into the 21st century.
- Merchandise included gliding shirts, stubby holders, hats and aprons, easily purchased via the online shop
- Sponsorship and advertising were done really well, as last year, with tracking and feeds going to many outlets via video and links. It was said that each social media posting was attracting 4,000 hits. While I am not sure what that means in real terms, it sounds like a lot of quality support for both GFA and the sponsors. This is an area that we (GFA) typically don't handle very well, and we can and should learn from the sponsor support and excellence shown by the F1.0 marketing team.
- As an additional support for the event, the organisers printed an event

program in a hard copy form (who would have thought!) that, besides all the sponsors being named and their logos shown prominently, also featured the organising team, a welcome to Leeton information page, a list of competitors, their aircraft and handicaps, information on the live tracking and social information and some really cool photos from last year.

- As a security feature on the website, each pilot received a login pin which is not unique or new in itself, but what was interesting were some of the inventive ways used to ensure that each pilot updated their information. For example, one email said, "We promised a free aerotow to the first 10 pilots to enter have a look and see if you're one of them."
- Turnpoint names were another feature, with the final turnpoint being called Lumpy's Loop, as it was last year. Lumpy was flying this year and he was chuffed to hear his name called 34 times every day. He, of course, called it 'my Loop'. Another turnpoint was called after last year's winner is this the start of a dynasty of turn points? I have heard members from other sites wondering if calling turn points by people's names is right, but these turnpoints are in the middle of nowhere, and are not towns. It's just fun innovation and encouragement.
- Once a pilot had registered on the net, you could choose a spot on a tiedown location map where you wanted to park your glider, even who to park near if there were any spaces. This saved the almost inevitable trial of wondering where to park your glider when you arrive at a competition.
- Also trialled and adopted was a phone system of confirmation of start, turnpoints and finish. This is truly amazing, as it also advises your position at the time remember, this is a race with everyone starting at the same time. Far from being a distraction I found it meant I could keep my head out of the cockpit as I turned at the turnpoint, because I would get a 'ping' confirming a good turn. Later I could have a quick look to find my placing when I was clear of others, disappointing as this information was at times.
- There was no wasted time at briefing. The Met was not even discussed, nor was the task, unless someone specifically asked about something. Pilots were expected to see their GFA Met (Skysight) and understand the rules. This is a reasonable

- expectation of competing pilots. Of course, the initial briefings and safety talk took a while, probably 20 minutes or so, only discussing serious aspects.
- One of the best parts of the event for me was the sandwiches that pilots could order for the duration of the competition, which I did. Each day, they were delivered with a special, individual message on each one. One of mine said, "Every exit is an entry to a new experience" very profound. While I am still not sure what it meant, it was a welcome and interesting change from the usual.
- The organisers, as part of a report to the NSW Government for some 'seed funding' they received, interviewed all pilots to determine how much money was injected into the local community. It would appear that Leeton benefited to the tune of between \$81,000 and \$100,000 for the F1.0 GP. It is important that clubs determine figures like this for their local areas, and also when they go on club camps, for example. Little focusses a local Council like a cash injection into their community at times of low input from other sources. I am sure the F1.0 GP team will advertise their economic input to the local council in the future.

AGAA AND JUNIOR MEMBER INITIATIVE

Readers may remember I mentioned this topic in the last magazine. The advertising Bus will be travelling this year and we are looking at a schedule. It will be at the Avalon air show, and in early February it will be at the Royal Newcastle Aero Club. Local clubs near Newcastle are being notified and can and should use this as a membership opportunity. Local gliding people will be asked to help set up and man the gliding simulators and explain to the children and other young people - aged from about 8 to 23 or so - details about gliding. These people need to be enthusiastic and supportive of gliding and aviation generally. We are still looking for the front of a fibreglass glider, from the wings forward, that can be spruced up and travel with the bus to give youngsters something to sit in, and a chance to play with the stick and have photos taken. If you know of one, please give me a call.

It has been a great soaring season so far. Fly well, fly often and stay safe.

PETER CESCO, PRESIDENT

president@glidingaustralia.org

FROM THE EO

OPEN GLIDER NETWORK (OGN)

The OGN consists of a series of receivers that pick up FLARM signals and re-transmit them onto a web page. Look at Glidertracker.org or gliderradar.com. With many receivers scattered around the state or country, you can see all FLARM equipped gliders that are flying.

The impact OGN now has on gliding competitions is raising international concern. Pilots are accessing the web page in flight, allowing them to see where all of their competitors are, and crews watching the web page are directing their pilots to the best climb – which sort of defeats the purpose, in my view.

For private/club flying, however, OGN is great. You can see where and how high your gliders are, and see the outlandings or the late returns home. Programs like Dittolog even enable clubs to automate flight sheets and invoicing based on the FLARM data. Most states now have OGN receivers and the number is growing. If you zoom out on the tracker sites and move around to Europe, you will be amazed at how many gliders are in their airspace, in particular in their spring and summer.

A GREAT SEASON SO FAR

Looking at the OLC (On Line Contest) and the competition results, pilots have been flying some great tasks. A large number of 1,000km flights have been achieved and a large number of people are flying their first 50km or 300km and more. Lots of good weather is still to come, so I wish you well with stretching your boundaries and developing your skills. Talk to your club coach and for guidance on improving your skills so that your flights can take you higher, longer and further.

BADGE FLIGHTS

A range of performance badges are available that recognise your skill level and challenge you to improve. If you are unsure what is required, talk to your instructor or coach and they will give you details.

Your ABC badges are first, recognising that you are a solo soaring pilot. Your instructor can approve you for the badge and you can complete the theory exams, all done on the MyGFA section of the web page. Your Silver C, Gold C, Diamonds and distance badges are also claimed on MyGFA.

You must fly with a Flight Recorder or

Position Recorder, and the flight must be 'supervised/verified' by an Official Observer, who can give you guidance on what is required. Look under Gliding Information on the web page to see the list of OOs.

When you complete the badge application form, the last page will ask you to pay for the claim. You cannot pay in the GFA shop.

WORLD CHAMPIONSHIP NEWS

The Junior world gliding championships will be held in Hungary in July/August 2019. See jwgc2019.hu. Our International Teams convenor is currently reviewing results to select pilots to compete in this event and is keen to hear from any experienced and qualified member interested in nominating for the position of Team Captain. Contact the ITC convenor Jim Crowhurst

iimcrowhurst@hotmail.com

The Soaring Development Panel has announced the Australian team to compete in the Women's World Gliding Championships to be held at Lake Keepit in January 2020. Australia is able to select nine positions for the championships, three in each class – Club, Standard and 18m. See the full details on PAGE 8

The Nationals at Lake Keepit doubled as the Pre-Worlds. We had seven international pilots flying and the weather was tremendous, so we expect a great reaction from the international teams. Good job from the organisation, too.

CAN YOU HELP OUR TEAM?

The GFA will provide some funding to the pilots, but we are seeking support from GFA Members and Clubs to raise further funds to help the pilots prepare and compete equally with the international teams. The aim is \$3,000 per pilot and we definitely need the help of GFA members. We have organised a Sports Foundation donation scheme which provides a tax deduction for any donation. Please use the blue and yellow DONATE button on the web page to help our team to effectively participate in the World Championships.

They will also need quite a few volunteers to help out with the organisation and to support some of the teams. If you have one to three weeks available to help out, it would be a great contribution and a lot of fun. We need



your gliders to hire to the international pilots as well. Join in, earn some money and you could even become part of the competition. For further information contact the Championship Director Mandy Temple at mandytemplecd@qmail.com

SPORTING PILOT EMAIL GROUP

We are establishing a Sporting Pilot email group to discuss issues related to competitions, badges, soaring skills, cross country flying, coaching and other topics. We will add some people to begin - unsubscribing is always an option - and we will provide a link where others can join.

PROMOTION IDEAS?

Do you have some good ideas that can be used to promote our sport, nationally or at club level?

The Board has a focus to increase our membership and S2F has a number of actions in progress, but we need your ideas and support to make people aware of our sport. If you have any suggestion, we can probably provide some funds to make this happen. Please send your ideas to me at eo@glidingaustralia.org and tell me what help you need to implement them.

NEW STYLE GFA MEMBERSHIP CARD

New and renewing members will have received their new style basic GFA membership card. Member details ratings and qualifications are provided on your Member Profile, which is re-issued whenever your qualifications change. This can be printed or saved to your phone. Renewing members may indicate if they want the new basic card or not.

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



SAFETY MANAGEMENT NEWS

MORNING BRIEFINGS

How has your 2018/2019 cross country soaring season been?

If, like me, you have been attending camps and regattas, many of you may also have been competing in comps. Every day most of you will have attended a Morning Briefing where a lot of information is shared. Most of this information is focused on preparing everyone for a successful and pleasant day's flying.

One of the great things about these briefings is they bring everyone attending together and gives the organisers an opportunity to set the culture of the event. They are usually supported by experienced members from their own club and also visiting clubs who are hopefully sharing with and mentoring newer members.

These Morning Briefings are mainly about safety and I've been impressed with the standard of briefings I have attended this season. Unfortunately, over the years we have recorded

several incidents and accidents where it has been established post incident that the members involved had not attended one or more briefings where the information shared may have provided the member with knowledge that may have prevented the incident. They also provide all members the opportunity to share any safety concerns they have.

You may notice that I have used the term member, not pilot, because sometimes these events have involved members who are not flying on the day and occasionally visitors. Does your club have a visitor's site briefing? Many visitors have no aviation knowledge to draw upon to recognize and avoid airfield hazards.

One question that has been raised recently is about morning weather briefings becoming redundant with the advent of SkySight/GFA Weather. I suspect at competitions this could be a valid argument. Most, if not all, competitors would have been studying the site weather for weeks. However,

in the case of club and regatta events where we encourage less experienced members to develop their understanding at weather briefings. These briefings are time well spent and are particularly important when complex weather systems are in play. Having an experienced member present the weather along with some local knowledge will play a big part in anticipating rapid changes in conditions and avoiding nasty outcomes. We experienced such conditions on several days in western NSW during January.

TO SUMMARISE

The standard of Morning Briefings is improving - BZ

Missing or being late to briefings is not cool.

Participate/Share knowledge at these briefings. You are part of the team.

If you can't make the briefing ensure you get a one-on-one briefing with the duty instructor.

Enjoy your flying.

STUART FERGUSON

NATIONAL SAFETY MANAGER



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

20M 2 SEAT CHAMPIONSHIPS

NARROMINE

9 - 16 February 2019

arnie.hartlev@gmail.com narromineglidingclub.com.au

KEEPIT REGATTA

LAKE KEEPIT

23 February - 2 March 2019

All pilots are invited to the Lake Keepit Regatta for a week of fun, friendly competition and coaching. This event is ideal for beginner and intermediate cross country pilots who want to start competition or improve their XC skills as well as for seasoned pilots that want to take it easy and share their knowledge.

- Daily talks and briefings by experienced coaches and seasoned competitors on topics of interest.
- We have 8 new cabins and lots of camping sites but be sure to register early as the cabins get booked very quickly. Additional accommodation available at the nearby Reflections Holiday Park.
- Bring your own glider, borrow your club dual seater or rent one of ours (limited availability) and come have fun at Australia's gliding paradise.
- Entry fee only \$180 per glider and \$50 per additional passenger.
- Evening meals available at a modest additional cost. More information and registrations

soaringstuff.net/KeepitRegatta

Jay Anderson jayoa@bigpond.com

SAGA STATE COMPS

CUNDERDIN

23 February - 2 March 2019 Winch and Aerotow available Contact Andrew Horton for more information

Andrew Horton 0416 104 752

WAGA/ GCWA STATE COMPS BALAKLAVA

23 February - 2 March 2019 For further details contact **Rob** Hanbury 0429 082 520

VSA ALPINE COURSE COACH THE COACHES

WITH G DALE - MT BEAUTY

9 - 11 March 2019

This course will be led by G Dale, renowned alpine coach, focussing the first three days on development of VSA Coaches.

Over the next 6 days, G Dale will lead coaching sessions for all pilots interested in developing their mountain flying skills. Further details will be made available on the VSA website at gliding.asn.au Contact organiser:

Philip Volk philip.volk@ horizonswealth.com.au 0418 349 257

wendymedlicott@optusnet.com.au

ALPINE COACHING-VSA, COACHING MT BEAUTY WITH G DALE

12 - 17 March 2019

This course will be led by G Dale, renowned alpine coach with the first three days focussing on development of VSA Coaches. Over the next 6 days, G Dale will lead coaching sessions for all pilots interested in developing their mountain flying skills. Further details will be made available on the VSA website at gliding.asn.au

Contact organiser: Philip Volk philip.volk@horizonswealth.com.au Mobile 0418 349 257

NARROMINE CUP 16 - 23 November 2019

For further details contact Arnie Hartley arnie.hartley@gmail.com

MULTICLASS NATIONALS

9 - 21 December 2019

/tocumwalsoaring.com, For further information nfo@tocumwalsoaring.com

10TH WOMENS WORLD GLIDING CHAMPIONSHIPS LAKE KEEPIT

3 - 17 Ianuary 2020 **Contact Wendy Medlicott** wendymedlicott@optusnet.com.au

CHANGE TO BADGE CLAIM PROCEDURES AND PAYMENTS

Recently we have introduced changes to the way in which Badge and Distance Claims are made. The process is now completely online and no paper forms or separate payments will be accepted.

The online claim form is part of the MyGFA Menu, and it will take you through a claim process similar to the way the paper form used to operate. It will ask you to choose the pilot name and the Official Observer from the list of valid OOs and before submitting your claim it will require you to pay the appropriate fee online (not in the GFA Shop). The fees have been reduced and simplified.

Please note that the fee is now payable regardless of whether your claim is successful or not, so it is in your interest to ensure that the claim is valid before sending it in. Your Official Observer should help you to determine this.

You should also make sure that your chosen Official Observer is current before you do your flight. A list of Official Observers can be found in the Gliding Information section of the GFA Website.

It is also important to note that the OO must be present and observe both the pre task declaration in the FRs carried on the flight and must be present to observe the file from the FRs taken post flight.

OFFICIAL OBSERVERS -HAVE YOU UPDATED YOUR RATING?

To the official observers who did not renew their ratings from October last year, now is the time to get ready for this season. Log onto the GFA website and renew now. The renewal is good for two years and the GFA office will contact you in plenty of time to keep your rating

If I can be of any assistance don't hesitate to contact me.

arnie.hartley@gmail.com

or **0407 459 581**



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

FAI GLIDING BADGES

TO 25 JANUARY 2019

BADGE

BADGE

A, B, C BADGE

VILKIN TIMOTHY A



DEALYPAUL

DRISCOLL RYAN

BERYL HARTLEY FAI CERTIFICATES **OFFICER**

4956

4957

4958

faicertificates@glidingaustralia.org

SOUTHERN CROSS GC

HUNTER VALLEY GC

G.C.V

G.C.V.

DILLON GREGORY

JATTRASS LIAM	903SQUADRON AAFC
ONES NATHANIEL	903 SQUADRON AAFC
)'GRADY CHARLIE	903 SQUADRON AAFC
ALOMBI LEONARDO	903 SQUADRON AAFC
VINKLER NICHOLAS	903 SQUADRON AAFC
(IMBER NICK	903 SQUADRON AAFC
RAMOS ALAN	RAAF RICHMOND GC
JICHOLAS WHITE	LAKE KEEPIT SC
(RAMERJOEL	SOUTHERN CROSS GC
ONG HONG FOO	GCV

3 BADGE (ALRA URAV 903 SQUADRON AAFC

I, B BADGE	
/IILES BRENDAN	902 SQUADRON AAFO
HOMMAN SUJAI	MELBOURNE GC/VMF
HELEZAROV TIHOMIR	BALAKLAVA GC
//ORSCHECK ROLAND	CANBERRA GC
HOLROYD JASON	GRAMPIANS SC
RAMOS ALAN	RAAF RICHMOND GC

HUM TSUN YAU	12370	BALAKLAVA GO

CURRY JAMES		MELBOURNE GC/VMF0
BERRIMAN ALICE		MELBOURNE GC/VMF0
CORNWELL NATHAN		BOONAH GC
CURTIS AIDAN		BBOONAH GC
CONLEY RAYMOND		GCV
CALLANDER PHILIP		GCV
OROSMARTHY LES		GCV
ATRICK JOHN		GCV
VERNER STRAUSS		GYMPIE GC
/ACLEAN TOM		ADELAIDE SC
VHIDBORNE STEPHEN		ADELAIDE SC
// ARKOVITCH CHRISTOF	PHER	STGC
30EHMER RALPH		GEELONG GC
JAZARI HAMID		GEELONG GC
HOMAS DAVID		GGEELONG GC
ROESING ANDREAS	12380	BYRON BAY

SILVER C		
.IM ADA	4950	BATHURST SC
SIBBS COOPER	4951	DARLING DOWNS SC

12381

G.C.V

BATES BRENDAN	4952	DARLING DOWNS SC
VILKIN TIMOTHY	4953	G.C.V
DICKSON ANDREW	4954	HUNTER VALLEY GC
PERRETT ROGER	4955	SOUTHERN CROSS G

MOFFAT JAMES	4959	HUNTER VALLEY GC
RICHARDSON SIMON	4960	NTH QLD GC
GOLD C		
DICKSON ANDREW	1749	HUNTER VALLEY GC

1751

DIAMOND GOAL GIBBS COOPER

MOFFAT JAMES

GIBBS COOPER	DARLING DOWNS SC
RUSSELL MARK	RAAF RICHMOND GC
DICKSON PAUL	HUNTER VALLEY GC
DICKSON ANDREW	HUNTER VALLEY GC
MOFFAT JAMES	HUNTER VALLEY GC
GILBY BRIAN	BOONAH GC

DIAMOND HEIGHT

FERRIER RODNEY	SOUTHERN CROSS GC
HORTON ANDREW	BALAKLAVA GC
MCILROY DAVID	CANBERRA GC

DIAMOND HEIGHT

FERRIER RODNEY	SOUTHERN CROSS GC
HORTON ANDREW	BALAKLAVA GC
MCILROY DAVID	CANBERRA GC

DIAMOND DISTANCE

GIBBS COOPER	DARLING DOWNS SC
DICKSON PAUL	HUNTER VALLEY GC
DICKSON ANDREW	HUNTER VALLEY GC
BROWN GEOFFREY	CANBERRA GC
DUNN PATRICK	WAIKERIE GC
GILBY BRIAN	BOONAH GC

DIAMOND C

С

FERRIER RODNEY	248	SOUTHERN CROSS
MCILROY DAVID	249	CANBERRA GC
BROWN GEOFFREY	250	CANBERRA GC

600 KM DISTANCE

SHANG GUANGWEI	115	NARROMINE GC
HOLMES DAVID	116	LAKE KEEPIT SC

750 KM DIPLOMA

DU PENG	166	NARROMINE GC

4	000	LC BA	DIDI	OBAA
1	000	F AIVI	DIPL	OMA

DAVISON CHRISTOPHER	46	MURRAY VALLEY GC
PATERSON MARK	46	SC OF TASMANIA

6 **GLIDING** AUSTRALIA www.glidingaustralia.org GLIDING AUSTRALIA www.glidingaustralia.org 7



The Soaring Development Panel has announced the Australian team to compete in the Women's World Gliding Championships to be held at Lake Keepit in January 2020. Australia is able to select nine positions for the championships, three in each class – Club, Standard and 18m.

The really exciting outcome is that we have nine excellent women pilots who will be able to represent us well at these championships, all with outstanding soaring skills and experience at the highest level. This speaks well for the standard of women soaring pilots in Australia.

THE TEAM MEMBERS ARE

CLUB CLASS

JENNY GANDERTON, JO DAVIS KERRIE CLAFFEY

STANDARD CLASS

CATHERINE CONWAY
CLAIRE SCUTTER
LISA TROTTER

18M CLASS

AILSA MCMILLAN JENNY THOMPSON LISA TURNER The women's contingent at the Club & Sports Class Nationals which served at the Pre-WWGC. Seven of the Australian team members for the WWGC January 2019 are in the photograph above. Jenny Ganderton, Kerrie Claffey, Jo Davis, Cath Conway, Lisa Turner (seated) Ailsa McMillan and Lisa Trotter. Also pictured are Akemi Ichikawa, Japan, and current Club Class Women's world champion Sabrina Vogt from Germany who will be returning to defend her title.

All nine pilots competed well in the Narromine Nationals or the Lake Keepit Nationals over the last few months, some in both. All are very current and focused on preparing for the world championships and will be practising hard over the next 12 months.

OTHER AUSTRALIAN REPRESENTATIVES

Australian resident Akemi Ichikawa will represent Japan in Standard Class.

GFA SUPPORT

The GFA will provide some funding to the pilots, equivalent to the funds provided to three or four competitors, but with nine, these funds are shared fairly sparsely. We are seeking support from GFA Members and Clubs and Regions in order to raise some funds to help the pilots prepare and compete equally with the international teams.

The pilots have to find enough money to pay the entry fee of \$1,000 plus \$1,500 for tows, plus accommodation for themselves and crew plus travel and, in some cases, glider hire. The aim is \$3,000 per pilot and we definitely need the help of GFA members. We have organised a Sports Foundation donation scheme which provides a tax deduction for any donation.



Jenny Thompson will fly in 18m Class at WWGC Lake Keepit

Please use the button on the GFA website

glidingaustralia.org to help our team participate effectively in the world championships.

Or go directly to the donate page tinyurl.com/y8pgxwtj





The GFA Executive Officer Terry Cubley has been named a Member the Order of Australia (AM) in the Australia Day Honours 2019.

The GFA and I am sure all members congratulate Terry for his outstanding achievements and dedication to Gliding and our sport in Australia.

MEMBER (AM) IN THE GENERAL DIVISION OF THE ORDER OF AUSTRALIA

For significant service to sports aviation, particularly to gliding as a competitor and administrator.

Federation Aeronautique Internationale

World Air Sports Federation (FAI): Vice-President, FAI, current. GFA Delegate, since 1996. Co-Vice President, International Gliding Commission (IGC) Bureau, current.

Gliding Federation of Australia

Chief Executive Officer and Secretary, since 2013 and Life Member, current. President, 1991-1994 and past Vice President and past Treasurer. Coach, Australian Woman's World Gliding Team, since 2017. Chair, Marketing and Development Committee, 2002-2004, 2009-2011 and Chair, Sports Committee, 1985-1989, 1997-2000.

Team Coach, 2011-2012 and 2018.

Australian Team Pilot, 1983, 1985, 1987, 1995, 2004, 2006 and 2008.

Represented Australia, various World Gliding Competitions and Australian champion five times.

Competition Director, 34th FAI World Gliding Championships, Benalla, 2017. Operations Director, Junior World Gliding Championships, Narromine 2015. Competition Director, World Gliding Championships, Gawler, 2001.

Victorian Soaring Association

President, 1987-1989. Vice President, 1986.

Gliding Club of Victoria, Benalla

Member, since 2015. Geelong Gliding Club: President, circa 1975-1980.

Air Sports Australia Confederation

GFA Delegate, current. Vice-President, current.

Awards and recognition includes

Recipient, WP Iggulden Award, Gliding Federation of Australia, 2003. Recipient, Air Sports Medal, Federation Aeronautique Internationale, 1995. Recipient, 1000 Km Flight Diploma, Federation Aeronautique Internationale

CLUB SPOT FROM SPORTS COMMUNITY

As part of the S2F initiative GFA is working in partnership with Sports Community (SC). One of the advantages of this arrangement is free access for all clubs to the resources on the Club Spot site.

Go to

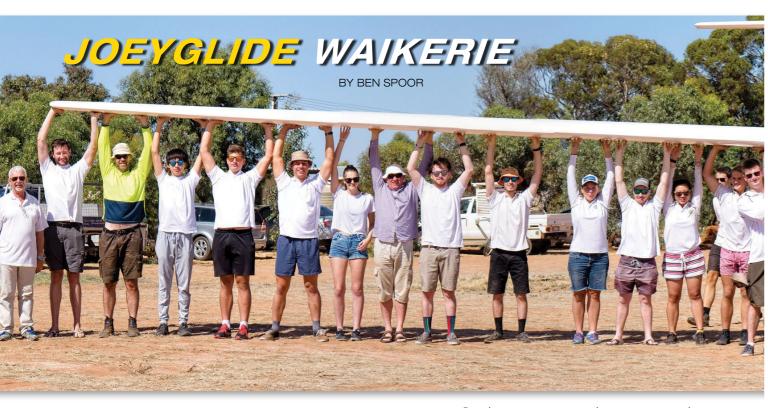
sportscommunity.com.au/gfa-signup or tinyurl.com/ybamwf52

You can sign up your club and start taking advantage of the resources on offer -

Webinars, Grant Applications, Podcasts, How to be the best President and much more. Check it out now and take advantage of these great resources.

MANDY TEMPLE **CHAIR S2** s2f@glidingaustralia.org





I wonder if the avid competition glider pilots reading this remember their very first gliding competition? I suspect most remember it as a time of uncertainty and nervousness but great excitement.

January 2019 marked my first competition, when I attended the Australian Junior Nationals, also called Joeyglide, held at Waikerie, South Australia. Over the years, another Junior at my home club, Bathurst Soaring Club, had emphasised the brilliance of Joeyglide for meeting other young glider pilots, although I had never been able to secure the time off from work. At age 24 this year, with only two years left before I age out of the Juniors, I'm glad I finally got myself to a Joeyglide and will share some brief reflections on my experience there.

The Juniors all arrived at Waikerie in a bustle of excitement, some after days of driving, having travelled from WA and QLD to attend! It was simply brilliant to see so many young people sharing such a passion for our wonderful sport. Having heard about the excellent conditions Waikerie can put on, we were all ready for our 10,000ft cu days. As it turned out, we had neither 10,000ft days nor cu all week.

Despite very warm ground temperatures, a hot upper air mass made convection difficult, with trigger temperatures in the high 30s at times, causing days that started late with disappointingly low convection heights. It certainly seemed rather unfair to be sweltering on the ground at over 40° C during the hot and sweaty, low blue days! Nevertheless, the youthful determination and optimism of the Juniors was present and we did our best with the conditions served to us.

But by Day 6 of the comp, we had only flown the practice day, Day 2 and Day 5. We were worried that we wouldn't get the third comp day we needed to legitimise the Nationals. Thankfully, we managed to get a task in on Day 7 and thus we could declare a National Champion.

TEAM SPIRIT

My personal experience at Joeyglide 2019 was unexpectedly positive in all ways. From a flying perspective, I did much better than I expected to for a first comp, placing 4th on Day 2 and 3rd on Day 7, my best performance. Unfortunately, an outlanding on Day 5 lowered my overall placing to 6th, although this still earned me the Southern

highest placed pilot at their first Junior Nationals. From a learning perspective, despite only flying three days, I believe I learned more in the one week at Joeyglide than I had in many previous club cross country camps. This was partly due to the fact that at a competition, I was forced to fly harder and further in conditions I might not ordinarily have

Cross Trophy for the





flown in. The learning also came from the fantastic, collaborative team spirit that pervaded the Juniors, so that everyone was willing to help each other out. We also had some fantastic lectures from experienced competition pilots, including Bernard Eckey and Peter Temple - although Peter doubled as our weather man and, given the conditions, we probably should have fired him much earlier in the week!

However, the aspect of my experience at Joeyglide that I will remember most fondly and that I consider most valuable is the new friendships I've made. The way I was welcomed and included, in particular by the current Australian Junior Gliding Club committee, was incredible and by the end of the week I felt like I'd known everybody for years.

GLIDING GENERATION

I have always loved gliding and one of the things I'd always wished for was to know more youngsters who love it like I do. After this week, I now have great young gliding friends my age all over Australia. This is special because we are the people who will grow up in the same 'gliding generation' and ultimately be the future of our sport in years to come. A special mention also to the Waikerie Gliding Club, who welcomed the Juniors so warmly and, despite being unable to influence the weather gods, provided an incredibly well-organised week.

I hope that some other Juniors are reading this who, like me, haven't attended a Joeyglide, and so leave you in the hope that my story might inspire you to attend as well. It really isn't as daunting as it may seem, and it's such a special way to make great friendships with other young glider pilots while markedly improving your flying. I, for one, am very excited about Joeyglide 2020 and just wish I had joined this community earlier in my gliding career! Safe and happy flying to all.

Look out for more from Joeyglide in the next issue of GA.



JOEYGLIDE AUSTRALIAN JUNIOR NATIONALS WAIKERIE

13 - 19 JANUARY 2019

SPORTS CLASS

1	JOSHUA GEERLINGS	NARROGIN GC	JS 1	2,412
2	DAVID COLLINS	SUNRAYSIA GC	LS 4	2,302
3	MICHAEL KELLER	NARROGIN GC	STD. CIRRUS	2,233

CLUB CLASS

I DAVID COLLINS	SUNRAYSIA GC	LS 4	2,381
MICHAEL KELLER	NARROGIN GC	STD. CIRRUS	2,295
REUBEN LANE	LAKE KEEPIT	LS1F	2,242

 $so a ring spot.com\ or\ tinyurl.com/y7y4g53t$

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ABOVE: JoeyGlide 2019 had

BELOW: Briefing on the first

day of the competition.

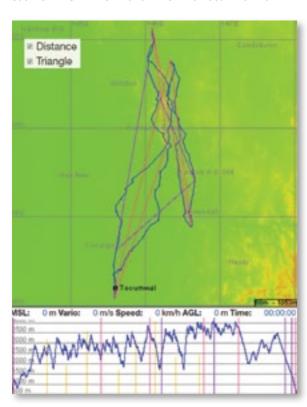
RIGHT: Ben Spoor in his

Standard Cirrus.

a strong turnout.

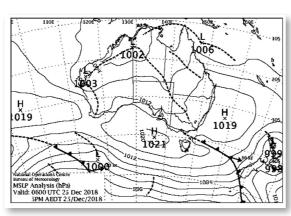


We had very exceptional weather the last week of December 2018 and the first week of January 2019 in southern NSW. Akemi and I went to Tocumwal from 22



December. Christmas Day was shaping up to be a 1,000km day and Akemi was determined not to miss it this time.

The synoptic situation indicated a trough forming to the north of Tocumwal. The wind was light. I launched first in the LS8 15m at 10.35am and checked the weather. Lift was forecast to go to 5,000ft AGL by 11am. Akemi launched in the LS10 18m at 10.58am. She climbed to 9,500ft immediately after the start and was making good progress despite having to cross a blue hole over Murrumbidgee River, so I extended the end of the flight to do 1,118km OLC, continental record, free three TP distance 1,095km. But as 27 December was looking even better, I added a remark to Jenny Thompson when reporting this record that I would probably try for a





longer flight that day.

On 27 December, conditions were shaping up for a great day. It was a prefrontal day, with north wind, Cu base forecast to go to 15,000ft-plus with heat wave conditions, max temp forecast to be in the mid-40s. I took off in the LS8 15m at 10.15am and struggled in the beginning, fully ballasted at the maximum weight of 525kg. I was back to the start zone after 45 minutes and

only a few hundred feet higher than launch height. I thought ten times of landing back at the airfield and relaunching for a speed task but decided to continue on and enjoy the day.

The clouds formed over hills near Leeton very early, and I tried to connect to that energy line. The bad weather was forecast to arrive in Tocumwal at the end of the day, so the best way to maximise use of the day was to come back from the northeast, probably north of Wagga Wagga, and in order to use only three free turnpoints, it made sense to use this energy line initially, then to fly as far west as possible before flying east. This was a good plan, except that wind was pretty strong in the west and lift was broken.

I managed to fly 1,193km OLC, a free three TP distance of 1,148km, a new continental record for 15m Class. Lumpy Patterson flew 1,009km in his JS3-18m, starting at 11.39am. I think it would have been possible to fly 1,300km this day in a modern flapped glider.

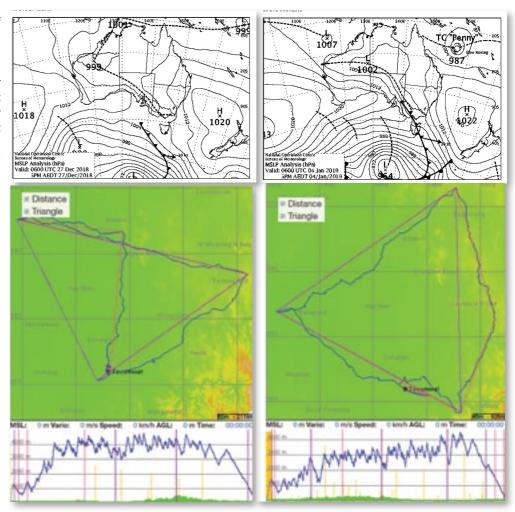
Conditions on 4 January deserve a special mention as well. This was also a prefrontal day, but with the actual front arriving at Tocumwal in the evening. The position of the front looked ideal to use on the last leg to come back from

OPPOSITE, TOP: Mac and Jørgen arriving back at Temora after flying 1,236 km on 4 January.

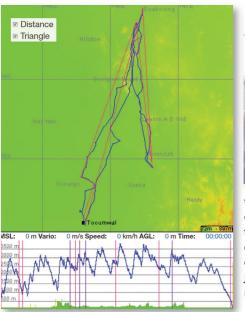
OPPOSITE, BELOW: IGC trace and the synoptic chart for 25 December when Mac flew the first of his three 1,000km-plus flights. He flew 1,118km at 113kph

ABOVE: A dust front marked the final turnpoint on Mac's 1,236km flight on 4 January.

BELOW: IGC traces and the synoptic charts for 27 December, when Mac flew 1,193km, and for 4 January.



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ABOVE: Akemi Ichikawa flew 1,041km on 25 December. Merry Christmasi



the northwest. This was always going to be a gamble. If it arrived too early, it would ruin the chance of completing my declared task. I declared a 1,250km task with Jørgen Thomsen who kindly invited me to fly with him in his Arcus M.

The day did not develop as had been forecast. The wind was too

strong and the day was slower to get going than the forecast. Cumulus formed towards Corowa, so we had to

change our plan very quickly and went for a free triangle distance record attempt instead. We just managed to fit a 1,116km FAI triangle into the weather and airspace. The arrival of the front was almost as forecast. It was clearly visible with a dust front, and we could use the energy line in front of it. At the end, we had enough altitude to glide to east of Corowa for 1,250km OLC, and land at Corowa before last light. However, we decided to turn back to land at Tocumwal for dinner and bed. Last light in Tocumwal was 9.07pm. It was a nice day to end two weeks holiday!

My target this season was to fly 1,250km in Eastern Australia. I could not achieve a declared 1,250km but I effectively did fly an OLC 1,250. I now feel that it is only a matter of time before it will be possible for me to to fly a declared closed 1,250km. I think the limit is between 1,300 and 1,400km in Eastern Australia. I found that flying $10\frac{1}{2}$ hours in a glider is quite demanding, not only physically but also surprisingly trying mentally. But it is huge fun, so I hope to have the opportunity to fly more great days in the coming years.

1000 KM FLIGHTS OLC

onlinecontest.org

25 DECEMBER 2018				
MAKOTO ICHIKAWA	1,118.33 KM 1	13.10 KPH	TOCUMWAL	LS 8
AKEMI ICHIKAWA	1,040.78 KM 1	21.19 KPH	TOCUMWAL	LS 10/18M
27 DECEMBER 2018				
MAKOTO ICHIKAWA	1,193.14 KM	117.64 KPH	TOCUMWAL	LS 8
BRIAN DU RIEU	1,129.04 KM	118.87 KPH	TEMORA	LS 10/18M
CHRISTOPHER DAVISON	1,065.91 KM	130.13 KPH	TOCUMWAL	S 1 C TJ REV 21M
JOHN DYSON	1,063.63 KM	125.87 KPH	TOCUMWAL	JS 1 C TJ REV 21M
MARK (LUMPY) PATERSON	1,030.23 KM	148.95 KPH	TOCUMWAL	JS 3 TJ 18M
JOS SCHRIER	1,047.05 KM	40.98 KPH	COROWA	ASH 31/21M
4 JANUARY 2019				
MAKOTO ICHIKAWA				
& JØRGEN THOMSEN (DK)	1,235.93 KM	124.72 KPH	TOCUMWAL	ARCUS M
TOBIAS GEIGER	1,038.49 KM	121.12 KPH	BENALLA	VENTUS 2AX 15M
BRIAN DU RIEU	1,048.92 KM	116.55 KPH	TEMORA GLD	LS 10/18M
CHRISTOPHER DAVISON (GB)	1,031.84 KM	122.51 KPH	TOCUMWAL	JS 1 C TJ REV21M
HANS-JUERGEN LANGE (DE /HE)	1,034.40 KM	116.12 KPH	COROWA	VENTUS 2CM/18M
RICHARD TRAILL	1,029.26 KM	121.75 KPH	LEETON	ASG 29E/18M
NICK WOODS	1,016.11 KM	127.18 KPH	BENALLA	ASG 29E/18M
JOS SCHRIER	1,057.62 KM	116.34 KPH	COROWA	ASH 31/21M
JUSTIN FITZGERALD	1,035.51 KM	117.96 KPH	TEMORA	VENTUS CT 17,6M
16 JANUARY 2019				
MARK (LUMPY) PATERSON	1,097.55 KM	117.42 KPH	TOCUMWAL	JS 3 18M
TOMAS SUCHANEK (CZ)	1,021.56 KM	127.70 KPH	NARROMINE	VENTUS 2AX 15M
INGO RENNER	1,000.33 KM	115.16 KPH	TOCUMWAL	DISCUS
22 JANUARY 2019				
JOHN MCWILLIAM (IRELAND)				
& ANDY AVELING (GB)	1,018.18 KM	117.54 KPH	BENALLA	NIMBUS 3D



PERSPECTIVE FROM TWO FEET ON THE GROUND

Glider references are placed into conversations as a signal to ensure that the gliding agenda is not forgotten. Comments like "Look at that lenticular - it would be awesome to be flying in that" or "Wow, check out those Cu's - 500 today" are usual signs that attention is still required for gliding preparation.

BEST INTENTIONS

The flying season starts soon, and it is time to hurry up and get ready. Preparation starts with the considered intention to make things easier than last year, to be more prepared, more organised, to include more spare parts and bits missed from last season. The hand is already in the pocket with an eye on the internet, scoping the bargain or the new designs to enhance flying experiences. Finances are calculated, the season's holidays are booked, and the jobs on the to-do list might need prioritising in order of impact on flying time.

It is time to put thoughts of preparation into action, to organise the parachute to be repacked, insurance, registrations, log books, trailer, car mechanics, book services and repairs. It is time to start testing the glider, checking all the functions and book in for annual inspections. Time to check the body health along with the medical scrutinies. The accommodation is booked, the organisation with kids and pets begins and any additional bribery of friends and relatives is considered. Christmas has been sorted back in May or entirely forgotten about by October.

GETTING AIRBORNE

The time has arrived to hurry up and complete some flights. The weather is scanned daily for any potential for thermals to aim for personal bests, chat to other pilots and to rearrange hangars and trailers.

We need to start hurrying up to get ready for more flights, check flights and align the competitions on the calendar. Time to hurry and start checking the glider, trailer, spares and get the list ready for travel. There is a hurry up and get everything required to fill the allocated gliding containers for the trailer and car. Check the checklist: charging cables, radio, torch, various size

batteries, duct tape, white tape, hose fittings, water metre, canopy cleaner, memory stick, SD card, scissors and power board. Check oxygen bottles and drink containers. Then there is the check list for the portable gliding kit, trailer kit, car kit and the inside glider kit. Need to hurry up and make sure everything is there. Need fuel, containers, extra chammie and bucket. Need extra cash for anything that is forgotten and a small investment to encourage the crew's supportive interests.

ON THE ROAD

Time to hurry to get to the competition. The pilot is in the car with the engine running, waiting for the crew. The window rolls down and the hurry up call is given with the head slightly tilted down with the look of disapproval along with the half a frown and eyebrow up expression. The evil eye is directed with the comeback reply of "Oh really? I will close the windows, lock the door, set the alarm and close the gate, then". The car is still running, and the watch is being too obviously observed with the extended arm out at eye level and a tap of the index finger on the glass cover.

The road journey has been mapped out with time schedules, including the stopping breaks. Loo breaks are 'considered but may not be necessary' - as if that would ever happen. Arriving at the competition site, there is a hurry up to rig, move the trailer, go and book in, pitch the tent, make the final do not disturb calls, meet and greet, get the food organised and aim for a good sleep. The next day is to hurry up and get the weights done, double check the paperwork, sort out allocated or volunteered jobs and meeting points.

The morning of the practice day, it's hurry up for breakfast, filling with water, chammie, wing covers off ready for briefing. Hurry up to put the glider on tow and grid, hurry up and get ready to launch as the tow planes make their way to the strip.

"Now we wait."

Wait for the weather and wait for the launch time. Every competition morning, we hurry up to wait. The hurry to wait encompasses an absolute buzz of anticipation. It is the defining point of the completion, symbolising the beginning of the race.



ABOVE: Shear wave at Bombala, NSW, looking north with a southerly

During the early 1970s when we first started to use wave over the Snowies, and when Alpine Soaring was operating between 1977 and 1990, unprecedented opportunities emerged to study the action of rotors and wave over the Snowy Mountains.

After our early ventures into wave flying at Berridale, I became aware of the same wave effects over the western plains that were not related to any mountains and always originated above an inversion. Little seemed to be known about them and, lacking any formal name, I called the effect Inversion Wave at the time. Nowadays it is called Shear Wave.

MOUNTAIN WAVE

Mountain wave is generated from a lower, dense layer, uplifted over the mountains and given its undulating surface from the terrain below, like rapids in a river. These undulations create the surface from which the stronger upper winds are deflected to create the wave above. Without this lower inversion, there is no wave.

SHEAR WAVE

Shear wave, however, requires the upper wind to create the undulations at the inversion, as it does for a windover-water effect, from which the wave above is propagated.

These effects were studied, flown in and measured as far as possible from powered sailplanes. The information was collated but never published because of the costs and difficulty in creating fully professional diagrams. This information may now be well known, but because I still find articles on the web that don't agree, I have dug up the old notes and hope that you find them interesting.

NARROMINE 1974

My most memorable experience of shear wave was during the 1974 Nationals at Narromine, where Ingo Renner flew directly from Tocumwal to Narromine. He flew most of the 470km distance without turning, at heights up to 16,000ft. This was also the day I obtained my diamond height, climbing twice to 20,000ft, the first time with a jammed barograph needle, and the second with a working one. I still remember floating down afterwards in the Kestrel 19 in the late afternoon at minimum sink, descending to the opaque hazy inversion, the surface undulating in clearly visible shallow waves, lit by the golden light of the setting sun. Then I floated through the hazy crests and back above the hollows, then back through the crest, until I sank back beneath into the world below.

An inversion is just the surface of a dense layer of air, which behaves in a similar way to a water surface, in that air blowing across it creates ripples or waves. In the atmosphere, the magnitude is hundreds of times greater. Shear wave requires a dense lower layer of air with a lighter layer on top, blowing across it. However, there has to be a sharp boundary between the layers to provide a surface with sufficient difference in density between them, created by temperature or humidity.

WAVE DIRECTION

As with all wave, rotors exist beneath the crests, the severity of which depends on the velocity differences above and below the inversion. Wavelengths vary with these velocity differences, and the vertical lift can be too weak to keep a sailplane aloft or can exceed 1,000ft/min, usually tapering off at some height above. They can also occur simultaneously at different altitudes and different wavelengths, if inversions exist at these heights.

One tends to envisage shear wave resulting from a still layer beneath the inversion, with a wind blowing across it giving wave at 90° to the upper wind direction.

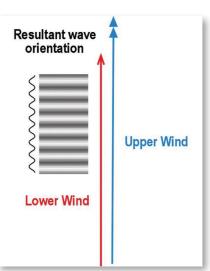
This is far from the usual case, as winds below the inversion, and the winds above, are rarely blowing from the same direction, and both are moving relative to the ground. This direction change is supposed to vary around 30°, backing in an anticlockwise direction in our southern hemisphere. My observation in flying mountain wave at higher altitudes is that 45° backing from northwest to west was normal, and that this rotation can repeat itself from west to southwest at a higher inversion. So the direction change could vary substantially. In westerlies, I once saw shear wave cloud upwind of the Snowies, aligned with the wind, but was flying mountain wave with the cloud orientated across the wind. The lines of cloud were at right angles to each other.

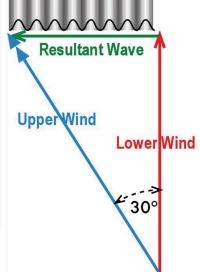
If we draw vector diagrams for a wind under the inversion and one above, we find that the result of the two wind directions is across the lower wind and that the wave orientates in the general direction of the lower wind. So, any cloud that forms is aligned roughly downwind, related to the ground level winds.

When continuous cloud lines are present from shear wave, the top surface of the line of cloud seen from time lapse photographs, commonly travels diagonally downwind across it, apparently aligned to the upper wind direction.

Rotors, of course, are generated beneath all wave crests, and their strength is proportional to the difference in wind velocities above and below the inversion in the resultant wave.

Measurements seem to indicate that when the resultant wind shear is greater than around 15kts, we have parallel straight lines of shear wave. If cloud is present in these conditions, it also occurs in straight lines but may be continuous or broken, depending on thermal conditions beneath. So we can have solid parallel lines of cloud, or they can be broken.





If less than 15 knots, the wave is weaker, and if clouds are present, they tend to be further apart and begin to meander somewhat. Weaker

again, the cloud lines become more separated, wander and even merge with each other, but are still aligned in a general downwind direction. In the end, these just break up into the random arrangement of a normal convective day. So cloud streeting is just visible shear wave, straight if sufficient shear is present or meandering if it is weak.

COMMON OCCURRENCE

Shear wave is far more common than has been believed, and I believe it is as common as thermals. Every time you see parallel bands of cloud at any altitude, it is either shear wave or mountain wave. One only has to look at the Japanese satellite images to often see shear wave marked by cloud all over Australia. Some is mountain wave, but by tracking the isobars you can usually distinguish between them. What you see as parallel cloud lines is only the tip of the iceberg, because typically there is no cloud to mark its presence.

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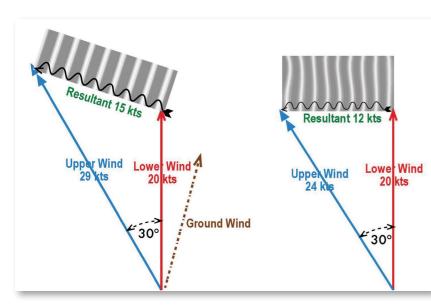


LEFT: Airflow across mountains without a lower inversion



RIGHT: Parallel lines of cloud when shear is 15kts or greater.

Shear wave can be of any strength. It doesn't require thermal activity to happen, and is normally without turbulence if flying above it. It does not matter if the resulting wind is less than 15kts, or possibly even 5kts, as modern sailplanes have a low enough sink rate to maintain height and follow the lift. However, the weaker the lift, the more likely it is for the line of lift to meander. This requires care to follow the meander by continually weaving while flying along it, to monitor the forward and back limits of the lift. For competitions, we forecast in great detail what the thermals are going to do, but we don't seem to be forecasting for shear wave that, if present, could win the day for those in the know.



The greater the difference in the wind velocities above and below the inversion the stronger the resultant wave. Below 15kts the wave meanders.

NOT HARD TO FORECAST

It shouldn't be that hard to forecast nowadays, as we just need to know the wind directions and velocities above and below the inversion and, of vital importance, how sharp the inversion is. A met balloon flight is best, but with a GPS and a sensitive temperature probe, a powered sailplane or even a tug should be able to fly it and determine the likelihood of it operating [or a predictive Skew T trace from one of the weather services ED]. If no cloud is present, don't assume that inversion wave is not there. Only small changes in temperature are needed, with 3° C being the maximum I recorded.

Shear wave can exist in conjunction with thermal conditions. Sometimes the thermals stop at the inversion, and the wave can be humped upwards and be stronger at

this point. If you are using the wave for cross country flying but find it is not quite aligned to where you want to go, it can be possible to use this hump to gain enough height to cross over to the next bar of the wave. I have done this over a succession of waves in the Kestrel 19, zigzagging across them. On another occasion, with weak thermals stopping at an inversion, I managed to contact weak shear wave meandering in the right direction, and flew at a constant 3,000ft at 80kts, jumped over a couple of waves and managed 90km without turning or slowing. This put me far in front of those struggling with weak thermals. However, the last leg was over elevated terrain where both the wave and the thermals petered out and I outlanded - ah, well!

THERMALS PUNCHING THROUGH

Shear wave can still exist with thermals punching right through them. This happened



LEFT: Weak shear tends to meander as cloud streeting.

one rough day when we were flying a task from Narromine in heavy smoke originating from a bushfire near Cobar. At 5,000ft the cone of visibility to the ground was so narrow that, if you were any higher, it could not be seen. However, the thermals were topping out somewhere around 9,000 to 10,000ft. At 5,000ft, shear wave existed, but not quite in the direction of the track. I followed this at speed for a long way until I had to fly across to reach the turn point, and was back to thermalling down in the rough stuff. The winners on that day took the thermals to the top of the smoke layer on instruments, and as the thermals went well above this inversion as pillars of smoke, they went up with them. As all the good thermals were pillars of smoke in clear air above the smoke, you can guess who won the day.

Conditions for this wave also occur with a strong low to the east and a strong high close to it in the west, giving close isobars and a strong southerly wind between. Shear wave here is orientated north - south. Back in the 1980s I have seen satellite pictures of continuous lines of cloud going right from Victoria into Queensland. Any close orientation of stronger lows and highs could give prospects for some interesting shear wave flying.

ANGLES

The angle between the winds above and below the inversion can vary, and their relative velocities can change as well. This affects the strength and orientation of the resultant wave. The greater the difference in wind velocities between the layers, the stronger the shear wave becomes. The same applies to increasing angles between the two layers.

The wave orientation may not be directly downwind when compared to the winds on the ground. Ground winds and winds just beneath the inversion are not necessarily the same direction in stronger wind conditions, because of ground friction effects. However, this tends to correct the alignment of the wave to the wind that one sees on the ground. The diagram below should explain this. The conclusion is that the streeting direction may vary somewhat from the wind that one experiences on the ground.

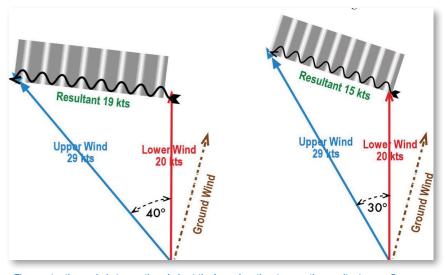
If not being exploited now, I believe that the next development in soaring could be the common use of

shear wave for soaring cross country flights, even on non convection days. Look at the Japanese satellite photos satview.bom.gov.au and see how often you see cloud ripples, and then think of the shear wave that is not visible. I would like to see trial measurements at inversions for the relative wind velocties and directions, together with the temperature gradient for the strength of the inversion. If positive, a sailplane could be launched and the result tested for soaring. Overcast or non-convective days with the prospect of shear wave could then provide a more productive activity than just flying circuits.

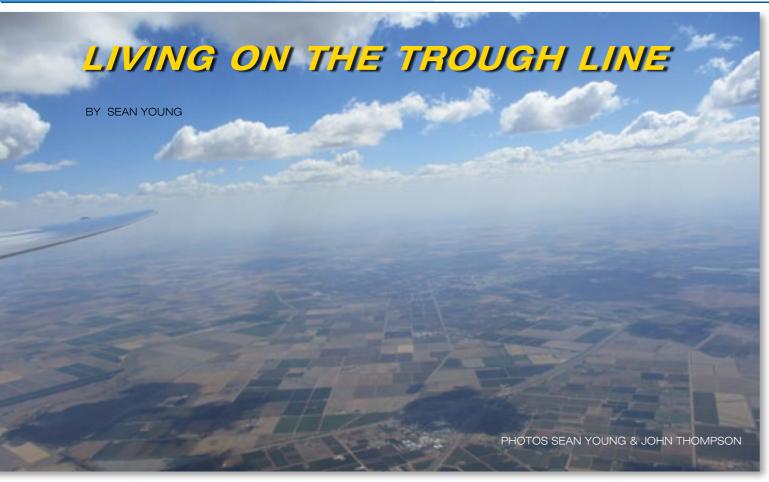
FORECASTING SHEAR USING GFA MET

Using GFA Met or skysight.io full version, you can forecast wind shear conditions. The Wind Shear plot (left-hand menu bar). Look for the higher values on the plot for areas with conditions conducive to thermal wave.

The Point Windgram plot (bottom of left-hand menu on full version os skysight.io) lets you see the wind above and below the inversion clearer, with ideal conditions being a strong inversion (deep blue layer), with a large increase in windspeed or direction change above the layer.



The greater the angle between the winds at the inversion, the stronger the resultant wave. Due to ground friction, the lower winds may be different to those below the inversion. This tends to orientate the wave to the ground winds.



ABOVE: A view of the irrigation around Grifith as I crossed north towards Hilston on 4 January, when nine 1,000km-plus flights were achieved around NSW and Victoria.

Every January, 20 or more Bathurst Soaring Club pilots pack up their gliders and make the three or so hour drive south and out of the ranges to Temora. Many members of Canberra Gliding Club also make the journey in the hope of being in the right spot for the peak of the summer soaring season.

Other clubs pick different locations around the edges of the NSW and Victorian wheat belt. Warkworth go to Narromine, Southern Cross prefer Cootamundra. Individual pilots go to Tocumwal, Benalla and Lake Keepit - all looking for the best soaring opportunities generated by the inland summer trough lines.

This year, we all experienced dramatic, even extraordinary conditions - both for great soaring and dangerous weather conditions.

I arrived at Temora to fly on 4 January. On that day the trough was to the southwest and the sky was filled with large cu up to 13,000ft, where I was flying. I reached The Rock, 120 km south of Temora at 8,000ft. What seemed like just a few moments later I was at the top of a thermal at 12,000ft. I glanced at my Oudie and saw that the average climb was 20kts. I reached for my camera and by the time I had taken a photo it had decreased a bit down to 18.5kts with an average for the whole climb of 15.5. After this, a 10kt climb seemed pedestrian.

FONT OF NOWLEDGE

Bathurst pilots at the Temora mess hall (RSL) Bill Tugnett (middle left) has been organising the BSC camp at Temora for many years.





Nine 1,000km-plus flights were flown that day from Temora, Benalla, Tocumwal, Corowa and Leeton - see the full list on page 24. I was happy with a far smaller distance in my dry ASW20. I am very glad I made the dash to Temora to fly on such a great day.

The next four days were very different, with the best soaring conditions at WA or up at Lake Keepit where the Club and Sports Class Nationals were taking place.

On 6 January several Bathurst pilots flew 300 to 400km flights. But on 7 January, thunder showers were forecast and by late afternoon the sky was ready to burst.

I went to the airfield to check that my glider was tied down properly. I tightened my ropes and jumped back into the car just as lashing rain smacked horizontally into the car's side. The wind speed was later discovered to have reached at least 59kts, the strongest wind that anyone at Temora could remember.

The following day, another dramatic squall line developed in the trough and passed over Temora. The dust front ahead of the rain was incredible. The country from Temora to the west has been in the grip of drought since early 2018. As at Narromine, a major feature of this summer has been dust in epic volumes as the top soil is sucked up into the atmosphere and blown across the parched terrain.

On 9 January the conditions were forecast to be very strong, and they were. However, I launched into a dust filled sky with visibility dangerously impared by dust that was trapped under the inversion up to 6,000ft. Once the inversion broke, the thermal reached above 13,000ft and the dust dissipated.

However, soon the sky overdeveloped and showers

continued over page

ABOVE: A squall line just about to pass over Temora. The dust in front of the cloud was the worst I have ever seen

BELOW: Graham Brown and Peter 'Sarge' Williamson from Bathurst Soaring Club about to launch 16 January.



began forming. On a more usual summer day you can



HAPPY BIRTHDAY WOMBAT!

Temora Gliding Club CFI and well known gliding personality Mike 'Wombat' Cleaver celebrated his 70th birthday in January. Mike very generously opened up his wine cellar for us all to celebrate with him. Mike (centre) is photographed with several members of the Bathurst and Temora and Canberra clubs including Ray and Janine Humphry, President of Temora GC Tim Causer, Dominique Brasier, Grant Johnson and Geoff Sweeney.

see the rain and avoid it. But a feature of the conditions during this camp was that the showers were often not obvious, disguised by sheets of impenetrable dust.

Several pilots reported massive rings of dust, blown off the ground in a circle as powerful downdrafts from the showers hit the ground. Temperatures on the ground during this period varied from 40 up to 47° C. These were not good flying conditions for the fainthearted, like myself.

On 15 January, the soaring conditions were excellent, albeit with the same visibility problem after launch due to dust. Once again, when the low inversion broke the visibility improved and a number of Bathurst pilots flew tasks of 500 to 600km - north,

then west towards Mt Hope or Hilston. Near the trough line in the west, showers again developed and the drama of navigating around massive dust clouds, virga and rain ensued. It was a great soaring day nevertheless. The following day was reported to be even better, without showers and three 1,000km flights from Tocumwal and Narromine. But it was time for me to head home.

YOU DON'T NEED A WEATHERMAN TO KNOW WHICH WAY THE WIND BLOWS

I have been flying from from sites along the edge of the wheatbelt for many years. There are pilots who have been flying the same region for twice as long as me and more. In my anecdotal analysis at least, the high summer conditions are changing. They are becoming more extreme in terms of temperature, dryness and thermal strength.

As excellent as these conditions are, I hope that next season there is a bit of a pause and we do not see any increase in the extremes. Outlanding when the temperature is 40° C used to be considered dangerous. The temperatures out west this January were 44 to 47° C on the ground. What if ground temperatures increase to 50° C in the years to come? Would this mean that January becomes a no fly period?

GA







It was Monday afternoon on 7 January 2019 and I was en route back to Temora airfield, on a cross-country task to the North. There was a storm that was building earlier to the North, which had started to move slowly southwards, potentially closing my flight path back to Temora from the west.

I maintained location near Leeton for a while, watching to see how the storm was developing and how this would affect my next decision about where to fly. A squall also developed to the south of my location.

Having made radio contact with other pilots on similar tasks to obtain weather information from their various locations, I decided to follow the a highly visible line – a patchwork of sunlit fields, visible up to 40km ahead, towards Temora. This meant I wouldn't be too far away for a retrieve should an outlanding be required before the storm broke, or if possible, to land back at Temora airfield.

I started on course towards Temora, and continued to fly in buoyant air at about 4,000ft, but at a slow speed according to the conditions. Curtains of rain and dark cloud continued forming about 20km away both to the south on my right, and to the north on my left. Lightning was visible at times to the north, and I was becoming more aware of the strength and potential danger of these elements in my current location. I encountered some lift along the way due to uplift between the storm and the squall, but no thermals.

At 22kms out, I had Temora Runway 05 in sight – but not final glide. I evaluated my outlanding options. There were many open fields available below with visibility still good but getting darker. The storm was fully developed by now and closer. I flew on towards the Ironbark forest west of Temora airfield, but by this stage I had insufficient height to cross the forest safely.

At about 7km from the runway. I found a thermal that gave me additional height in order to reach



This squall line produced winds of at least 59kts.

Temora airfield. There was still a clear window and good visibility to Runway 05.

Landing required me to come in on a long final and steep decent to overcome the increasing wind speed for a cross-wind landing. While landing and taxying off onto the grass, the wind backed to the northwest, which was now at 90 degrees to 05.

Soon after I had clambered out of the cockpit the rain began pelting down with strong gale-force wind blowing. The wind was blowing over the tail end of the glider. I kept pushing up the port wing to stabilise the glider for a few minutes until the storm had subsided.

Later that afternoon I learnt that the weather report for the time just after I landed showed that winds were gusting to 59kts, and that 9mm of rain had fallen in those following 10 minutes. As long as the port wing was held up, the glider was stable during this storm event.

Lesson learned: Given the developing storm conditions before landing at Temora, and with the benefit of hindsight, the safest and best option would have been to land at an alternative airfield. Wind directions and speeds can also change very quickly before a storm breaks with corresponding implications for landing in such conditions. GA

GLIDING AUSTRALIA www.glidingaustralia.org 23

Alan Wilson (far right)

and David Pietsch from

Canberra GC ready to



Over 25 years ago when Ian McPhee was running operations at Lake Keepit, a bunch of us from Grafton would visit the club for a week of cross country flying. We would make a phone call beforehand to Macca to check on weather "Yeah! Yeah! Great weather! Come on over," replied Macca, over background noise on the phone that sounded suspiciously like rain drumming on the roof. For Macca, the supreme enthusiast and ultimate optimist, there was never a day that was not great for cross country flying at Keepit.

ABOVE: Typical Keepit Weather pre-start.

RIGHT: Allan Barnes did a great job interpreting the weather forecasts, and was overall winner of Club Class.



Well, the location certainly lived up to its reputation when Lake Keepit hosted the Club and Sports Class Nationals comp. A stationary blocking high pressure system sitting over the Tasman Sea maintained an unbroken weather system of glorious flying weather. Pilots experienced convection each day from 8,000 to over 11,000ft, convergence over the hills to the east, light to moderate winds and a steady flow of air from Queensland with sufficient moisture to provide cumulus most days.

No days were lost to bad weather, and we flew the full two weeks with just one mandatory rest day in the middle – twelve days flying and over 50 hours added into pilot logbooks in one comp. That doesn't happen often.

Local weather guru Allan Barnes did a great job of interpreting the forecasting data, which enabled us to send the fleet on varied tasks each day, exploring the surrounding terrain and maximising opportunities for interesting flying. Gliders were flying up convergence lines from Manilla to Coolatai northeast of Warialda, across the plains and cotton farms West of Moree to Keytah station, south to the Liverpool Ranges and beyond to Gulgong, to Tooraweenah in the southwest and over the stunning Warrumbungles. The pilots chased the thermals cooking up off the edges of the Pilliga scrub and, of course, made the favourite run home from Mount Kaputar in the afternoon under lots of powerful 'black stuff'.

But it wasn't all plain sailing. On one very memorable day, the weather didn't match expectations. Forecast at 13,000ft, we originally tasked east up to the New England plateau. Fortunately the backup task B was invoked as convection was struggling to go above 6,000ft. Geoff Sim reckoned that the previous evening, a cool nor'easter had blown in from the coast, replacing the air mass. The weather models obviously hadn't taken this change into account. As it was, the day was mainly blue and some pilots struggled to get home. Jo Davis recorded a particularly valiant effort, flying club class in her ASW19 and landing at 7.58pm.

Other club class gliders had fun making it around the turnpoint at Mount Kaputar at 5,000ft – although the day had been forecast so high it was never envisaged that this could ever be difficult. One of the US women pilots, Kathy Fosha, flying the Std Libelle CX, managed to clip the turnpoint thistle on the north side below the ridge line! Later in the afternoon the day eventually built up to 10,000ft.

We also had a couple of days with late afternoon rain showers forecast. Allan Barnes had experienced situations in Europe at the World comp at Hosin, in which a very large finishing circle was set to increase the options for finishing should a storm be centred over the airfield at the end of the day. On two occasions at the Keepit comp, the normal finish circle of 3km was enlarged to a 20km radius. A couple of gliders actually utilised this to land at Gunnedah, because the 20km circle is closer to Gunnedah than Keepit.

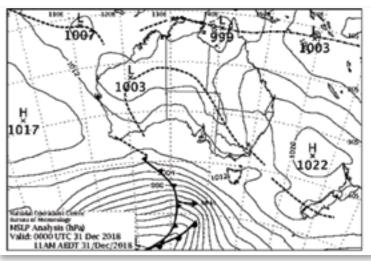
Most gliders landed ahead of the storm that eventuated on one of those days, with a 30 to 50kt outburst of wind and 25mm of rain ... except for Matthew Atkinson, who started late and landed in the middle of the rain and wind. Fortunately he made it safely in, with a number of volunteers holding his wings down in the rain as he waited in the middle of the runway for conditions to ease.

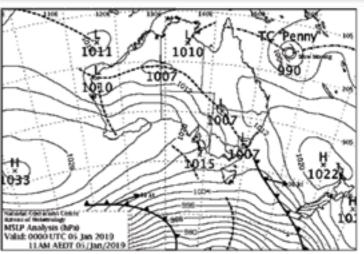
WOMEN'S WORLD GLIDING CHAMPIONSHIPS

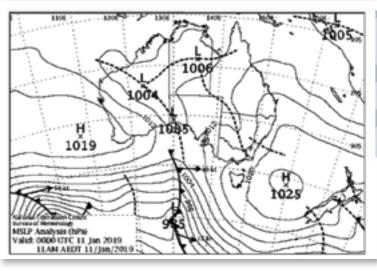
This competition was a practice run for the Womens World Gliding Championships (WWGC) to be held next year at Keepit. Notable was the presence of seven overseas women pilots, practising for next year's competition and representing Germany, UK, Japan, Belgium with three from the US. In addition, there were seven Australian women pilots competing for selection for the Australian team next year. Very appropriately for a Women's Championship, the competition was directed very professionally by another woman, Mandy Temple.

As an interesting aside, when asked how many women pilots compete in the USA, the three US women competitors said, "We're it! Just three of us ever compete in the USA." So, with seven Australian women competitors at this comp and nine selected for our team next year, we're doing much better at getting women into gliders than they are. (See #GirlsCanGlide)

Among the creditable performances from our women mixing it with the men were 3rd and 5th placings for Ailsa McMillan and Lisa Turner in a field







of 21 Sports Class pilots, and 4th and 5th placings for Jo Davis and Jenny Ganderton in the Club Class.

Safety was a topic of every day's briefing, with Vic Hatfield illustrating his safety message with typical Vic jokes. Nevertheless, he must have been getting the message through because the fortnight of flying proceeded without incident. The most telling message I heard from Vic was that taking risks to achieve a podium finish generates a very transient and limited glory. "People forget the names of the winners from past comps, but they remember the name of the pilot with the serious accident."

continued over pag











CLOCKWISE: German pilot Sabrina Vogt, last year's Women's World Champion, won two days at Keepit and placed third in Club Class flying Robert Smit's LS4.

Peter Temple blitzed the field on Day 1 in Sports Class with a speed of 165kph. He was presented with the Sammy the Snail

prize later for letting Adam Woolley beat him on other days.

Competition Director Mandy Temple with US Pilot Sarah Arnold, winner of Day 9 in Jenny Ganderton's Cirrus.

Jo Davis will be representing Australia at next year's WWGC in Club Class – and placed 4th in Club Class in this championships.

LEFT: Good media coverage was given with two TV slots. Links - NBN News tinyurl.com/ycqh79m4 Northern Daily Leader tinyurl.com/y9fhdjow

NOTABLE FEATURES

- Twelve days of great flying weather
- Over 50 hours logbook time per pilot
- Promotion to overseas pilots of top flying conditions in Australia
- Top speed for the week 165kph by Peter Temple (151kph only got 8th place)
- Adam Woolley won nine of the 11 days in Sports Class and first overall
- Peter Temple had two day wins and was awarded the Sammy the Snail prize for letting Adam Woolley win the others.
- Jo Davis' late home effort at 7.58pm
- Six separate pilots shared the Club Class podium for daily first place.
- Allan Barnes made first place in Club Class
- Great food supplied every night by Jan Dircks





Lisa Turner will be representing Australia at next year's WWGC in 18m Class. Lisa placed 5th in Sports Class in this championships.

LISA TURNER

Wow, what a competition. The weather was amazing and reasonably consistent day in day out for the 12-day competition period, and the only non flying day was the mandatory rest day, which was still flyable. Lake Keepit certainly turned on the weather for us and will go down in history as 'one of those great weather comps' along with Dalby in 1994 and Gulgong in 2003.

I had a lot to achieve at this competition, most importantly, selection for the Australian team for the Women's World Gliding Championships 2020. I wanted to fly more consistently than I had at the Multiclass Nationals and finish in the top half of the placings each day with no really low scoring days. That meant flying consistently well all day, every day – no getting completely stuck in a hole for 30 minutes, no low points, no taking high risks tactically on task. Easy.

On the first competition day, Adam Woolley in his 15m V2 caught up to me on task after starting after me - I was in my ASG29 18m. Oh well, he is in great form right now and my best bet at this stage is to run along with him and accept the handicap penalty - better than digging myself into a hole trying to outrun him.

We had a lot of fun running along together and I had the opportunity to observe how Adam feels the air, even when running under good cumulus streeting at 110kts. He is constantly looking for the best air to fly through, thus minimising the time required for thermalling, even if they are 10kts. For the next few days I ran into Adam or Peter Temple on task a few times and saw this style repeated, noting that they were performing consistently well.

There was something to learn from this - time to adapt my flying style and see how it goes. I realised that while I was planning ahead well on the medium term - this cloud street or this task leg - I needed to focus more on the longer term, the next leg or further ahead, and the immediate term - this cloud or the next. I started focusing on these areas and noticed how my flying felt more consistent and I maintained good speeds along all task legs.

I managed to muck up my starts and first leg a few times in the beginning of the comp as well, which was

something I had also done at the Multiclass Nationals. This was at least partly due to poor planning and not understanding my instruments well enough, so it was a weakness to work on. I applied focus to starting well and not missing the start line when in a gaggle, and to the first few glides out, giving me a good starting speed to task. This certainly helped me on Day 4 when I felt I had a good start and by the second leg my stats said I had averaged 150kph in the past 60 mins with over 6kts average climb, a personal best. Let's not talk about what happened after that when the cu's finished and we were into the blue.

The heat was certainly a challenge over the course of this competition, with every day for two weeks 37° C or

higher, apart from the rest day which was a cool change at 35° C. Energy management became a critical focus point by Day 5 when pilots started to request the rest day be brought forward. For the first time ever I had decided to use oxygen above 5,000ft every day regardless of the forecast thermal height. It was certainly helping with fatigue management.

Halfway through the competition, Bill Hatfield suggested I use oxygen from take-off, as the blood oxygen levels are already depleting by 5,000ft. I followed this suggestion and feel it helped with my energy management for the remainder of the comp.

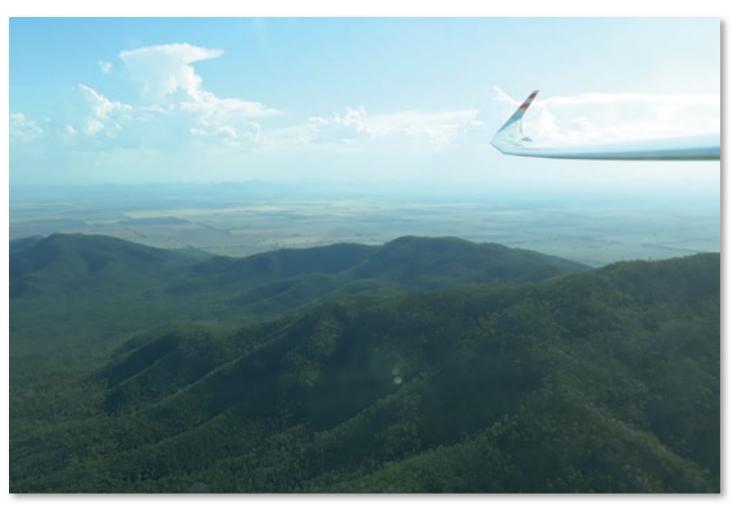
There were certainly some tactics coming into the flying at this competition and I have been surprised at the level of tactics used generally in 18m class this season. Some days I determined the gaggle would be the best option for a low risk, consistent performance and would tell Dad I was 'getting on the gaggle bus today'. Some days, the gaggle would catch you up on task, and sticking with them was the best you could do at that point to maintain your performance for the rest of the flight. Other days, I felt I was on a good rhythm and pushing along fine on my own.

The tasks at the competition were at times a challenge tactically with the use of AAT wedges, and semi-circles coming into use. Many short AAT legs around changing weather also required a lot of decision-making and looking a long way ahead on the flight. I identified this as something I need to work on over winter and I am glad we had the experience this year before the World Comps.

By the end of the competition I felt I was flying consistently better than I did at the Multiclass Nationals only a month before. Lessons had been absorbed and tactics adapted which were reflected in my performance at this competition.

It's tough trying to compete at this level with a young family. Your time to train is more limited and it requires a lot of support and understanding around you to make it happen. It also takes a lot of personal sacrifice, planning and time away from the family, which is not for everyone. I certainly feel that I am where I wanted to be by the end of this competition season and on track to where I want to be for the World Championships next year.

continued over page



ABOVE: Ailsa flies over the Kaputar Range in the JS1 (OG) she competed in at this competition.

OPPOSITE PAGE: Ailsa flies above the clouds in wave.

BELOW: Ailsa came 3rd in Sports Class.



AILSA MCMILLAN

It's not often you get a competition with all possible days flown. All the other women and I, looking for practice flying out of Keepit before the Worlds next year, certainly got plenty of that, with good flying across the whole tasking area. I had the incredible opportunity to race in a JS1 for the first time (thanks Arnold!) and



quickly learned how to make it go with a 3rd place at 160kph on the first day. The rest of the competition followed along similar lines, fast days under cumulus, with winner speeds above 130kph on all but two days. With this great run of weather came a continuous run of 38° C days, but meanwhile all the fantastic volunteers on the organising team did a great job of getting everyone weighed, gridded and launched each day under these conditions. Thanks!

I hope everything runs just as well next year for the Worlds. It's going to be a lot of fun to hang out with the rest of the Aussie team and to welcome across all the visiting international pilots.

PETE SUMMERFELDT

Are we ready? Could anything go wrong? Who are the staff? What have we forgotten?

On duty to assist at Keepit, we had the Manager Val Phillips, the Club President Tim Carr, Treasurer Chris Bowman, secretary Michelle Dowell, Club Tug Master Peter Summerfeldt, Club CFI Vic Hatfield and Club Safety Officer Greg Edwards, as well as members Harry Potts, Ranjit Phelan, Dave Holmes, Melody Braithwaite and Dave Fagan. Plenty of the club profile were there to ensure that all eventualities were protected.

So what could have gone wrong with a perfect location to fly a comp, all of the required staff on hand, good weather for flying and a great bunch of pilots with good aircraft, and the tugs all on site and ready. Where do I start?



On the official Practice Day, one of the tugs was playing up. Luckily, Ian Downes had brought his Cessna, so it was put into action to replace the faulty Pawnee. Problem averted.

The next sign of trouble came when the Keepit Dam Manager advised Val and Tim that the water level in the Dam was so low due to the severe drought that the pumps had developed a series of faults and, as a result, the only water at the gliding club was the water remaining in our holding tank. It's a very big tank but it will only last a day or two! Therefore, for the rest of the two weeks, water had to be trucked in every few days.

Next, the cool-room at the kitchen failed! Ice, lots and lots of ice, was required to stop the food and supplies from becoming spoiled.

Then, just when you thought there couldn't be any more trouble, Allan 'the weather' Barnes lost his voice. Good job we had pretty pictures to look at courtesy of Skysight.

The team sprang into action to attend to these troubles while the pilots were out on task. On two of the competition flying days, some interesting weather arrived at the airfield at the same time as some of the gliders. There was severe wind, blowing dust and turbulence. The level of skill and attention to safety delivered by the pilots at this comp had to be seen to be appreciated. Very professional attitudes to safety and to each other meant that any minor differences and issues were dealt with quickly and correctly.

A few outlandings occurred during the comp calling for a couple of aerotow retrieves, and the rest were retreived by trailer. Eleven competition days were flown with the top scoring pilots amassing more than 10,000 points. Fourteen female pilots competed from Australia, the UK, the US, Luxembourg, Germany and Japan.

All in all, good tasks, good weather, great food and competitive but friendly people helped the comp turned out very nicely, and everyone learned from the exercise. It was a great practice run for the WWGC at Lake Keepit next year.

CLUB & SPORTS CLASS NATIONALS LAKE KEEPIT

31 DECEMBER 2018 - 11 JANUARY 2019

SPORTS CLASS

1 G1	ADAM WOOLLEY	VENTUS 2	10,684
2 PT	PETE TEMPLE	ASG 29/18M	10,255
3 OG	AILSA MCMILLAN	JS 1	9,350

CLUB CLASS

1 YMW	ALLAN BARNES	SZD 55	10,133
2 S5	RAY STEWART	DISCUS	9,875
3 BM	SABRINA VOGT	LS 4	9,665

soaringspot.com or tinyurl.com/y72wt52k



THE NUMBER STUFF

The second F1.0GP was held at Leeton NSW from 27 December 2018 to 6 January 2019. There were 35 entrants comprising 6 Jantars, 8 Standard Cirrus, 1 Open Cirrus, 4 Hornets, 10 Libelles, 2 LS1fs, 2 DG100s a Phoebus, and an Astir. There were four international pilots, one from the US, two from England and one from Germany. Ben Loxton won with Lumpy Paterson in 2nd, both in Cirrus. Ben flew like a champ and Lumpy gave him the hurry up, but wasn't close enough on the last day to really scare him. Andy Maddocks came 3rd in his Hornet, despite my own best efforts in a Hornet.



THE TECHNICAL STUFF

The F1.0GP is a form of racing that I've had very little flying experience with. I was the contest director for a qualifying GP in 2007 held at Gawler, so the general idea was familiar to me but actually flying one was not. The idea is very simple - a fixed start time across a long start line, a fixed course, first one across the line is the winner.

The scoring is similar to motor racing – in other words, the winner gets maximum points, 2nd place gets two points less, 3rd place gets one point less and so on till the last few places get no points. The amount of time by which you win or lose doesn't matter. No dumpable ballast is allowed. Modifications to your glider do not get a penalty in this contest, unlike Club Class.

The slight twist in this case is that the size of the turnpoints varies according to the glider's club class handicap. That means the overall minimum distance is the same on handicap. This is the reasoning behind limiting the types of gliders eligible to enter. It seems to work pretty well.

Trackers in all gliders send height and position data via the mobile phone network, and information is displayed on the web in close to real time. The competition I helped run at Gawler in 2007 had trackers but they were nowhere near as reliable. They had to be hired at a cost of \$10,000, which could only be done due to the generosity of Simon Hackett and Internode.

The ones used at Leeton were developed and donated by Sanderbuilt (Todd Sandercock) and Innovact (Alex Wallis) and worked remarkably well, even though they are not fully developed. Dollar cost is unknown but the time spent would have been very significant. We even got text messages in-flight, advising us of our start height and speed, any penalties incurred, our relative position as we rounded a turn point and on the final leg. A text message came through before the landing roll had finished, giving the final position and points scored. Submitting a trace was unnecessary unless there was a dispute or tracker failure, which was not very often.

The media was the best I've seen at any comp. The camera and film work was done by two young guys, Thomas McQueen

and Owen Derrick, who sacrificed their flying to take heaps of excellent footage, which was quickly made available on Facebook and the competition website. The number of hits and followers would have pleased any business.

The contest director was John Orton, task setter Tom Gilbert, and the Safety Officer Graeme Cant. Four tugs were available for most of the contest until one was recalled by its club near the end of the contest. Launching was a hot and dusty affair for the rope runners. Many people were on the ground helping to do the start calls, collecting tow money, organising social events and more, and were thanked with goodies at the end of the comp. Adam 'Charlie' I'Anson and Nick Gilbert were the main ones responsible for organising the event.

TOP LEFT: Ben Loxton flying his Standard Cirrus.

LEFT: The morning briefings were lively affairs.

TOP: As was the case on all the airfieds in NSW this season, dust was a major factor.

RIGHT: Scott Lenon flying Standard Libelle CK.

BELOW: Claire Scutter in a Standard Cirrus.









ABOVE: Armin Kruger with his crew Kathleen flying a

RIGHT (L-R): Nick Gilbert with **Lumpy Patterson and Andy** Maddox.

BELOW: Eric Stauss recounts his flight with Charlie l'Anson.

BOTTOM: Calen White flying a Standard Libelle





THE GOOD STUFF

The driving idea for this contest is to cater for pilots that don't have deep pockets and also to be fun and family friendly. In reality, it is all of those things.

The success of the first GP meant that this one was oversubscribed with a waiting list for any dropouts, and I think that challenge is only going to intensify.

A lot of young pilots were there and the quality of flying was excellent. Families and partners were out on the field as well. Sarah Lennon worked hard to include them in the activities and keep everyone entertained so that they would want to come back again next year.

The timing of the event, just after Christmas, is important to cater for working families who may not otherwise be able to attend. The costs were kept down by actively seeking donations and sponsorship. The NSW government was a key sponsor but quite a few businesses were involved as well, including 5 Rings Aerospace, the major event sponsor. This meant that the entry cost, tug ferry fees and launch costs were very reasonable.

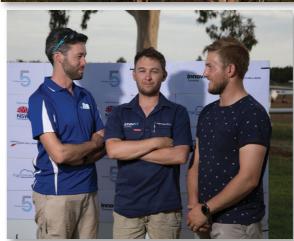
The racing was intense and the weather was often awesome. The speeds achieved by these gliders, which were unballasted and had restricted start heights, was amazing. I came second last in my group one day, only achieving 119kph. The winners did over 136kph!

Leeton is an excellent site with one exception - the dust. The organisers worked hard to send water trucks out to the take off area and while this reduced the problem, it was not a total success. Some launches flew straight inro into an orange cloud till they popped up out of the dust. I looked out after one such launch to see the wings badly covered with dust and wondered what this would do to my performance and maximum all-up weight, although It didn't matter much because everyone else was in the same boat. The dust, however, makes it a tough time for those on the ground and camping, so the future of holding the GP at Leeton at this stage is uncertain.

The F1.0GP really is new fun in old plastic.











FORMULA 1.0 GRAND PRIX LEETON

27 DECEMBER 2018 - 6 JANUARY 2019

1 QT	BEN LOXTON	STD CIRRUS	54
2 QO	LUMPY PATERSON	STD CIRRUS	47
3 АА	ANDREW MADDOCKS	HORNET	31
4 MV	PHILIP RITCHIE	HORNET	30
5 C2	FINN SLEIGH	STD CIRRUS	29

results.f1gp.com.au/scoring/agg/5

ABOVE: Ingo Renner came to present the winner's trophy to Ben Loxton who then (ABOVE RIGHT) received the traditional winner's spray.



ABOVE: Don Woodward took this photograph of his ASG 29 as showers skirted Narromine.

RIGHT BOTTOM: Pilots huddle together for warmth in the piecart as the temperature approaches 40°. The NSW State Gliding Championship was held at Narromine in difficult heat wave conditions, and hosted 24 contestants in three classes. Interestingly, these were Club, Standard 15m and 18m Open. Unfortunately the only two-seater entry, in Open Class, had to pull out before the comp started.

Contest Director Mick Webster and a small group from the Hunter Valley Gliding Club did an outstanding job and showed again that a contest can be very successfully run by handful of enthusiastic individuals, with the help of the Narromine Gliding Club and its wonderful facilities.

NSW STATE CHAMPIONSHIPS

2 JENNY GANDERTON LAKE KEEPIT MOSOLITO

NARROMINE

1 PAUL DICKSON

2 BEN COLEMAN

3 GARY STEVENSON

19 -26 JANUARY 2019

CLUB

2 JEININI GANDEITION	LANE NEEL II	MOSQUITO	4,004
3 BERNIE BAER SOUTH	HERN CROSS	LS 1-0 FG	4,351
C BEITHE BALL COOT	121114 011000	20 1 0 1 0	1,001
18M / OPEN			
IOM / OPEN			
1 DON WOODWARD	VICTORIA	ASG 29	4,794
O LLINADY DATEDOONI	0000	0.0	
2 LUMPY PATERSON	SRGC J	S 3	4,255
3 DAVID PIETSCH	CANBERRA	JS 1	4.113
O B) WIB T IETOOTT	O, II IBEI II D (1,110
STANDARD / 15	VI		
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1 TOM CLAFFEY	NARROMINE	ASW 28	5,088

GRAMPIANS

HUNTER VALLEY LS 3

HUNTER VALLEY DISCUS 2B

DISCUS 2B

4.806

soaringspot.com or tinyurl.com/ya43sc44

HEAT CHALLENGED

Dust storms, a heat wave and some thunder storms dominated the weather for the period of the contest. Blocking highs remained resolutely fixed off the east coast, and heat wave conditions over the previous weeks meant that the air mass temperature was very high. Trigger temperatures therefore were also very high, but most days were marked by a slower than predicted rise in temperature, due to dust in the air and the effects of local heavy rains on the Sunday night. This led to the cancellation of two days when launch time was so delayed that the fleet could not be launched in time to complete a task. In the end, five tasks were flown out of seven days.

FUN, SAFE AND FAIR

'A fun, safe and fair' competition was the stated aim and this was certainly delivered, with a focus on safety, daily safety discussions, and a particularly good attitude among the competitors. There were no accidents or incidents, and none of the precious pilot behaviour sometimes seen at these events.

AATs were mainly set due to the difficult weather, but two racing tasks were held. Narromine and the Narromine Gliding Club provided the usual stunning facilities including dinner, breakfast and sandwich lunches each day prepared by Fiona and her girls.

Contest Director Mick Webster did a great job, making some difficult decisions with his usual cheerful, even temperament. He was aided by a small group - John Rowe and Paul Dickson were safety officers, the indefatigable RIGHT TOP: Rain falling at Trangie. 35km west of Narromine.

RIGHT BOTTOM: Dust gets whipped up near the airfield.

James Moffat organised the launch and looked after the trackers, and Peter and Fefe heroically ran wings in the heat wave.

lan Steventon also did a wonderful job with the scoring (and blogging) on his first attempt, including the trialling of an early start bonus system - pilots starting in the first 10 minutes after the gate opened were awarded an extra 100 points. This bonus decayed out until 50 minutes after the gate opened.

ALL THE WINNERS

Club Class: Bernie Sizer (Grampians, Pik 20B) led Club Class from Day 1 to the final morning but at the start of the last day there were only 70 points between the first three pilots. By the end of the final day Paul Dickson (Hunter Valley, LS3) was first, Jenny Ganderton (Lake Keepit, Mosquito) second and Bernie Baer (Southern Cross, LS 1f) third.

Standard/15m: Tom Claffey (Narromine, ASW 28), in the only non-Discus in the class, dominated the class as he often does, leading all week, winning three of the five days and coming second on the other two. Ben Coleman (Hunter Valley, Discus 2b) was second and Gary Stevenson (Grampians, Discus 2b) third.

18m/Open: Don Woodward (Victoria, ASG 29) flew a brilliant and consistent contest, leading from the first day to the end of the contest. Don blitzed the last day, winning with a speed of 148.87kph, which also won the award for the fastest speed of the week. Don held off a sustained challenge by Lumpy Patterson (SRGC, JS3) who finished the last day with a speed of 140.33kph. David Pietsch (Canberra, JS1 Revelation) was third.

We witnessed a great show of true sportsmanship on the last competition day. Before launching to contest the championship, Lumpy Patterson flew one of the tugs and helped launch the other two classes before his, while similarly Don Woodward ran wings. The pair also performed the fastest relight ever seen, relaunching a grateful pilot who went on to win the day in Standard Class.











The 2019 Vintage Gliders Australia annual rally continued the tradition of great fun with stimulating flying of gliders of yesteryear. Good weather conditions prevailed and the Bordertown Gliding Club again proved themselves as excellent hosts. No flying days were lost, and the refurbished and re-engined double drum winch operation accentuated efficiency and economy.

The spacious clubhouse catered well for the visitors, and was where most meals were cooked up by multitalented members in the club kitchen, led by JR Marshall. Retired professional meteorologist Peter Bannister gave daily forecasts and expanded our knowledge of the art of accurate forecasting. As most visitors arrived on Saturday afternoon, a pub meal in town was called for.

Early Sunday saw most pilots out rigging and lining up for winch revalidations. A light southerly breeze assisted, and there were some soaring flights to about 5,000ft. Peter Raphael in the bright red Cherokee logged 125km during three and a half hours airborne.

The pleasant weather continued for the whole week, with light winds from the south slowly shifting to the west late in the week. This kept the temperature much below the extremes recorded across South Australia the previous and the following week. Most flights operated from 4,000 to 7,000ft, with 10,000ft available to the East by Friday. Every day of the rally was flyable, however, only two pilots braved a stiff southwester on the final Saturday.

Vintage gliders flying in the rally were: Cherokee II GPR with Peter Raphael. Olympia GFW 'Yellow Witch' with owner JR Marshall and annual visitor from England Ged Terry.

tor from England Ged Terry.
ES-60 Boomerang GTL with
owner Mike Renahan.
ES-60 Boomerang GQO with
owner David Howse.
Schleicher Ka6E GEA with owners
Dave and Jenne Goldsmith.

The club's Twin Astir and Puchacz were kept busy including training, revalidation and mutual flights.

Once again, a large number of impressive glider models were a feature as many flights were demonstrated, some to great altitude and one never to be seen again!

A wonderful model of the Yellow Witch looked very realistic on aerotow launches. On Thursday morning a bus tour group of Bordertown Seniors was impressed by all the model and gliding activities.

The Vintage Gliders Australia Annual General Meeting was held on Thursday evening, chaired by VGA President JR Marshall. Re-elected office bearers are JR as President, Leigh Bunting as Secretary, Treasurer Ruth Patching reporting that five new members had joined during the year, and webmaster Peter Raphael. The only change was Dave Goldsmith taking over as Vintage Times editor when Dave Howse retired from the position.

Issues of interest to VGA members were discussed. The vintage glider GFA airworthiness concession application is now coordinated by JR Marshall for vintage gliders flying 20 days or less per year, the annual rally counting as one day.



OPPOSITE TOP: The mob

OPPOSITE BELOW: All eyes are on the model gliders.

BELOW LEFT: Jenne Goldsmith (Ka6E) and Peter Raphael (Cherokee II) prepare for takeoff.

BELOW: Ged Terry with the Yellow Witch.



continued over page









BOVE: Colin Collyer uilt this beautiful nodel of the Olympia, ellow Witch eter Raphael The Annual Dinner and Patching Address took place on Saturday evening, with many accolades for the Bordertown members who did a brilliant job to manage and cater for the Rally. Awards presented

were the League 2 award to Peter Raphael for his 125 km flight in the Cherokee, and the Renmark Trophy to Jenne Goldsmith for the longest distance flight of the Rally, 242 km, in the Ka6E. Jenne was also awarded the Geoff Gifford trophy for the longest distance flight between rallies of 459 km, also in the Ka6E.

Each year Gary Crowley organises a speaker to deliver the Patching address, and this year Captain Brian Surtees from the DCA/CASA Flying Unit gave a fascinating insight into the development and expansion of the Unit's in-flight testing of navaids, dating back to the days of following railway lines up to the sophisticated devices of today. The Unit expanded to become responsible for testing across much of Southeast Asia, Australia, New Zealand and the Southern Pacific Ocean. However, later developments and ground-based monitoring techniques have reduced operations in recent times. Our thanks go to Brian for a fascinating look into the Flying Unit's efforts to maintain a high standard of aviation safety.

Once again, the enthusiasm of those attending the Rally carried the day, with good flying and camaraderie ensuring a great time was had by all.



The BG12/16 now registered as VH-GRW was started by Chris Kennedy in 1989 and largely completed by 1990 with the basic fuselage wings and tail woodwork complete. He then went to work in Saudi Arabia until 2011. The project remained in storage until 2017 when he started actively gliding again.

The last 10 percent of the work took until Jan 2019 to finish, Test flights started on 5 January

with two ground hops behind a vehicle, then tows to 3,000 agl.

As I was very current in my own BG, I was 'volunteered' as the No 1 test pilot. I found she performed quite nicely on tow and in flight. Some high speed runs, stalls and steep turns when she was quite well behaved were followed by a long landing with flaps only. Next flight, I located a thermal and found she was easier to



fly than my BG, due to a helpful trim, followed by a much shorter landing with the very effective flaps that extend to the ailerons.

Chris has since flown three hours in her and has a few more hours to complete the first stage of testing.

It's great to see RW in the air. She now shares a hanger with two other BG12a's. There can't be many clubs around with three flying BGs - some may say that's a good thing - and we look forward to getting them all in the air together.





OPPOSITE PAGE and TOP: VH-GRW getting ready for its first flight by Laurie Simpkins.

ABOVE: M200 two-seater.

LEFT: Laurie's BG12 flying over Warwick.

OPERATIONS

HOW WE CAN LEARN FROM INCIDENTS

You are having coffee with some of your colleagues, discussing and laughing about a mistake another colleague of yours has recently made. You say, "Did you already hear the latest story?" "How could he have done that...?!" "I mean okay, NO BLAME, but this was really too stupid."

Think for a minute - do you have the tendency to talk that way? You might still think, "If only he had reacted in a different way." But are you convinced YOU would have reacted differently?

While it is easy to point the finger at somebody else, what if - one day - the finger is pointed at you? Would you not want to explain what really happened? To be understood? Because you did your best, because it was logical to do it that way? You were right with it!

The goal of a GFA safety investigation is to do precisely that: to find out what really happened and WHY it made sense at that moment, rather than pointing the finger at any individual. This is what we mean when we say we are committed to a 'just culture'.

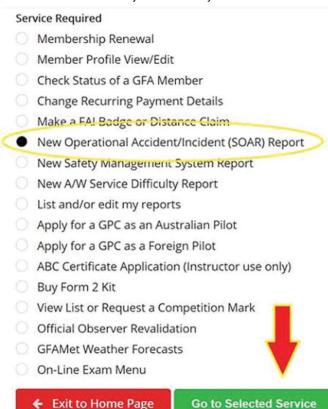
Think about it - gliding is a high-risk pursuit. As a worker in the maintenance hangar, at the flight line, driving a winch or as a pilot in the cockpit, all of us do the very best we can to fulfill our role.

HOWEVER, WE DON'T ALWAYS SUCCEED

Why? This is what the GFA safety investigation helps us to find out.

Contrary to a legal investigation initiated by the Police or Regulator, the purpose of a Safety investigation is NOT to find the guilty person, but to understand why it made sense to you and to learn from your view so as to make the system safer.

What exactly do we mean by that?



Lesson 1: Don't put the blame on individuals. Instead, ask questions to understand.

If people get blamed for their mistakes, the only thing one achieves is that people will keep their knowledge about mistakes, safety gaps or dangerous situations to themselves. Ask 'why?' like a mantra to get deeper and deeper to the cause, to put yourself into that person's shoes and to understand why the event happened.

Lesson 2: Learn from experiences and make your job safer. Mistakes or incidents can be seen as free lessons. If we fail to learn from them, other colleagues will fall into the same traps because the holes or safety gaps are still there. Please support your club's safety efforts and report whenever you experience an event that you think offers an opportunity to learn

And remember: the goal of a Safety Investigation is never to stop people from flying! The goal is to enable operations to take place with an improved margin of safety and to make safe all the available assets we have - to make you safe!

ACCIDENT AND INCIDENT REPORTS

In keeping with the philosophy of learning from the experiences of others, GFA makes available an annual report of all operational accidents and incidents in the Documents Library. These reports provide a statistical summary of all accidents and incidents for each calendar year going back to 2011 when the GFA's SOAR database was first implemented. The document draws data from the database and provides a synopsis of each reported occurrence. These reports can be accessed at this link: tinyurl.com/y8mgeaxh

OPERATIONAL ACCIDENT AND INCIDENT REPORTING SYSTEM

Following member feedback, the online form used for reporting and amending Operational SOAR reports has been updated and is now more intuitive and easier to use. The reports are accessed in the usual way by logging into the My GFA - SOAR Rpts tab on the GFA website. After logging in, the reporter will be presented with various options (see the graphic below, left) and should select **New Operational Accident/Incident (SOAR) Report** to commence a report, or List and/or Edit my reports to view or edit reports that have not yet been submitted, before pressing the Go To Selected Service button. This will take them to the relevant input form.

Once you are presented with the form, please complete it to the best of your knowledge. You have the option of saving a report that is partially completed so that you can edit it later, but bear in mind reports should be submitted within 72 hours where it is not immediately reportable. Therefore, don't worry if information is not known or is currently unavailable prior to the deadline, as any further information, documents or files can be emailed to the Executive Manager Operations (emo@ glidingaustralia.org) once the report has been submitted. The important issue is to get the report in the system as soon as possible by selecting the **Send to GFA** button (see graphic opposite).

Attachments can be uploaded once the report is ready to send. Attachments should be limited to 4Mb per file. If you have larger attachments, please email the Executive Manager Operations (emo@glidingaustralia.org) who will share a folder in the Google Drive for you to upload to. If all else fails, you can email a report to the Executive Manager Operations, who will then enter it on the system for you.

FLIGHT RADIOTELEPHONE OPERATOR'S LOGBOOK ENDORSEMENT

An Operations Directive was recently issued to introduce structural changes to the GFA Flight Radiotelephone Operator's Logbook endorsement regime. Although the changes only apply to persons who were not already endorsed, several members have asked whether an RAAus endorsement is compliant.

The short answer is NO. The reason for this is because the current legislation only allows GFA members to hold either an

current legislation only allows GFA members to hold either an

our want to save this report without sending it for processing, select SAVE. You will be able to retrieve the report for further edding,

our want to submit the report to the GFA Operations Department and to your CFI, select SEND. If you Send, the report will also be sent to those organisations.

rise RAAss. * No : Yes:

ICAO flight crew licence, or Recreational Pilot Licence with a flight radio endorsement, a CASA Flight Radio Operator's Licence (almost phased out under CASR Part 61) or a GFA Flight Radiotelephone Operator's Logbook Endorsement. However, as the RAAus radio endorsement system is CASA approved, a person with an RAAus endorsement can convert it to a GFA logbook endorsement at the discretion of their CFI or delegate. CFIs or delegates must confirm the member holds an endorsement by reference to their online RAAus profile.

TOWING RELEASE MAINTENANCE - CASA MAINTAINED TOW PLANES

In December 2015 the Civil Aviation Order (CAO) 100.5 Amendment Instrument 2015 (No. 1) was made. The CAO contained requirements, in the form of directions, relating to the maintenance of Australian aircraft maintained under the Civil Aviation Regulations (CAR) 1988. The amendment added new classes of additional maintenance previously covered by

CHRISTOPHER THORPE

Executive Manager, Operations

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various Airworthiness Directives (ADs).

The ADs were amended so that they no longer apply to aircraft maintained under Part 4A of CAR 1988. Among the ADs incorporated (at Appendix 12) was AD/SUPP/8, relating to the maintenance of towing

release systems fitted to CASA maintained tow planes. GFA's review of the new CAO 100.5 Appendix 12 identified that the transcription of the requirements from AD/SUPP/8 was flawed. In early 2016, GFA advised CASA that the requirements for maintaining towing release systems in the then updated CAO 100.5 were not feasible to comply with, as the annual maintenance requirements now had to be completed daily, and it omitted to record that towing release mechanisms could be overhauled by a GFA approved Inspector.

CASA agreed that AD/Supp/8 would continue to be the definitive document for glider tow planes pending correction of CAO 100.5. This was confirmed when CASA approved the requirements to use AD/Supp/8 Amendment 1 in the GFA Aerotowing Manual when it was issued in 2017. It is pleasing to note that clause 12 (towing release systems) of CAO 100.5 was amended in November 2018 to reflect the earlier requirements in AD/Supp/8 Amdt 1. The Aerotowing Manual will be amended to reflect this recent change in due course.

Weather wise be prepared to change plan

Wow! That squall line is dead on track. What do you reckon?

Yeah, we could both be dead on track that way. Let's go round it.

accidents & incidents

All clubs and GFA members are urged to report all accidents and incidents promptly, as and when they occur, using the GFA's occurrence reporting portal at glidingaustralia.org/Log-In/log-in-soar.html. 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/ltmko56

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.

Damage						
	VSA	SAGA	NSWGA	WAGA	GQ	Total
Nil	4	5	2	2	3	16
Minor	1		4			5
Total	5	5	6	2	3	21

Injury						
	VSA	SAGA	NSWGA	WAGA	GQ	Total
Nil	5	5	6	2	3	21
Total	5	5	6	2	3	21

Phases						
	VSA	SAGA	NSWGA	WAGA	GQ	Total
In-Flight	1	3	1	1	2	8
Landing			3		1	4
Ops	1		1			2
Launch	3	1		1		5
Thermall		1	1			2
Total	5	5	6	2	3	21
Tunna of F						
Type of F						
Type of F		SAGA	NSWGA	WAGA	GQ	Total
Local		SAGA 4	NSWGA 4	WAGA 2	GQ	Total
	VSA 4				GQ	
Local	VSA 4 1	4	4		GQ	14
Local Ground O	VSA 4 1 Coach	4	4			14 2
Local Ground O Training/0	VSA 4 1 Coach	4	4 1			14 2 2
Local Ground O Training/(Competiti	VSA 4 1 Coach	4	4 1		1	14 2 2 1

Level 1						
	WAGA	VSA	SAGA	NSWGA	GQ	Total
Airspace				1		1
Operation	1	1	2		5	9
Technical					2	2
Total	1	1	2	1	7	12

5-AUG-2018 VSA AIRCRAFT SEPARATION NEAR COLLISION

PA-25- BEECH B200C

A tow plane on mid to late downwind took evasive action to avoid an Air Ambulance that had joined a midcrosswind for a left-hand circuit contrary to published procedures for the aerodrome. Contra circuits are employed at this Regional airport to separate the gliding operation from the power traffic. The tow pilot descended to maintain separation and informed the pilot of the Air Ambulance that they should be South of the airfield

as per published procedures. The Air Ambulance pilot responded that they were flying IFR. The Club CFI spoke with the Chief Pilot of the Air Ambulance operator and was advised that the pilot had been counselled and removed from their roster due to this and other flying issues.

9-AUG-2018 SAGA AIRSPACE INFRINGEMEN DISCUS B

During a 2½ hour local flight the pilot inadvertently breached Restricted Airspace to the east of the home aerodrome. The pilot advised that they had checked the NOTAMs before the flight and noted that the Military CTR and Restricted Airspace areas were active on the day of the flight (Thursday). The restricted airspace and military CTR are active during the week but are normally inactive or released to gliding on the weekends. The pilot believes that the incident occurred due to a lapse in attention while chasing thermals near the boundary, and because they were accustomed to flying in the area on weekends when the airspace was inactive/released. The pilot suggested:

- In future, I need to ensure my risk assessment with respect to airspace is thorough and that I have a clear understanding of the airspace as it applies on that day.
- Be aware that when I have been doing less recent flying, I need to be even more thorough about reviewing all risks, including airspace.
- Ensure wind direction, particularly, if strong is included as a risk factor with respect to boundary infringement. This was the pilot's second airspace infringement in five months. The pilot was counselled and was required to attend a briefing with the Duty Instructor before flight on each day, and to present flight traces to the CFI for review after each flight.

12-AUG-2018 NSWGA HARD LANDING PIK-20

On final approach at a height of about 150ft AGL, the experienced pilot noticed the windsock flick from a south-westerly direction to a southerly direction. The pilot then saw a with cloud of dust marking a thermal rotating directly in the glider's flight path. In the knowledge that the aircraft would fly into the thermal during the flare, the pilot anticipated the glider would balloon. However, just as the pilot transitioned to the flare, the glider was dumped heavily onto the ground. The glider rebounded, and

the pilot made a safe recovery and landing. The aircraft suffered only minor damage to one of the undercarriage doors.

18-AUG-2018 NSWGA GROUND HANDLING GROB G 103

The glider was being towed back to the hangar at the end of the day by the trainee pilot with a quad bike using a tow bar and wing walker. The glider's right wing hit a tap standpipe, damaging the right aileron. The supervising instructor stated they should have more attentive. When taxying gliders, drivers need to pay particular attention to obstacle clearance, remain situationally aware and take things slowly.

19-AUG-2018 WAGA NEAR COLLISION PA-25-235 A/C MODEL 2 CESSNA

After the glider pilot released from aerotow at 4,500ft, the tow pilot initiated a sideslip manoeuvre away from the glider to quickly lose height while watching the glider. When the tow pilot eventually looked in the direction the tow plane was travelling, they noticed a Cessna aircraft approaching head-on at the same level (~4,000ft). The tow pilot took immediate evasive action by climbing abruptly and the Cessna passed 100ft below. The tow pilot did not recall hearing any calls from the Cessna pilot, and it is believed the Cessna pilot may not have seen the tow plane as it was flying into the sun.

The tow pilot is responsible for collision avoidance if they are initiating a high rate of descent. In this case the Cessna pilot would have had little opportunity to see and avoid an aircraft rapidly descending sideways from above. Such a manoeuvre also demands the tow pilot clear the airspace they are flying into, and not be looking elsewhere. Sections 8.4 and 8.5 of the GFA aerotowing manual require tow pilots to ensure airspace below the tow aircraft is clear to commence descent, and to then select a descent pattern appropriate to the topography, airfield circuit requirements, wind velocity, sun and other traffic. Long continuous sideslipping in a low winged tow plane should be avoided, since the forward wing blocks the view of anything below and ahead. The tow pilot was counselled.

19-AUG-2018 WAGA NEAR COLLISIONPA-25-235/A6 - H 36 DIMONA

A tow plane and glider combination was departing from RWY 10 at the same time as a motor glider departed from RWY 36. At a height of about 300ft AGL the tow pilot saw the motor glider converging from his 2 o'clock position, and immediately turned left to create separation and to show a larger profile to the motor glider pilot. The pilot of the motor glider also turned left and flew behind the towing combination. Neither pilot in the glider under tow saw the conflict as their attention was towards the tow plane and direction of turn. Neither command pilots heard any radio calls. Investigation identified



the following causal factors:

- Due to the topography of the airfield it is not possible for aircraft preparing to take-off from runway 10 to have visual contact with aircraft operating off runway 18/36 due to the presence of rising ground between the two runways (refer diagram). Visibility is not achieved until one or both aircraft are airborne above 100' AGL.
- This topography also impeded radio reception, as VHF works on line of sight propagation. Radio waves in the VHF band propagate mainly by line-of-sight and ground-bounce paths. They do not follow the contour of the Earth as ground waves and so are blocked by hills and mountains. The club is investigating ways to improve VHF radio signal propagation by experimenting with a passive repeater system and if that is not successful, other methods for signal improvement between the unsighted parts of the airfield. In the meantime, the club published some guidance for its members in its monthly newsletter.

22-AUG-2018 SAGA AIRSPACE INFRINGEMENT CLUB ASTIR

The pilot reported that the glider drifted 300 metres into restricted airspace while thermalling close to a known airspace boundary due to inattention. The pilot was unaware of the breach until after the flight when they were reviewing the flight logger trace and self-reported. The pilot will undergo some remedial training in airspace procedures.

22-SEP-2018 SAGA MISCELLANEOUS ASK-21

Following an aerobatic routine during an ab-initio instructional flight, the glider recovered below the minimum 1,000ft above terrain. The command pilot was counselled by their CFI. GFA Operational Regulation 6.4 states: "A sailplane shall not be flown in aerobatic manoeuvres without the prior written approval of CASA when it is: (a) Below 2,000 feet above the level of a certified or registered aerodrome within two nautical miles of that aerodrome; or (b) More than 2 nautical miles from a certified or registered aerodrome and below 1,000 feet above the highest terrain or obstacle within a 600 metre radius of the sailplane (Exemption CAR 155 (3)(a)).

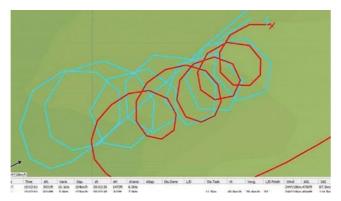
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22-SEP-2018 PREPARATION/NAVIGATION **TWIN ASTIR**

During an instructional flight, the instructor, who had earned their rating less than 12 months prior. became focussed on remedying the student's lack of speed control. This continued into the circuit and the instructor did not complete the pre-landing checks. As a consequence, the instructor did not recognise the undercarriage was not lowered. While on final approach and about 300 metres from the aerodrome boundary, the command pilot heard a broadcast from the base station alerting to the undercarriage being retracted. The command pilot lowered the undercarriage and a safe landing ensued. Instructors, especially newly qualified ones, often become preoccupied with explaining aeronautical concepts or monitoring or guiding the performance of their students. This can lead to distraction or task fixation. When time is limited, such as in the circuit, instructors must remain situationally aware and not persist with exercises where the student is clearly not coping. Awareness of falling into the fixation trap is the number one key to breaking the accident chain. Above all else, all pilots must never forget the golden rule of aviation - first and foremost, fly the aircraft. NOTE: Over the years there have been many accidents, including fatal, caused by the pilot changing hands to lower the undercarriage at low height. On the other hand, most gliders only suffer minor scratches from a well-conducted 'wheel-up:' landing. Ground crew should consider this before alerting a pilot on final approach to a retracted undercarriage

29-SEP-2018 NSWGA **NEAR COLLISION** JS1 B A/C - ASW 27

Two gliders got close in a thermal while competing in a Club cross-country regatta. Approximately 13kms south of the start point, the pilot of a ballasted JS1 entered a thermal at a height of 4,900ft and commenced a right-hand turn. About 6 to 8 other gliders entered the thermal shortly thereafter. After completing two turns in the thermal the pilot of the JS1 saw the unballasted ASW 27 join about 400ft lower. The ASW 27 maintained a roughly concentric circle with the JS1 and was, for most of the time, turning below and slightly behind it. Being unballasted, the ASW 27 was turning a tighter radius and gaining height on the JS1. The other gliders in the same thermal were mostly either below or on opposite sides of the thermal to the JS1. After three or four turns the IS1 pilot became somewhat anxious about the proximity of the ASW 27, which was now only slightly below and just behind, and inside the IS1's turn radius. The pilot of the IS1 noted: "I didn't voice that concern on the radio and continued turning. I have flown many tight gaggles in competition and felt there was no problem. I just had to monitor proximity and maintain separation." The ASW 27 pilot was turning a tighter circle than the JS1 and gradually drew ahead, turning below and inside and continuing to gain height on the JS1. After



about four turns the ASW 27 was slightly ahead, turning inside the IS1, whose pilot was suddenly confronted with the left-hand upper wing climbing up in front of the JS1. Fearing a collision, the JS1 pilot applied full aileron deflection away from the other glider and rolled away, narrowly avoiding contact. The pilot of the IS1 left the thermal and continued task. Post flight analysis suggests the two gliders got within 10 metres of each other. The pilot of the ASW 27 advised that they don't recall seeing the IS1 after entering the thermal. The traces show the two gliders were flying concentric (i.e they both shared the same centre), which indicates they may have been following another glider. The difference in climb rates was mainly due to the smaller radius of turn of the unballasted ASW 27, which put it closer to the core.

As with most near miss events and mid-air collisions, at least one pilot should have seen the other. In this case the pilot of the ASW 27 did not see the JS1, possibly due to blind arc limitations and possibly because they were focussing on another glider that they perceived as a potential threat. On the other hand, the JS1 pilot had the other glider sighted for most of the time but elected to persist with the climb even when they became concerned about the potential risk of a collision. It is not uncommon for pilots who are accustomed to flying regularly in close proximity with other gliders to become inured to the risk, and place too much faith in both their own abilities and that of other pilots. Pilots who think this might apply to them should look at raising their personal minima to avoid such close encounters.

1-OCT-2018 NSWGA WHEELS UP LANDING **DG-300 ELAN**

The low hours pilot reported that they broke off the flight at around 1.500ft AGL and headed for the circuit joining area for a landing on RWY 27. Just after the glider entered the circuit at around 1.000ft AGL the pilot heard the pilot of the Club's tow plane make a radio call advising they were landing on RWY 09. The glider pilot assessed the best option was to land on RWY 33, which was currently occupied by a glider that had just landed but was about to be moved clear. While reassessing the options, the glider continued to lose height and the pilot was starting to feel a little stressed. This led to the pre-landing check being rushed and the pilot

did not lower the undercarriage. The aircraft landed safely but suffered some minor scratches to the fuselage. The pilot had only 7 flights in a retractable undercarriage glider and noted: "It appears that as a result of flying almost exclusively in fixed wheel aircraft the F and the U have become associated in my mind with no action, and the result of rushing the check was to revert to an automatic box ticking exercise, in which I repeated 'undercarriage' without putting the wheel down (although speed and trim were set).

Following this I did not realise the wheel was not down until I contacted the ground."

This incident highlights the importance of configuring the aircraft for landing as soon as the decision to break-off the flight is made (i.e during the transition from 'soaring pilot' to 'landing pilot'). Since landing mishaps usually occur due to poor workload management, it is important to get some of the tasks out of the way early and prepare for landing by:

- Making sure the straps are tight.
- In gliders so equipped, dumping any water ballast, lowering the undercarriage, setting the flaps, and trimming to an appropriate speed for the downwind lea.
- Making sure the radio is on the correct frequency, that volume and squelch are correctly set, and that the microphone is positioned for best performance. This is covered in more detail in Operational.

21-OCT-2018 VSA **NEAR COLLISION TWIN ASTIR - CESSNA**

The glider was returning to the circuit joining area following a training sortie when an audible FLARM warning alerted the command pilot to a potential hazard in front and to the left. The command pilot initiated a scan for the other aircraft and saw a towing combination on a converging heading that had been obscured from view by the student pilot's head. The command pilot took avoiding action by turning to the right and away from the threat. The tow pilot sighted the glider approaching high and to their left but did not need to take avoiding action as the glider changed heading away from the towing combination. The tow pilot reported that they did not hear any radio calls from the glider, and the glider did not show on the Flarm fitted to the tow plane. Investigation revealed the FLARM firmware in both aircraft had recently expired and so the units were not working optimally. This incident highlights the importance of good Lookout and working Flarm to facilitate alerted see-and-avoid. FLARM devices must be updated with the latest firmware version at least every 12 months to avoid firmware expiration, and to ensure interoperability with all other FLARM devices. Registered Operators should ensure a record of the update is entered into the applicable maintenance documentation for the aircraft.

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865 hours with 385 landings. Excellent condition. Vario, Flarm. Tow out gear. Good trailer. 50% share - syndicate located at DDSC \$10,000 Contact Steve - 0418 569 009



VH-GJT PILATUS B4PCLL.

VGC,2885 hours 2338 launches,40 year survey and repainted 8/14 form 2 29/12/19. Tow gear, new tyres, basic radio electric/mechanical vario/Gmeter. Registered enclosed trailer (will sell without). New tyres, needs some modification/repairs (ongoing project) \$17,500. Will trade for 2 seater . Contact Bundaberg Gliding on 0417 071 157



VH-XOK LS4A

Manufactured 1981, new canopy Nov1996, 3000 hour survey conducted at 2926 hours, tops of wings refinished Oct2001, fuselage/ tailplane refinished Jul2002, new instruments fitted Aug2012 (LX8000 and LX V5 electric Vario, Xcom Dual-Watch radio), currently 5801 hours/2288 launches, Komet aluminium/fibreglass lockable clamshell trailer, "fresh" Annual inspection. PRICE negotiable. Contact Waikerie Gliding Club on 0417 868 213



VH-XOZ

Nimbus 3DM and cobra trailer for sale. Currently based at Lake Keepit NSW Australia. I can do endorsement or conversion training if required, it is a 1991 model I have many spares and full maintenance records and manuals. Recent panel upgrade to LX9000 with v8 vario and power flarm. I have many more pics that I can email or view glider at Lake Keepit Soaring Club. All offers considered. Contact Stephen Hedley Mob 0412 378 758.



VH-GTT

Nimbus 2 - 20.5mt wingspan Hangar share - for Sale separately. Glider- Microair radio - Tow out gear, rigging gear, trailer, and parachute. Form two until September 2019. Gel coat finish, 2 GPS, Basic instruments. L/D 48:1-Total Hours 3560. HANGAR SHARE - Benalla, no gliders to move. PRICE - Glider \$22,000 HANGAR SHARE -- \$12,000. Total package \$28,000. Contact Ron Grant Mob 0412 514 151 ron@rgaccess.com



VH-IIC ASW20 4,500 hours with 1264 landings. Clearnav



2, Vario , Flarm, Xcom Radio. Fresh Form 2. Tow out gear. Good trailer. Comp Ready. \$55,000 Contact Peter on 0403 310 174

VH-UKB ASW24e

Self launcher excellent condition poly finish. Full instrumentation, tow out gear, alloy Cobra trailer with new poly finish New prop with old prop as spare, 21 hrs on motor. 1780 hrs on airframe. \$75,000.



Contact: Hank 0427 427 448 **VH WUP**

LS3a half share for sale, with number 1 hangar spot at Benalla, good trailer and form 2 'til October. Lovely aircraft with sweet handling. \$23,000 Contact Randall Mathews Mob 0407 789 746



VH-PII

A great performing and handling glider. Renowned in Europe as a great club glider with no vices. Climbs well in strong lift and one of the best gliders in weaker thermals too. 40/1 glide, 120 Litre ballast bags (new), spacious ASW style cockpit. Very flexible wings provide excellent handling and feedback. This glider has a number of features that make it not only a joy to fly but to ground handle too:Instruments lift with canopy, wingtip wheels, tail wheel (not skid), strong undercarriage with positive locking. Reliable instruments including Vertica V2 running XCSoar. The Pegase is handicapped just behind the LS4 but this one will cost you less than 1/2 the price (without the \$500



per year manufacturers charges). Comes with fresh form 2, all tow out gear & tube trailer. Price Reduced! A bargain at \$16,000! Contact Greg on 0400 438 038

Two K7s for sale VH-GSJ and VH-GQQ

Both past 50 years but worthy projects. Some spares and instruments and registered trailers as well as digitised plans for the complete aircraft. VH-GSI is certainly worthwhile with wings and fuselage in good condition (all joints appear sound). Both aircraft always hangered dry on concrete floors and trailers inside as well. All offers considered. Contact Bob Wylie stafflyt@tpg.com.au or 0437 041 709. South Gippsland Gliding Club, Leongatha

MOTOR GLIDERS AND TUGS

VH-VLO

Ximango AMT-200 Motorglider, considered one of the best for touring, glide ratio 30:1, reliable and factory supported Rotax 4 stroke engine, 1 person 1 minute folding wings refinished in PU, standard instruments plus transponder and colour Garmin 296 GPS, only 550 hours, \$79,000 ono. **Phone Ian 0418 691 313**



VH- KPT FALKE SF25B

3300HR New Engine, Fresh Form 2, Excellent Condition. Contact Jon Joubert Mob 0418 599 860



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 allweather covers and wing and tail ballast tanks all fully operational. Also comes with 24.5m and 22.9m wingtips and various spares.

continued over page

CLASSIFIEDS

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



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KOMET EUROLIGHT TRAILER FOR ASG 29 18M

Purchased August 2008. Double walled aluminium sides, fiberglass/ Epoxy top. Lateral guides for wing dollies and outer wing panel holders modified to Cobra style. Stored mainly undercover and used infrequently. Selling due to an opportunity to change to a different trailer. \$17,000 Contact Craig Vinall 0416 236 662







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