GLIDING AUSTRALIA

Issue 55 March - May 2021 magazine.glidingaustralia.org

LAKE KEEPIT REGATTA
TWO SEAT NATIONALS
F1GP

TEMORA - RECORDS - THERMAL STRUCTURE - VINTAGE

GLIDING AUSTRALIA MAGAZINE

No. 55 March - May 2021

COVER: DAVID FAGAN IN A DUO DISCUS T AT NSW STATE CHAMPIONSHIPS LAKE KEEPIT BY VAL PHILLIPS

WELCOME TO GA 55

The summer soaring season was successful with mixed weather. There were many comps and camps, coaching courses and new records set.

This is the fourth issue of GA in the new formats. As long as you have an internet connection on your device of choice, you can read GA wherever and whenever you like. Go to magazine.glidingaustralia.org.

You can also download a PDF version of GA from magazine.glidingaustralia.org/past-issues.

You can order a very special DIGITAL PRINT copy of the magazine as well. Each magazine will be ordered and printed just for you, so it will be a limited edition – rare and collectable. Order your very own copy here bit.ly/2TUkFs5

I would love to hear what you think about the new formats and the magazine in general so please contact me any time. Or you can leave me a message on the website at bit.ly/2McMqYu

I hope you enjoy this edition of Gliding Australia Magazine.

Sean Young

Sean Young
Editor
sean@glidingaustralia.org

Adriene Hurst
Deputy Editor
adriene@glidingaustralia.org

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www.store.glidingaustralia.org

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

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

Tel: 03 9359 1613 Fax: 03 9359 9865
C4/ 1-13 The Gateway
Broadmeadows VIC 3047

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FROM THE PRESIDENT

In my part of the world, South Australia, it has been a very strange summer for gliding. We've had some big days, but they've been few and far between. The weather patterns have been far from normal with long periods of cool, dry conditions. It's interesting that in other parts of the country, pilots are setting records and I congratulate them for their achievements.

We are approaching the later section of the soaring season, so I encourage you all to get out and make the most of it. Although autumn usually doesn't support the big flights, it is a lovely time of year to fly. For students and those new to cross country, the conditions can be very reliable and pleasant.

MEMBER IT SUPPORT

Of late there has been quite a bit of comment about Gliding Australia's IT system and how it interfaces with our members. I acknowledge that it has some 'clunky' aspects and the GoMembership system needs improvement. But, although we are a relatively small organisation, our business is complex and the fixes are not simple. A few months ago, the Board agreed to embark on an investigation to define where the gaps are and how we might do better. Richard Frawley is leading this program and regularly reports on progress. To repeat, this is not an easy process, it is complex and it is time consuming, but we are making progress and over time you will see improvements.

CLASS E AIRSPACE

No doubt you have all read or have heard about Airservices Australia's proposal to lower Class E airspace to 1,500 ft AGL for much of Australia's eastern and south-eastern seaboard. It is Gliding Australia's view, and that of the other Australian aviation sporting organisations, that the proposal is totally unworkable and there has been no safety case established to support the proposal.

We believe the introduction of the proposal, in its current form, would result in significantly decreased safety outcomes and huge a cost impost for all but a few airspace users. Gliding Australia has responded to Airservices Australia, putting our case against the proposal and has written to the responsible minister, the Deputy Prime Minister Michael McCormack. It is unconceivable that the proposal in its current form will ever be implemented. We have a team of very experienced and knowledgeable people, including Graham Brown and Drew McKinnie, looking after our interests in this area.

INTEGRATED TRAINING PROGRAM

At the GFA's recent Board meeting, our Integrated Training Program (ITP) sub-committee made a presentation to the Board outlining the details of the new ITP. You might ask, what is the ITP all about?

Over many decades we have developed our student pilot training program that has very successfully trained glider pilots to be safe and skilled, but we have lacked a cohesive approach to developing the pilot skills that enable them to transition to confident, capable cross-country pilots. A few years ago, the Glider Pilot Certificate (GPC) was introduced. For a glider pilot to be certified to that standard, they had to demonstrate, among other things, that they were competent to undertake effective and safe cross-country flying.

It is said that there isn't much new in the world and so it is with the ITP – its purpose it to pull all of these factors together into a single, fully integrated training package that will take a student pilot from their first flight to being a competent cross-country pilot. The program will be based on 44 elements of competency, and students and trainers alike will know exactly where they are within the program. The ITP is going through its final stages of development and, following some initial trial work, will be rolled out throughout our gliding community later this year. This really is a very exciting program.

COVID

It would be difficult to write any sort of a report these days without a reference to COVID. Like every organisation, the Australian gliding community has been heavily impacted, with the severity dependant on your geographical location. Many clubs are now reporting that they have demand that they are finding difficulty in keeping up with. That is great news, so long as we can meet the demand and I guess it's up to all of us, as volunteers, to offer our support. The imminent, community wide release of COVID vaccines is a very welcome development, but in the meantime we must not be complacent and must keep our guard.

Be kind to each other, fly heaps and keep it safe.

STEVE PEGLER
PRESIDENT
President@glidingaustralia.org

FROM THE EO

We effectively have a new GFA Board, with all but one Regional Board member having changed at the AGM in October. The Board sets the policy and direction for the GFA.

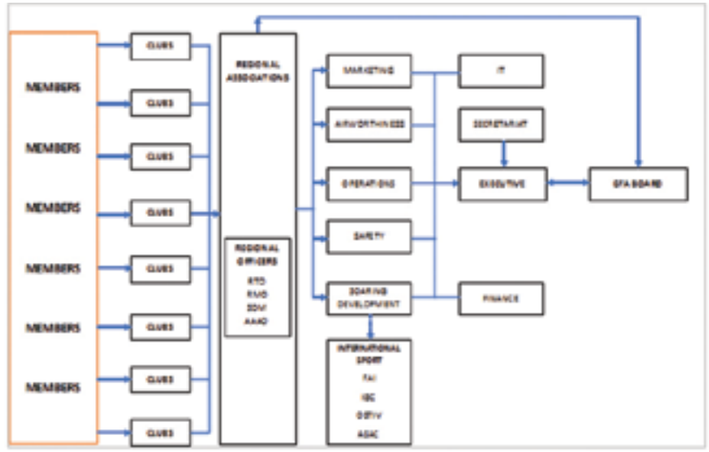
The GFA Executive has not changed much in the past few years. It comprises the heads of the GFA departments plus the President and two Vice Presidents. The Executive is responsible for implementing the policies set by the Board.

If you open www.glidingaustralia.org and scroll to the bottom of the page, you can click on 'Contacts' where you will see the list of all GFA and Regional Officers. If you want to find their contact details (eMail/Phone) you need to look in Go Membership and click on the Green 'Reports' tile, then Customer Reports/ Membership reports.

MOSP 1

The Manual of Standard Procedures (MoSP) has 4 sections, with MoSP1 detailing our Administrative Procedures. The Board has recently updated MoSP 1 and you can find it on the GFA web page under Member Area/Documents. It details roles and responsibilities of GFA officers, and provides details of GFA membership, Regional Associations and Clubs.

We expect that our move to Part 149 with CASA will require further changes to MoSP1 and the other parts of MoSP, so we anticipate a further update later in 2021.



ABOVE: Simplified GFA Administrative Structure

BOARD/EXECUTIVE MEETINGS

The Board and Executive have not met face to face since April 2020, but have been planning a meeting in Melbourne at the end of March. With the recent lockdown and subsequent border issues, however, we have once again decided to delay a face to face meeting until later in the year. The Board has had many meetings via Zoom and these are working very well, and are certainly reducing meeting costs significantly. They also allow Board members to meet more regularly to work through specific topics.

RECENT TOPICS

GFA Strategic Plan. The Board requested support from John Blackburn AO, a GFA member from Canberra and Benalla. John has a depth of experience with regards to strategic plans and has provided advice to the Board. The Board met at the end of February and will meet again at the end of March to update and re-set its Strategic Plan. This will be promoted to members at that time.

GFA Membership. Membership is a core focus for the board. Membership has been reducing progressively over the past 15 years and because we gave members 6 months free membership in mid-2020 we won't know the impact of Covid restrictions on our membership until the end of March. Different states have been impacted dependant on the amount of infection, so Victoria is by far the most affected, but we have seen some slowdown in most states. The good news is that many clubs reported lots of flying from November to January.

We are now providing a report to clubs to flag members who have not renewed their membership by the end of the month. If you don't renew on time you still have access to Go Membership, but you are not able to fly as pilot in command or receive instruction. We are suggesting to clubs that they contact members who have not renewed to advise them of this, as often it is just a mistake, but we don't want the member or the club impacted by an inadvertent failure to renew.

A member who does not renew their membership within two months of it falling due will be able to renew later, but their ratings and credentials will lapse and will need to be applied for again once they are a financial member. This can be avoided by selecting a different membership category, such as non-Flying Associate which lets you retain your ratings. There are also a number of payment options available.

GFA OFFICE

The GFA staff have been working from home since April 2020. The staff have coped with this very well, and have continued to support members with enthusiasm. We have been hoping that they can come back to the office soon, but this was stalled with the recent lockdown in Victoria. We are now hoping that staff can return to the office in late March, but obviously we have no control over that. We will take the opportunity to update the office environment and facility during this time.

COMPETITION SCHEDULE

Our competition season has been significantly reduced. While regional events are taking place, restrictions on interstate travel has meant most national events could not proceed. The Two-seat Nationals went ahead at Narromine in February but with only a small list of competitors. The combined Club and Multi-class Nationals will be held at Darling Downs in March, again with quite a small list of competitors, but it is good to see an event made available.

Our world teams are still planning to attend the delayed World Championship in Germany and France, although a few pilots have decided not to attend. The issues are the high airfare costs, the possibility of costly quarantine on return, and the possibility that flights may not be available to return back to Australia. The competition organisers are making positive comments but this appears dependent on successful vaccination programs.

INTEGRITY COURSES AND CREDENTIALS

The Governance and Integrity committee of the GFA Board have been reviewing and updating our policies in relation to Complaints Handling, Harassment and Discrimination, Child Protection, and Ethical decision making. The Victorian Government has produced a Play by the Rules program aimed at sporting clubs which covers these topics and others.

GFA Board members have been completing short online training courses on these topics and are encouraging Club Committee and Club members to participate in these programs where they apply to your club. If you complete some of the training, you can apply for a Credential using the certificate of completion as evidence. You can see the full list and the links to the training courses in the Document library on the GFA webpage [Member area/Documents/ AA Integrity].

TERRY CUBLEY AM
EXECUTIVE OFFICER
eo@glidingaustralia.org

☛ continued over page

PART 149

The GFA Board has agreed to apply to become a Part 149 Approved Self Administering Organisation (ASAO) under the Civil Aviation Safety Regulations. This will mean that GFA would share responsibility with CASA for managing our compliance with the Regulations. We have until the end of 2021 to have our application approved if we are to avoid having to pay significant CASA costs.

The Board has contracted Peter John to develop our Exposition/Application and he is well on his way to having a draft completed for Board review.

INTEGRATED TRAINING PROGRAM

The Operations Department and Soaring Development Panel have been working together on a significant update to GFA training resources with an initial focus on the GPC syllabus and training package. This will provide much more guidance on the training sequence and standards, with improved resources for use by Trainers (Instructors and Coaches) and for student pilots. It will also provide theory courses to support the training.

The updated manuals and logbook and courses will be made available to trainers at the end of March in order to seek feedback, and will then be trialled at a few clubs over the next six months before becoming the new standard. *GA*

S2F

DEVELOPMENT - UNUSUAL ATTITUDES AND SPIN TRAINING

This article is the first in a new series that aims to share initiatives that have been trialled and proven to be successful in driving club development.

Our data from new joining members tells us that around a third of them come from other forms of aviation and, therefore, it makes sense to target this group. This approach has been used successfully at several clubs around Australia. Some have advertised to RAAus training clubs, or power flying schools, for example, and in all cases courses have led to new members.

At our club, we have found that six pilots with two instructors made a reasonable group, although air sickness in instructors is something to watch for with repeated flights.

Please see the flyer below, which may be sent to flying clubs to advertise your services.

A morning lecture with a light lunch followed by a couple of flights is a format that has proven to work well. The associated Power Point slides to accompany the training will be published shortly.

OFFICIAL OBSERVING 2021

Everything you ever wanted to know about Official Observers but were scared to ask.

FAQ 1 – How do I become an Official Observer?

The first thing you must do is download and read two reference documents -

1. The Sporting Code Section 3 – this document is produced by the International Gliding Commission (IGC). It's normally updated in October each year, although the current version was updated in January this year.
2. Annex C – this is a plain English explanation of the sporting code and contains a lot of interpretation and clarification to make the code easier to understand.

The documents can be downloaded from the IGC Documents section of the FAI Website.

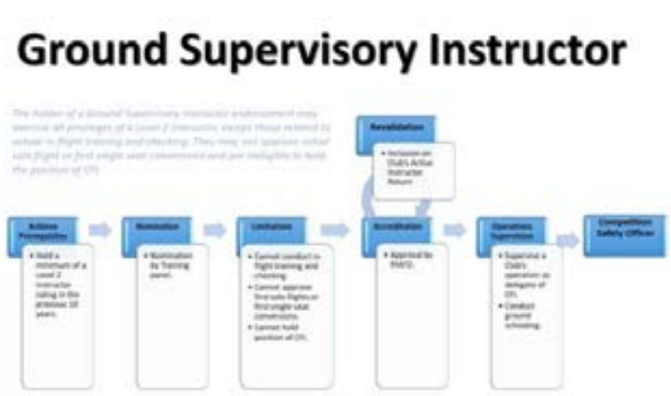
https://www.fai.org/igc-documents

Once you've done this you should go to this link https://bit.ly/2ZX7oBD and work through some worked examples which are similar to the Official Observer test.

Once you feel confident that you have a good understanding of the code, you may use this link https://bit.ly/2ObySRe and take the test.

This test will offer you 10 questions, drawn from a bank of questions.

The pass mark is high, but remember that if you get a question wrong, you do get a second chance to have another go for each question and if you fail the test, you can sit it again as many times as you like. It is also an open book exam, and it's all about education.



Once you successfully pass the test you will be emailed a certificate, which you should download and then upload to your profile on GoMembership. Next, create an Official Observer credential.

1. Log in to GoMembership
2. Click My Profile
3. Click Credentials
4. Click Add Credentials
5. Select Official Observer Badge/ Aus Record exam from the drop down list
6. Click Next
7. Enter Online exam as Authority
8. Enter date of exam as Start Date
9. Expiry date will fill automatically
10. Leave Issuing Officer MID blank
11. Click Next
12. Attach the certificate
13. Finish

FAQ 2 – I used to be an Official Observer. Is my status still valid?

There are two ways to find out if you are recorded in the GoMembership system as an Official Observer

The first way is to download the Official Observer report.

1. Log into GoMembership
2. Click Menu
3. Click Reports
4. Click Customer Reports tab
5. Click GFA Members Reports
6. Download the Official Observers report

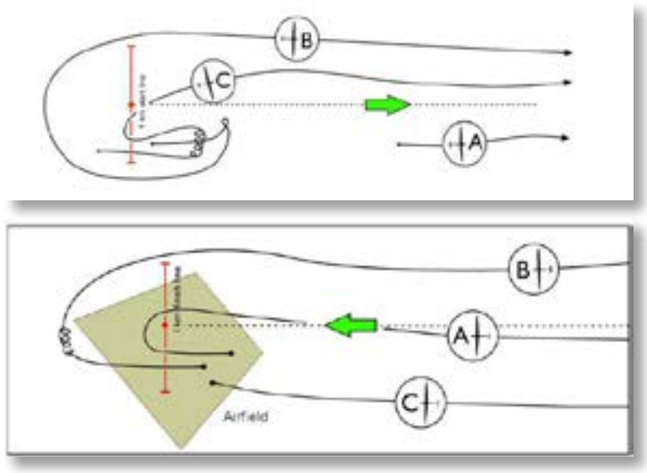
You can now check if your name is on the list.

That's easy. You just download the Official Observer report from GoMembership and check the list.

1. Log into GoMembership
2. Click Menu
3. Click Reports
4. Click Customer Reports tab
5. Click GFA Members Reports
6. Download the Official Observers report

FAQ 5 – How do I revalidate my rating?

GoMembership will send an email reminder one month before your rating expires with a link to three questions. If you answer these correctly, you will be sent a certificate to use to create a new credential in your profile. Follow the steps in **FAQ 1**. If for some reason you don't manage to revalidate before the old credential expires simply take the full Official Observer test with 10 questions.



Alternatively, you can go to your own profile and look at your credentials.

1. Log into GoMembership
2. Click My Profile
3. Click Credentials
4. Select 'Active'

Check the list to see if an Official Observer Credential is listed.

FAQ 3 – I thought I was an Official Observer, but I can't find any details using **FAQ 2**.

In this case, the easiest solution is to simply sit the test again. If you're a current OO and familiar with the documents you should have no trouble in passing the test.

Then simply follow the instructions in FAQ 1 to upload the new credential and all is good.

FAQ 4 – How do I find an Official Observer at my club?

PATHWAYS

The member surveys we have conducted ask for clarity on the pathway to achieve a particular rating.

A new document is now published here https://bit.ly/37ULkvY to address this. It contains pages to show how each rating is achieved.

The document at the top of this page is one example of many.

MANDY TEMPLE
CHAIR S2F
s2f@glidingaustralia.org

GFA investing in clubs

AWPA – AUSTRALIAN WOMEN PILOTS' ASSOCIATION
SCHOLARSHIP AND AWARDS

This one is for you lady glider pilots out there.

The APWA offers a number of scholarships to learn how to fly and improve flying skills, for female fixed wing power pilots, as well as helicopter pilots and glider pilots of any age and experience level. Please check the website for more details: https://awpa.org.au/scholarships-awards/

Among all the different types is one gliding-specific scholarship called the Soaring Scholarship. With a value of $500, it assists a female glider pilot holding a Silver C badge to improve her cross country gliding skills. Scholarship funds can be used, but are not limited, to assist a female sailplane pilot with towing charges, glider hire and outlanding retrieval costs. Applicants must be permanent residents of Australia, and hold a silver C badge, a current GFA membership and up to date medical credentials. Applications are still open - the deadline is 18 March.

There is also the AWPA Gliding Award, comprising a perpetual trophy and memento Albatros. This award is made for the most meritorious gliding flight carried out by a female glider pilot during the previous year, or for an outstanding contribution to the advancement of gliding in Australia. Membership of AWPA is not a requirement. The deadline for the nomination is 18 March.

The 2020 award went to Jo Davis who was leading the 2020 Woman World Gliding Championship until the last day, finishing 4th overall. This is the best performance by an Australian woman ever at a Women's World Gliding Championship.

"Flying has always been a passion of mine. More weekends than not are spent at my club at DDSC. While I've been flying for many years now, there's still a thrill when the main wheel leaves the ground. The thing that's kept me coming back, though, is cross country flying and competitions. There's really just nothing like pinning the ears back and flying absolutely as fast as you can. Trying to outrun people in the sky is straight out fun and competitions generally are a great excuse to hang out with some exceptional people."

Jo Davis

Please have a look at all the AWPA scholarships and feel free to apply for the Soaring Scholarship or nominate someone for the Gliding Award. We are working hard at the AWPA to raise funds to offer these scholarship and love to help ladies improve their flying skills and recognise lady pilots' achievements, so please apply and nominate.

The award and scholarship will be presented at our upcoming AWPA conference in Broken Hill, 21 to 25 April. Learn more about our conference here https://awpa.org.au/conference-agm/. Glider pilots are very welcome – there will be a few of us there!

FAI GLIDING BADGES
1 DECEMBER 2020 28 FEBRUARY 2021

BERYL HARTLEY
FAI CERTIFICATES OFFICER
faicertificates@glidingaustralia.org

A CERTIFICATE

GEORGE CHAPMAN	HUNTER VALLEY GC
HARBANS MANN	SOUTH GIPPSLAND GC
HAYDEN BORCHARD	ADELAIDE SOARING CLUB
ADAM MECHLER	GEELONG GC
RUSSELL GRUNDY	KINGAROY SSC
LEONARD WEBER	BATHURST SC
JACKSON TENHAVE	TEMORA GC
AIDAN CORREA	DARLING DOWNS SC.
FINLAY BUNT	ADELAIDE SC
RODNEY BIRCHALL	BATHURST SC
PATRICK HUMPHRIES	SC OF TASMANIA

B CERTIFICATE

JOHN GALL	GC OF VICTORIA
GEORGE CHAPMAN	HUNTER VALLEY GC
HARBANS MANN	SOUTH GIPPSLAND GC
HAYDEN BORCHARD	ADELAIDE SC
LEONARD WEBER	BATHURST SC
MANIKANDAN JAYARATNAM	ADELAIDE SC
BERNARD LE RICHE	SOUTHERN CROSS GC
NOAH TANZEN	GC OF VICTORIA
RYAN LUK	ADELAIDE UNI GC
FINLAY BUNT	ADELAIDE SC
PATRICK HERLIHY	SOUTHERN CROSS GC
JESSE VERSTEEGEN	BATHURST SC
RODNEY BIRCHALL	BATHURST SC
PATRICK HUMPHRIES	SC OF TASMANIA INC

C CERTIFICATE

PHILIPPE FREIDEL	ALICE SPRINGS GC
JOHN GALL	GC OF VICTORIA
LUKE MORRIS	BATHURST FLIGHT (BTH FLT)
ZACHARY MCPHERSON	RAAF RICHMOND GC
GEORGE CHAPMAN	HUNTER VALLEY GC
HAYDEN BORCHARD	ADELAIDE SC
ANTHONY HALLTHE	CENTRAL QUEENSLAND GC
RUSSELL GRUNDY	KINGAROY SC
MANIKANDAN JAYARATNAM	ADELAIDE SC
ANDREW PLUMPTON	SOUTHERN CROSS GC
BERNARD LE RICHE	SOUTHERN CROSS GC
SAMUEL MCKAY	ALICE SPRINGS GC
SALLY CRAWCOUR	GC OF WESTERN AUSTRALIA
NOAH TANZEN	GC OF VICTORIA
FINLAY BUNT	ADELAIDE SC
PATRICK HUMPHRIES	SC OF TASMANIA INC

SILVER C

PETER BRUNTON	DARLING DOWNS SC
MICHAEL POPE	NARROGIN GC
RUSSELL EDWARDS	GC OF VICTORIA
CHRISTOPHER MARKOVITCH	SOUTHERN TABLELANDS GC
ALEXANDER BOLEK	GEELONG GC
GLENN GORE-BROWN	KINGAROY SC

GOLD C

RODNEY VAN DEN BRINK	WAIKERIE GC

750 KM

GEOFFREY WOOD	ADELAIDE SC

1000 KM

TOBIAS GEIGER	GC OF VICTORIA

GFA CALENDAR

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

THE AUSTRALIAN GLIDING MUSEUM AGM AND BARBEQUE

7th March 2021 at Bacchus Marsh Airfield, Victoria

There will be a Vintage Gliders Australia Rally over the long weekend 6th to 8th March. Contact Dave Goldsmith on daveandjenne@gmail.com

AUSTRALIAN NATIONAL CHAMPIONSHIPS

Downs, QLD, Australia (map)
Contact: Bob Flood
Mob: 0421 663 458
bit.ly/2065sUV

VINTAGE GLIDERS AUSTRALIA EASTER RALLY

2 - 5 April 2021

The Hunter Valley Gliding Club are planning to hold their Annual at Warkworth, Singleton, NSW f Informal vintage aircraft flying will also be available until the following weekend. For more information contact Rob Moffat at robsmoffat@hotmail.com

DARLING DOWNS EASTER REGATTA

2 - 10 April 2021

Darling Downs Soaring Club Mccaffrey Field Bowenville QLD 4044 for more information
tinyurl.com/172ftw9c

SA COACHING WEEK & STATE CHAMPIONSHIPS WAIKERIE

Over the Christmas holiday and New Year, Waikerie Gliding Club hosted SAGA Coaching Week and the SA State Championships, held back-to-back starting 26 December 2020. The articles here start with news from the comp by Competition Director Brian Rau, followed by the experiences of three enthusiastic Coaching Week participants.

BELOW: 2021 SA State Gliding Championships Competition Director Brian Rau (left) and Championship Winner Bernie Sizer.

The 2021 SA State Gliding Championships were conducted between 11 pilots over seven days, after an intensive coaching week following Christmas Day. Waikerie as a competition site is well known for its good flying weather, open countryside, an OGN glider tracking network, accommodation, meals and nearby town shopping areas. In 18m Class were Peter Temple ASG29 JPT, Craig Vinall ASG 29E VNL, David Pietsch JS1 GXX and Haidyn Dunn Shark LPI. Club Class included Sidney Nankivell LS3 WUD, Sam Woods KYR Astir 77, Bernie Sizer Pik 20B GVH, Richard Atkinson LS4 IID, Patrick Dunn Kestrel GXX, Brink van Schalkwyk Mini Nimbus FQB, Phil Heintze ASW19B UKE. The Pawnee WGC and HZY tugs were flown by rostered pilots.

Although the 18m Class was below the class minimum number and the pilots were unable to vie for the state trophy, the gliders couldn't be combined into a single class due to the large performance discrepancy, and the four 18m gliders flew separately. The fleet used water ballast handicaps for 18m, while Club Class flew dry.

The strong SE winds prevailing after the hot coaching week made task setting challenging for Craig and Haidyn. Six competition days were flown mixed with speed tasks and AATs The last two days brought much improved weather and faster speeds. A safe friendly competition was completed without accident and only two out landings. Each evening became a sociable occasion when all could discuss the day's challenges and enjoy meals prepared by generous helpers together with beer and wine. Soaring Spot, managed by Adam Howell, recorded the daily progress.

The scores on the final Day 7 reflected the better weather. For the Club Class 321km speed task, winners were Sidney WUD 113kph, Bernie GVH 111kph and Richard IID 108kph. For the 18m Class 398km speed task, the winners were Peter JPT 147kph, Craig VNL 139kph and David GZZ 136kph.

Club Class pilot Bernie Sizer with 4,962 points was awarded State Trophy winner at the concluding presentation dinner. Sid Nankivell won second place with 4,557 points and Richard Atkinson came third with 4,345.The 18m winner Peter Temple, with 5,152 points, was awarded a medal for his outstanding performance. David Pietsch came second with 4,305 points and Craig Vinall was third with 4,041.

I would like to thank all pilots and those that crossed the border to make the competition a success, the tuggies without whom no competition would be hed, the organizers and the launching helpers, the catering volunteers with their generous help, the task setters and online scorer Adam Howell and retrieve crew Brink who generously assisted recovery of a sandy out landing with his 4WD.

LEARNING ENVIRONMENT

This year's South Australian Gliding Association Coaching Week at Waikerie in South Australia's Riverland was a great success with 25 coaches and students, six twin-seat and six single-seat gliders and good soarable weather. Morning lectures followed by afternoon flying and flight analysis after dinner created a positive learning environment for any aspiring cross-country pilot.

It was great to see that several pilots were given their first opportunity to fly cross country, some in a twin with a coach and others with a lead and follow flight. Cath Conway's Dimona was also used to provide outlanding instruction. A number of pilots achieved badge flights, some for their first 50km out and return. The State Championships followed the Coaching Week, which gave some pilots an opportunity to extend their cross-country skills.

There were lots of smiling pilots by the end of the week, so thanks must go to the Waikerie Gliding Club for making their facilities and accommodation available, and to those club members who put on some great evening meals.

Coaching Week will be held again at the end of this year from Sunday 26 December to Saturday 1 January 2021. I look forward to seeing you then.

BY CRAIG VINALL, SAGA SOARING DEVELOPMENT MANAGER

CROSS COUNTRY CONFIDENCE

Would any of you who are new to gliding like to feel confident in flying cross country? Of course you would. I am no different. I have been gliding on and off for 40 years, and returned to the sport recently. I have never flown any real distance from my home airfield without the instructor, for fear of landing out.

South Australia's Riverland. The Riverland covers an area of some 9,386 square kilometres along the Murray River from the New South Wales and Victoria boarders to Blanchetown in the west. The Waikerie Gliding Club was the perfect venue to practice cross country soaring and developing the courage to leave the safety of the local area and venture afar, out of one's comfort zone.

There was a good cross section of aircraft at the Coaching Week, including ASK21s, Duo Discus, DG1000s for dual instruction as well as a number of single seater aircraft for those who have flown cross country and wanted to hone their skills. There was also an ASW30Mi. Clubs represented this year were from the Adelaide Soaring Club, Adelaide University Gliding Club, Bordertown & Keith Gliding Club, Balaklava Gliding Club and Waikerie Gliding Club.

The first official day was quite windy and no flying took place, allowing us to put all the aircraft together and everyone to meet each other. There were lectures and discussions both in the morning and afternoon in preparation for better flying weather for the rest of the week.

At 9am each morning, a group briefing was held of the day's weather forecast, together with any warnings. The weather was presented each day by a different person to give a different perspective. We were then told the course to be flown, way point and turn points and details relating to the flight track. The morning finished with a lecture on various topics together with group discussions afterwards. Flying commenced in the afternoon at around 1 pm.

At the end of the day's flying, all the flight data was collated and performances put up on a white board for review and

continued over page

discussion together with the flight logs on the computer screen. Comparisons were made between all our flights for the day.

Distances flown over the week were in the order of 100km, 200km, 300km and 400km. Not all were proper triangles, however, all flights were challenging. My longest flight lasted over 4 hours. Although we did most of our flying on blue days, the last day saw us flying in cumulus conditions in cloud streets, which made a welcome change.

Since Thursday night was 31 December, a quiz was organised in the evening followed by some fun entertainment including some jokes from the floor.

I would like to thank all those at the Waikerie Gliding Club who made this week possible and to the people who presented lectures. A lot of organising goes into making an event like this successful – from the organisers, tug pilots and kitchen staff. I would also like to thank the SAGA representatives who made the event possible. It was a successful week.

I encourage all SAGA members to join the Coaching Week next season. You won't be disappointed. You will not only have fun but meet fellow pilots, learn a lot and have the confidence to fly further than you have ever done before. That's got to be a positive for anyone's flying.

TIM BURN BALAKLAVA GLIDING CLUB

A PILOT'S LIFE

What a week! After I attended the coaching week – an event that's a 'must do' for all pilots proposing to fly cross country, the next great step in soaring – I found my self sticking around to see how the serious guys do it.

Not only was the experience fascinating, but it also gave me the opportunity to meet the competitors on a social level around the awesome facilities that Waikerie has to offer. It's just like a gliding resort, if there is such a thing, with air-conditioned accommodation that steps out onto irrigated mowed green lawn.

AT WAIKERIE

In the evening I would sit under the pergola that stretches the full length of the club house looking east onto the tiedown area, with the setting sun behind. In the cool shade, the pastel colours drew a beautiful picture of all the sailplanes lined up on two cables across that green lawn, with a vintage red courtesy of Craig Vinall. Simply perfect.

The members' kitchen was typically a hub of activity in the mornings and evenings. Some would make a full cooked breakfast prior to preparing their gliders for the day's racing task, although I opted for the traditional coffee. Everyone was allotted a section within one of the three large refrigerators, and a dedicated pigeon hole for dry goods.

Keith from Bordertown, who clocked up his 583rd 5hr flight that week, would always be there, super organised and focused. What a gentleman, and what a story he has to tell. I hope he writes an autobiography preserving the gliding adventures he was so privileged to have experienced, taking him through America, Europe, England, Australia and Soviet Russia. I believe he has attended over 23 world comps everywhere around the globe over the past 50 years or so.

DAILY ROUTINE

Briefing at 10am everyday gave everyone that extra bit of time to prepare, covering both the A task and the B task in the event that conditions changed. Brian would cover the meteorological variables that then determined what Craig prepared for the racing day. An urn for coffee and tea was always ready to go and freely available for all. Baskets of fresh fruit were available on the bar, together with the dinner list used to determine the numbers to cater for that evening.

The launches were very well coordinated with Bill Mudge at the helm. His experience in managing multiple gliding events together with the tug pilots in the two powerful Pawnees, wing runners, cable catchers, timekeepers and crew made an efficient start to each day.

I took photos of everything, which have been uploaded to the Waikerie Gliding Club's new website to be published sometime in March, so look out for that one.

GOURMET EXPERIENCE

Every night the main kitchen provided dinner for around 25 people, including dessert. Nigel and Heather Baker prepared their traditional 'pigs in blankets', a sausage mignon served with a creamy gravy laden with mushrooms, yum, and provided the best hand made salads and desserts to accompany every main course, changing them everyday throughout the Comp.

Craig prepared his traditional Paella, baby-sitting the rice until perfectly caramelised while he would sip a glass of earthy, meaty Châteauneuf-du-Pape alongside. While I opted for the traditional BBQ Lamb and Halloumi Skewers, Pork Mignon, local lean beef snags and field mushrooms, Shirley prepared an awesome lasagna among many more meals, finishing up with the presentation dinner with more than 30 in attendance.

After attending both events back to back, I had clocked up 41.3 hours over the two weeks and was able to meet the likes of David Pietsch, who started his Jet engine on his JS 1 Revelation one morning, prompting me to scramble for the keys to the golf buggy and shoot over to his hangar and check it out.

I managed to chat with Peter Temple on several occasions. Simply put, Peter inspired me. His natural aptitude for soaring both in competitions and cross country is impressive, and congratulations to Peter for winning 1st place in the comp.

The camaraderie was amazing, and I look forward to catching up once again.

BY RODNEY VAN DEN BRINK VH-IKS

SA STATE CHAMPIONSHIPS
WAIKERIE
2 - 9 JANUARY 2021

18 M

1	PT	PETE TEMPLE	ASG 29	5,152
2	ZZ	DAVID PIETSCH	JS 1 REVELATION	4,305
3	VNL	CRAIG VINALL	ASG 29	4,041

18M / OPEN

1	VH	BERNIE SIZER	PIK 20 B	4,962
2	WUD	SIDNEY NANKIVELL	LS3	4,557
3	IID	RICHARD ATKINSON	LS4	4,345

https://tinyurl.com/1jzv8mjq

PETE TEMPLE FLIES 1,312 KM FROM GAWLER

BY PETE TEMPLE

A number of people have offered congratulations on my flight, to which I've responded, "It's just a matter of being in the right place at the right time." That is true, but it takes a lot of planning to be in the right place at the right time.

Gawler is only 22km from the coast, which is good for long distance flights since the thermals start and finish early, but you can glide home from a long way out late in the day. Our playground is typically north along the ranges or east out past the Murray River to Waikerie and beyond.

On this day, the maximum temperature was 44° C, unusually warm for spring, with an almost stationary trough running from central Australia to Tasmania. We get these conditions several times each summer but rarely this early in the season. Thermals are enhanced by the trough but also the local geography provides a sea breeze front that can be more than 500km long. When these two effects are aligned, soaring conditions can be outstanding.

Planning for such a flight is much easier than it used to be with tools like SkySight. I find that SkySight is particularly good at forecasting convergences, such as occurred along the trough and sea breeze on this day. I spent many hours studying the optimal route. I had to time arriving at a restricted airspace boundary after it was deactivated but, making distance faster than planned, I actually arrived two minutes early and had to wait. I was forced to go into wind first in scrappy low conditions due to airspace restrictions and the forecast for a late start to the thermals east of the ranges.

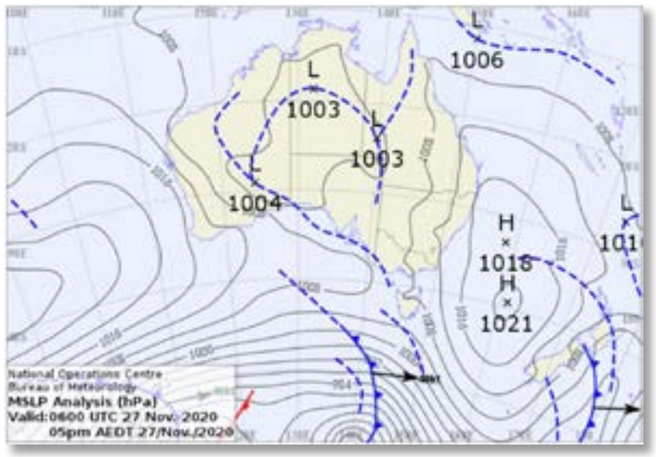
The 40 km/hr headwind seriously slowed the first leg and it took me 2.5 hours to fly the first 150 km. But then I connected with the first cumulus on the convergence line and never looked back. I spent six hours above 10,000ft and rarely thermalled while cruising at 90kts. The stats show 5% circling even though the thermals were only 4 to 8kts.

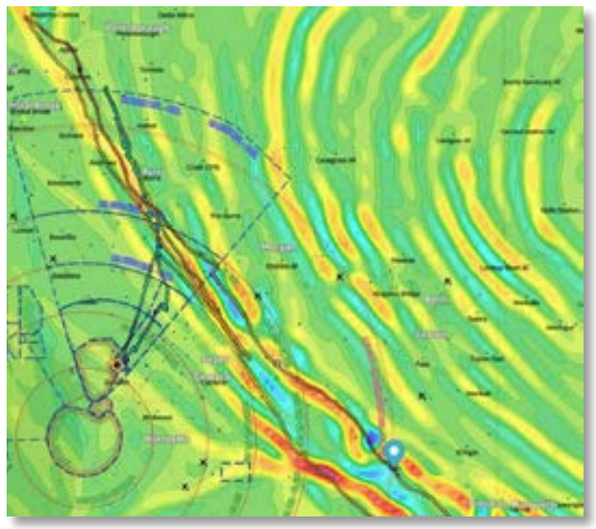
I flew down as far as I dared into Victoria, which was locked down due to COVID-19, and then took a long 430km leg to near Port Augusta – flying along the convergence with cloud base at 15,000ft. To paint a picture... it's blue to the west of the convergence in the sea air, a highway in the sky of fantastic cumulus at the convergence and then scattered cumulus inland to the east.

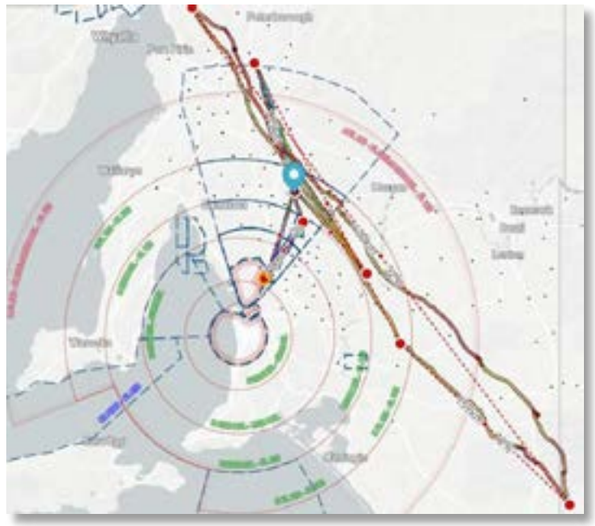
Finding the best line of lift is not always straightforward but, from past experience, I knew to avoid the best looking cumulus on the edge and track under the overdevelopment further inland. This worked like a charm and I was generally in netto rising air of between 2 and 6kts the whole way.

Then it was south again along the same line for a magic time before turning for Gawler to arrive before last light after flying 1312 km. I love long final glides at that time of the evening – cruising at 100kts with just a gentle whistle in smooth air without a ripple. What a day to be a glider pilot.

Why not come to Gawler and give our amazing conditions a try?







RIGHT: Pete's view of the line of clouds up to 15,000ft along the trough / convergence line.

BELOW LEFT: The prognistic chart showing the trough line extending from WA through to Tasmania.

BELOW RIGHT: Convergence and Track in SkySight.

OPPOSITE: The route Pete flew.

RECORDS FLOWN IN AUSTRALIA 2020-21 SEASON

Jenny Thompson JENNY THOMPSON
RECORDS OFFICER, GFA
fairecords@glidingaustralia.org

DECEMBER 2020 - FEBRUARY 2021

ADAM WOOLLEY AND KEITH GATELEY

300 AND 500KM OUT AND RETURN 20M TWO SEATER CLASS – 141.62KPH. FLOWN FROM LAKE KEEPIT 2/12/20

NORM BLOCH

750KM TRIANGLE 18M CLASS – 148.3KPH FLOWN FROM BEVERLEY 8/1/21

JAMES COOPER

FREE OUT AND RETURN DISTANCE OPEN CLASS - 1070.24 KMS FLOWN FROM CUNDERDIN 8/1/21

TOBI GEIGER

1000KM TRIANGLE 15M CLASS – 134.21KPH FLOWN FROM BENALLA 10/1/21

DAVID JANSEN AND JOHN BUCHANAN

TWO SEATER 500KM TRIANGLE RECORD CLAIM - 138.83KPH FLOWN FROM NARROMINE 22/1/21

KEITH GATELY AND ADAM WOOLLEY

TWO SEATER 750KM TRIANGLE RECORD CLAIM - 120.76KPH FLOWN FROM NARROMINE 23/1/21

HORSHAM WEEK

BY ARNOLD NIEWAND

Horsham Week has been run continuously at the Horsham Aerodrome for the last 55 years. It is recognised as a training ground for pilots who haven't had a lot of competition experience, and who wish to increase their skills in a safe soaring environment.

Experienced pilots are willing to share their knowledge in friendly competition enabling lower hours pilots to learn from them. The competition organisers are keen for all who attend to learn all aspects in preparing for and flying competitions.

It is well known that Horsham is an excellent area for gliding with many suitable outlying paddocks in the tasking area, good weather conditions and good facilities. While the flat plains of the Wimmera/Mallee generate great thermal conditions, the Grampians Mountain Range to the south and Mount Arapilies to the west of Horsham, provide different terrain for flights and wave can also be experienced.

ABOVE: Michael Durrant took first place in Open /18m Class.

BELOW: Jack Hart took first place in 15m / Standard Class.

They say enthusiasm is infectious. Well, at Horsham in early February, an almost full field of enthusiastic glider pilots gathered for the start of Horsham Week Gliding competition. Led by Competition Director Bruce Cowan and the capable Horsham Week Team, everyone was looking at flying fast courses, long distances, and ten knot thermals!

The Horsham Flying Club, who host the event, had spent weeks preparing their facilities for a Covid-safe event and their efforts were clearly seen. The runways, taxi ways and tie down areas were all well grassed and properly manicured by Horsham City Council, making for a potentially great week of soaring.

The VSA Cross Country Coaching class held at Horsham one week earlier, with Mike Durrant in charge, was attended to capacity with plenty of optimism from students and instructors, and was very successful. The scene was set for a great competition.

Influenced by some tropical conditions – cool, windy and a short launch window – Open/18m and 15m/Standard classes were the only classes to launch on Day One.

The first day of the competition was mostly overcast with thermals going to 4-5,000ft and a strong southeasterly wind. All gliders made it around with reasonable average speeds, and everyone agreed the day was better than it looked from the ground. The following day was cancelled due to poorer weather conditions.

Day Three was flyable with a strengthening southerly and a forecast of thermals rising to 4-5,000ft. This time, all classes were launched and some pilots found the conditions very tough. The day turned out to be a real challenge for all concerned, some making it around and others landing out at various spots around the circuit.

As one experienced pilot said later after arriving home, it was the toughest day he had flown for 30 years, but it was very rewarding to complete the course.

Day Four was still with a south easterly wind, but less wind strength. A blue day saw some good flying and all classes made it home.

Day Five promised to be a very good day and lived up to its prediction - a mostly blue day with thermals going to 6-8,000ft and, for the Open Class on their second leg, cumulus cloud for two-thirds of the time.

Some real glider racing was had in all classes with less than 3km/hr separating the first four in Open Class over the 500km-plus course. All classes made it around the course with Open Class flying 553km, 15m/Std 464km and Club Class flying a 3.5hr AAT 244 – 434km.

The next day with a strong northerly and high fire danger was cancelled.

A bus trip was organised in the afternoon through the little desert to the Aviation Museum and Vintage Machinery Museum at Nhill, followed by an evening meal at the Dimboola Hotel, which was well supported. It made a great day to see some local history from the Wimmera and surrounds as well as a first hand view of the Little Desert area that many of the pilots fly over from time to time.

Day Six was quite flyable with forecast heights of 4-5000ft. All pilots were keen to go soaring today after a good day on Wednesday and a break on Thursday.

All classes were set tasks and lined up on the grid with the Club Class in the process of being launched when at 1pm the Premier of Victoria made his announcement to lock down the state from 11.59pm that night.

Competition Director Bruce Cowan had no option but to cease all operations and declare an end to Horsham Week 2021. This gave all pilots time to de-rig their gliders and travel home before midnight.

With everybody missing out on two days' competition flying, it was a disappointing end to an otherwise successful Horsham Week. There is a real sense of unfinished business among the pilots and many are keen to resume their flying next year, rekindle friendships that were cut short and enjoy the Wimmera skies again.

As a result, Horsham Week will be on again in 2022 with a new Competition Director, Selwyn Ellis, and a good team of pilots making up his committee. Make it your aim next year – keep 5 to 12 February 2022 free and mark it on your calendar for another safe and friendly Horsham Week. GA

HORSHAM WEEK

6 - 13 FEBRUARY 2021

OPEN / 18 M

1	OD	MICHAEL DURRANT	JANTAR 19M	2,663
2	N2	TERRY CUBLEY	VENTUS 2CXT/18M	2,618
3	FQF	ROLF A. BUELTER	LS 8T/18M	2,603

15 M / STANDARD

1	FQC	JACK HART	MOSQUITO	2,963
2	2M	TIM SHIRLEY	ASW 28	2,934
3	CQP	DANIEL SUMMERS	LS 3A	2,933

CLUB

1	UKP	GRANT HEANEY	JANTAR STD 2	2,127
2	XOR	CRAIG COLLINGS	ASW 20	2,108
3	ZAV	ROBERTSON & RYAN	JANUS CM RG	1,906

Full results at soaringspot.com
tinyurl.com/3mshs3or

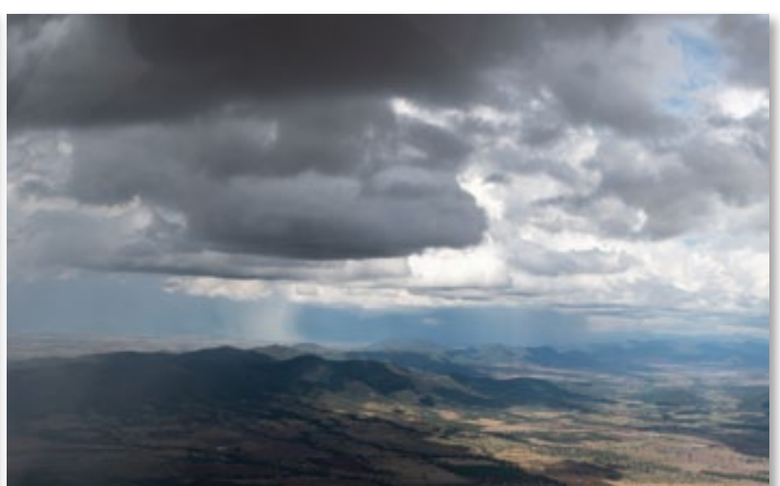
KEEPIT REGATTA

BY CAM BARTLETT
PHOTOS BY VAL PHILLIPS

From scratching thermals at 2,000ft to riding storm shelves at 175 kph, the aura of discipline and enthusiasm filled the skies over Lake Keepit. Engagement in gliding was felt to be at its finest here, for both inexperienced junior pilots and more seasoned veterans. Day 1 finally came around after several restless nights leading up to the regatta, filled with excitement, only to find pilots racing their gliders up to the launch point of runway 32, readying for an aerotow launch out and over the lake.

The day seemed to have a solid forecast and, sure enough, some solid results were made by pilots in both Club and Sports Classes. However, the day was also short lived for a number of us who outlanded – including myself,

ABOVE: Matthew Scutter in his Diana 2 FES.
ABOVE LEFT: Val and the crew ready to launch the fleet.



outlanding at the start gate position. I can tell you, it was brilliant.

Continuing on through the week, the days appeared to get more difficult and the weather forecasts plummeted, although this didn't scare the majority of the competitors. Hard-willed and eager to best themselves, the pilots gridded up again on a seemingly bleak day. We found interesting weather conditions including rain and lightning moving from the east, from which all pilots conscientiously maintained an exceptional safety margin. Despite the difficulty of tasking in such conditions, the thermals were strong and each day looked more promising as it went on.

Grappling with the first thermal off the launch, everyone was keen to climb fast and push hard before the rain rolled in. It was exciting to watch the more experienced pilots delve into this challenge while us junior pilots took the opportunity to observe the others and challenge ourselves. With the guidance of quality coaching and mentoring, lead-and-follow operations continued for valuable fun time, while Ian McPhee, aka Macca, and Mark Laird, aka Lairdy, pushed a Grob103 into a hill searching for that crucial 8 knotter bouncing off the mountain range's sun baked rocks.

All the while, reflecting the task set, a Diana 2 piloted by Matthew Scutter promptly decided to go another lap, this time achieving a blistering 175kph average speed around the course. Hardly believable.

The weather continued unpredictably and many packed up early to return to reality, however, this did not stop the monsoon of celebratory expositions from pilots at the dinner table, telling tales of their flights and fun times with our mates. It must be said that the experience at a Lake Keepit Regatta encompasses all that fulfils the dream of flying and being free, where Guinness is drunk and songs are sung of all feats high and low. GA

OPPOSITE and ABOVE Matthew Scutter in his Diana 2.

LAKE KEEPIT REGATTA
20 - 27 FEBRUARY 2021

SPORTS

1 NWP	MATTHEW SCUTTER	KSC	DIANA 2 FES	3,152
2 K1	JACQUES GRAELLS	LKSC	JS1 18M 1075	2,657
3 ZDS	DAVE SHORTER	LKSC	JS1 18M 1075	2,310

CLUB

1 IZE	SOPHIE CURIO	KSC	LS 4	2,599
2 NZE	RAY CALDON	SCGC	LS 6/17.5M	2,435
3 LL	VIC HATFIELD	LKSC	G 103 TWIN III SL	2,177

Full Results at soarinspot.com bit.ly/3bFXk5m

FAIR WEATHER AT TEMORA

BY SEAN YOUNG

At the beginning of January, Bathurst Soaring Club pilots packed up their gliders and drove the three hours south to the annual Temora camp. Many members of Canberra Gliding Club also made the journey, hoping to be in the right spot for the peak of the summer soaring season.

After the smoke and dust of the previous year, it was a relief to return to more normal weather conditions. It seemed that more pilots than ever flocked to Temora, where over 30 gliders lined up for a launch each day.

This year the weather conditions were good with several strong soaring days. But neither did we experience the extreme conditions of two years ago, nor the more or less unflyable conditions of January 2020.

BIG JANUARY DAYS

On 7 January Ed Marel had the longest flight out of Temora, flying 657km in his ASH 31. But it was a few days later on 10 January that the big soaring days arrived. Temora CFI Grant Johnson achieved a terrific 775 km in his Nimbus 2. He flew a 600km FAI triangle via Hilston then Jerilderie and added a further 175km at the end. However, son Nathan flew 763km in a Std Cirrus, without water!

On 11 January, Matthew Scutter and Mak Ichikawa arrived at Temora as the weather in the middle of the week looked very promising for long distance flights. Both Matthew and Ian de Ferranti flew over 600km that day. The next two days were big pre-trough days with many long flights flown from Temora.

Thermal heights rarely reached 10,000ft and most days had at lease some cumulus. It was in a way refreshing to have a period of good soaring conditions free of the drama of the last few years.

As always, Temora Gliding Club were perfect hosts. They provided a hangar for daily briefings so that we could keep the appropriate social distancing. Each day, Club President Tim Causer led morning briefing, with Graham Engel talking on operations. From Bathurst Soaring Club, Ed Marel gave a very thorough daily weather briefing.

The Bathurst Club brough a tug to Temora with Brian Bailey to fly it each day. Many thanks to everyone for a succesful two weeks in the northeast of the Riverina region of New South Wales.

FIRST CROSS COUNTRY CAMP

Alex King from Bathurst Soaring Club flew the club LS4 to Temora for his first cross country camp. At Temora he completed his Silver C and set his sights on his 300km Gold Distance. Though he unfortunately failed to complete the Gold Distance declaration, in fact, he had no difficulty with the flying - on 13 January he flew 453km! He also had his first land out, which he handled very well. Well done, Alex.

LEFT: Friends from Bathurst Soaring Club - (l - r) Graham Spoor, George Marbot, Graham Brown and Ray Humphry.

RIGHT MIDDLE: Alex King after his first outlanding. RIGHT: Looking relaxed, Alex skipped his first 300km and flew a memorable 453km. But he still needs to fly his official Gold Distance...

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MAKOTO ICHIKAWA AND MATTHEW SCUTTER

You can spend days looking at the weather pattern and see how the actual weather develops. You may think, ah, 'Wednesday looks like the big day'. But when Matthew Scutter and Mak Ichikawa suddenly show up at the airfield, then you know the big day is on.

Matthew had been flying from Narromine in his new Diana 2 with Mak in his JS3-18. They were there to practise together in preparation for the World Gliding Championships to be held at Narromine in 2023.

They thought that a trough system approaching NSW would bring stronger conditions to Temora so they changed location. Mak said, 'The weather was pre-frontal with a good cloud base and no high winds.'

On Tuesday 12 January, Matt and Mak planned to attempt a new 1,000km speed record. Mac said, 'We decided to start a bit late, launching at 11.30 for a 12.20 start as Matthew was aiming for a speed of about 135 kph.

'But the day overdeveloped, was a bit too moist and showers developed. We turned short of Ivanhoe so I could get back, as I don't have an engine.'

Mak flew 910 km at 135 kph and Matt 997km at 131 kph.

The next day they tried for a 1250km yo-yo flight. Mak said, 'We took a high tow, but the CU's started about half an hour late. In the south the climbs were not as strong as we had hoped. Also, cirrus started to come in. So we abandoned the task.'

Matthew decided to fly back to Narromine rather than land at Temora. Mak flew 988km OLC. He actaully achieved 1,015km but the OLC scores for a maximum of five turns, and Mac had six. so the final kilometres were not counted. Matt's flight ended up at 982km.

ABOVE: Mac and Akemi Ichikawa ready to launch at Temora.

BELOW: You can see a video interview with Mak online at GA Magazine https://bit.ly/3dR4Vkm

ABOVE: Matthew Scutter landing his Diana 2 FES at Temora after a flight of 997km.

LEFT BELOW: The battery compartment of Matt's Diana 2. The glider is fitted with the new generation XL batteries that supply 30% more power for the 24 kW engine. It is a self launcher - even fully ballasted to 53kg/sqm.

MATTHEW SCUTTER

Matthew has been enjoying his new Diana 2 (SZD-56-2 Diana 2 NG – FES). At the time of writing, it is one of two so far delivered to Australia. It is the only one with a FES.

Matthew has been flying from his new home club Kingaroy, as well as Narromine and Temora. He has also just taken part in the Lake Keepit Regatta.

LONG DISTACE ARCUS

Keith Gately and Dean Ward flew 701km on 12 January. They were going for 750km but rain developed along the track. However, this was Dean's longest flight.

As you can see in the photograph to the right, they enjoyed their flight on 'Big Tuesday'.

Keith has been having a terrific season flying record flights with Adam Woolley and doing well in the Two-Seat Championships.

TWO SEATS AT NARROMINE

BY SEAN YOUNG

ABOVE: Adam Woolley in the front seat of the Arcus with Keith in the back, camera in hand.

The Two-seat Nationals took place in February with a mixture of excellent soaring days and difficult conditions. Nine teams competed in a very strong field with several Australian World Championship team members taking part including former world champion Brad Edwards, Mac Ichikawa and several others.

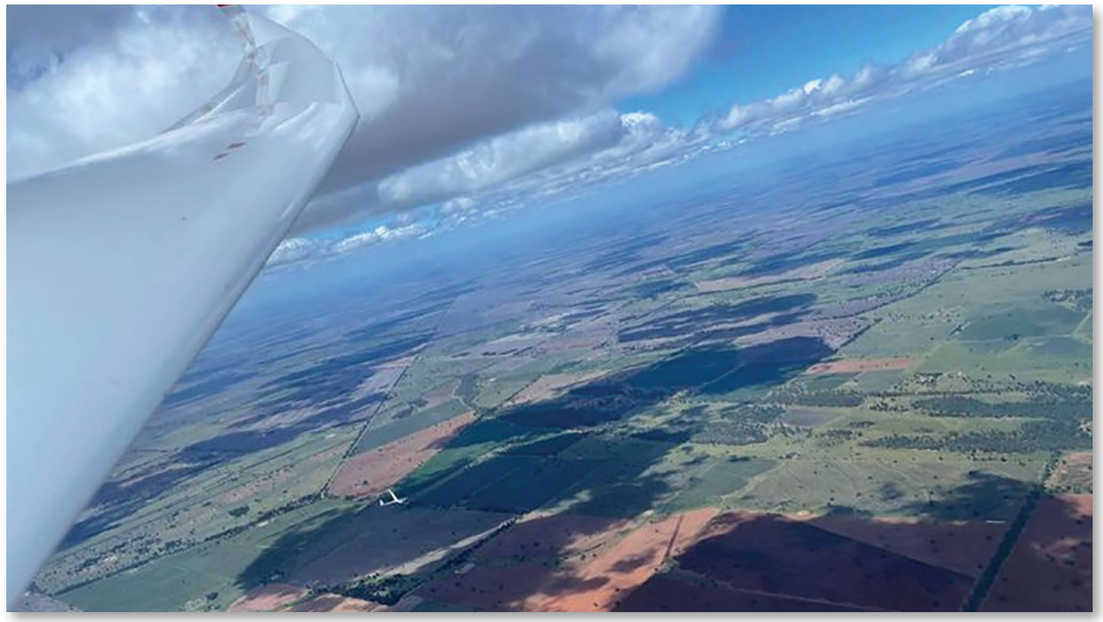
Viewers could watch the races as they happened on https://live.glidernet.org. There were seven race days, which was a very good result as low pressure systems stretched across the area bringing rain and cloud across NSW during the week. Nevertheless, the pilots experienced more than one classic Narromine day and squeezed excellent performances from all days.

The first competition day was cancelled, but on Day 2, 14 February, David Jansen and John (Butch) Buchanan flew their Arcus T, flying 376 km at 102 kph, to win the day. They beat Brad and Bill Edwards in their new ASG 32Mi, Miles Gore-Brown and the Kingaroy team in the Kingaroy Duo Discus X and Mac Ilchikawa and Ron Sanders in Ron's Nimbus 3 DM. Others in the fleet included Harry Medlicott and Allan Barnes in an Arcus M and Adam Woolley and Keith Gateley flying an Arcus M.

After a struggle to the finish, Adam and Keith had a technical outlanding. They also outlanded the following day, making the possibility of ending up on the podium at the end of the championships a difficult prospect.

BLUE, LOW, WINDY

The following day was blue, windy and difficult but with some excellent strong climbs, Brad and Bill Edwards outperformed the pack and won the day.



Paul Jacobsohn and Mick Webster flying the Duo Discus GIE made it into the 3km finish circle to qualify for 6th place but couldn't quite make it to the airfield and landed in a nearby paddock.

WIN FOR ADAM AND KEITH

On Day 3, Adam and Keith won the racing task flying 354km at 109 kph. This was the first of three day wins that helped them to finish in 4th place at the end of the comp. A gap of just 10 points divided them from a podium position. The technical outlandings did cost them dearly.

LEAD CHANGE

Up to the 6th task on 18 February, David Jansen and Butch Buchanan had been at the top overall points score. But Brad and Bill Edwards, although coming in 5th place, moved to the top of the score card with two days to go. However, with a small margin of about 260 points across the top four places, it was still possible for any of the top teams to win the contest.

On the second last day, a 439km racing task was set that Adam and Keith won at a speed of 113.35 kph. When the scores came in, just 152 points separated the top three gliders going into the final day.

The final race on 20 February was an AAT won by the Edwards Brothers flying 396km at 129.86 kph to keep the top spot and win the Championships.

David Jansen and Butch Buchanan, after flying consistently strongly throughout the competition, took 2nd place.

Mac Ichikawa and Ron Sanders took overall 3rd place, flying the only Open Class glider in the competition. During the competition, they finished consistently among the top four finishers and won Day 6.

TWO-SEAT NATIONAL CHAMPIONSHIPS NARROMINE

13 - 20 FEBRUARY 2021

1 ZBE	BRAD EDWARDS & BILL EDWARDS	LAKE KEEPIT	ASG 32	6,243
2 GDV	DAVID JANSEN & JOHN BUCHANAN	KINGAROY	ARCUS T	6,025
3 XXF	MAK ICHIKAWA & RON SANDERS	STH RIVERINA	NIMBUS 3DM	5,915
4 FIG	ADAM WOOLLEY & KEITH GATELEY	BATHURST	ARCUS M	5,905

Full Results at soarinspot.com bit.ly/3kqsJg7

F1.0 GP – THE RACE

BY CHARLES DURHAM

I would like to paint you a picture of gliders launching and climbing away at a competition, cumulus clouds all over the horizon. These are not the 18m Superships that have become a common sight at State and National comps. I am circling in a gaggle comprised mostly of Libelles with the odd standard Cirrus, Hornet or Jantar thrown in the mix. A voice comes over the radio, "Leeton gliders, the start gate opens in 10 minutes not above 4,500ft." You could be forgiven for thinking that I am describing a scene from the 1970s but this is 2021, the final day of the Formula 1.0 GP.

As I approached the start line on that day at Leeton, a voice came on the radio counting down the seconds until the gate opens. I must be below 4,500ft, I must not exceed 90kts ground speed and I must not cross the line before the gate opens. Ahead of me and to the right is a Hornet flown by Jenny Thompson, and on my left is her daughter Sarah in a Jantar with very distinctive purple metalic wing tips. In the distance is a glider that can only be Adam I'Anson with his highly visable fluro orange strips on the nose of his Cirrus.

ABOVE and BELOW: Ruben Lane crossing the finish line in his DG100

HOT ON THEIR HEELS

A quite reasonable assumption is made by all of these pilots that hot a swarm of Libelles is hot on their heels, literally ready to pounce on us all at the first thermal. As the start line approaches, we all start to pile on the speed to get rid of those extra few hundred feet before we cross the line as the GPS counts down to zero. Then, as if somone flicked a switch, the GPS reaches zero, beeps and all the tension evaporates as the gliders slow down, turn slightly and start tracking for Aria Park. The race is on.

I first gained interest in this competition about three years ago. The idea of a serious competition aimed directly at Club Class was very enticing. I myself fly a Club Class glider and although I was not able to make the first year, I greatly enjoyed following the competition online. I am consistently impressed with the innovations coming out of this competition. Every glider carries a tracker, which allows anyone to watch the task unfold live on a mobile phone. This, combined with the format of shorter racing tasks and the old style start gate, slightly modified for safety reasons, makes for very exciting racing and is very engaging for the spectator.

FAMILY ATMOSPHERE

We had arrived at Leeton eight days earlier, rigged the gliders and set up our campsite. A beautiful, lush, green patch of freshly mown lawn awaits us -- Leeton Airfield! The Leeton Aviators Club, who currently have stewardship of Leeton Airfieid, have put a lot of effort into preparing the airfield for us.

In fact, the local club has put a great deal of work into the facilities and I hope that, as a result, more glider pilots will take advantage of this place, which is perfect for events like this. The club house has been recently renovated and the camping area surrounding it is not only excellent but its close proximity to the club house creates a real sense of community and only helps to enhance the social atmosphere. There is something quite nice and relaxing about the fact that all of us are living in the same spot, sharing meals together and spending the evenings telling tall stories of the day's flying. We can all share a laugh and drink without having to drive into town to our accomodation at the end of the night.

Leeton also introduces a family atmosphere to gliding competitions, since many of the competitors bring their families or partners with them. It's a good opportunity for a lot of city kids to come out to the country, ride their bikes around the airfeild, have a break from technology and get some fresh air.

RIGHT: Tom Gilbert finishing after the fleet in the Janus. Thanks to Tom's input, the task setting was excellent!

BELOW: Gliders on the grid prepare to launch into excellent conditions, as is evident by the dust devil in the background.

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OPPOSITE TOP: Tom Gilbert in the Janus..

BELOW LEFT: Christian Streifeneder prepares to launch in the famous 'Super Libelle'.

BELOW RIGHT: Charles Durham on the grid making preparations for the day's task with the help of his friend Naomi, acting as crew.

CRITICAL HANDICAP

One of the things I like about the tasks we fly in this competition is that they are short and fast -- no 500km tasks here. Our task today is a little over 150km. This means that you can always see other gliders around you and get a rough idea of your placing. Having another glider ahead of you gives you the goal of catching them.

The handicap system is also one of the best I have seen. A glider's handicap affects the task you fly. A lower performace glider like a Libelle turns 1.5km short of the turn point, whereas a Hornet or a Jantar turns at the turn point. An open Cirrus, on the other hand, might have to fly 1km past the turn point. Put simply, the higher performance gliders fly a slightly longer task to keep it fair. Sometimes as I approach a turn point in my Hornet, it can be a little disheartening to see a Libelle ahead of you cut the corner, but then it simply heads on to the text turn point and marks the next thermal for you, so it all evens out over the day. This really is a true air race, short, fast and competitive, not to mention fun.

Several times throughout the day, I would be in a gaggle and see all the other gliders go off ahead of me, leaving me to believe I was coming last, only to find those same gliders entering the next thermal after me. The atmosphere had been quite unstable all week and I was amazed to find aircraft flying so close together experiencing such different conditions. We rounded the last turn point and started tracking for Lumpy's Loop, a turn point placed 10kms out from the airfield in order to make sure all gliders approach Leeton from the same direction each time.

EDGE OF YOUR SEAT

We would approach Leeton from the east with the choice of a straight-in landing or a competition finish in front of the club house where Tom Gilbert, our official photographer, would be waiting with his camera. There is something special about seeing gliders crossing the line at high speed in quick succession. It's edge-of-your seat stuff!

Every one calls inbound as they turn Lumpy's Loop, giving you a good idea of where you are positioned in the race to the finish line. Christian Streifeneder claimed line honours for the day with his famous Super Libelle. I myself came 6th having a photo finish with Adam I'Anson who manged to beat me by a fusilage length -- a very near photo finish.

The final tally saw Scott Lenon from Temora become the overall winner of the Ingo Renner Trophy. It was great to see the competition continue on through all the adversity surrounding Covid-19. With the hard work and determination of the volunteers and the perseverance of competitors, we could continue to fly when so many other competitions this season have been cancelled.

The F1.0GP is a credit to those people who give their time to run it. A couple of people who deserve a pat on the back are the competition director Greg Schmidt and safety officer Aaron Stroop. These guys and many others have worked together to give us a competition that is a little different to others and may just give the gliding movment the public interest and the kick start we need to build up our sport and secure our future. GA

FORMULA 1.0 GRAND PRIX LEETON

28 DECEMBER 2020 - 5 JANUARY 2021

1	SCOTT LENNON	STANDARD LIBELLE	CK	30
2	CHRISTIAN STREIFENEDER	STD LIBELLE	EU	24
3	CHARLIE IANSON	STD CIRRUS	13	21
3	JENNY THOMPSON	HORNET KJ	10	21
4	JUSTIN COUCH	JANTAR STD 2	IZX	16
5	ANGUS STEWART	OPEN CIRRUS	ZXV	15

https://results.f1gp.com.au/scoring/agg/27

BORDERTOWN 2021

VINTAGE GLIDERS AUSTRALIA ANNUAL RALLY, 9-6 JANUARY, 2021

BY DAVID AND JENNE GOLDSMITH

To be or not to be? There was great uncertainty as Christmas approached, although all the necessary preparations had been made for a COVID safe National Vintage Gliders Australia Rally at Bordertown from 9 to 16 January 2021. Our esteemed VGA President, JR Marshall, knew what was required, as he was an officially trained and appointed COVID Marshall in the state of South Australia. The fear was of the possibility of border closures with fresh outbreaks of COVID cases in NSW. Indeed, borders did close before the event, preventing people from Queensland and NSW from attending the rally.

Vintage Rally participants from Victoria were still able to cross the border to South Australia by applying for an entry permit a fortnight in advance. Attendance at the rally was strongly suppressed. In total we had five vintage gliders attend the event, two travelling from Victoria and three from SA, supported as always by some beautiful model aircraft. Some people came without their gliders or models. Nevertheless, it was a great pleasure to see everybody, and the Bordertown National Vintage Rally remained a great social get together, despite the low numbers.

Entering the state of SA had an extra degree of excitement. Jenne was driving our Fiat camper and towing the Ka6E trailer with the paper permits for both of us to cross the border at the ready. However, David and the Ka6E GEA were not aboard! We had been attending the Geelong Club Christmas Camp at Horsham.

A FINE START

On the Friday before the Rally started, the weather looked favourable enough for David to fly the glider 160km interstate to Bordertown. Jenne wondered what explaining she might have to do to a policeman at the border, but entered the state with no inspection of papers, as the checkpoint had not yet been set up. David arrived over the border first and found the best conditions of his flight in SA, climbing to 8,000ft while waiting for Jenne to arrive.

With great weather at the start of the rally, Jenne was glad of the oxygen in GEA on Saturday as she went back across the border to the edge of the Big Desert northwest of Nhill, south to the northern edge of the Little Desert and along a wonderful cloud street back into SA and down to the wine region of Padthaway before returning to Bordertown. The flight was 338km in all, no low points, and reached a best altitude of 11,809ft.

JR Marshall confined himself to SA in the Olympia 'Yellow Witch', but had no trouble covering 161 km in 2hrs 50 mins, an admirable speed for the pre-WWII design. Renna also had a 2hr 20min romp in his Boomerang GTL.

SUDDEN CHANGE

The next day was even better. Taking the first launch in GEA, David followed the cumulus into Victoria as far as it went to Dimboola before turning and again working along the northern edge of the Little Desert back into SA, up past Keith and back to Bordertown at altitudes of up to 12,500ft on a 374km flight. Peter Raphael in his Cherokee II enjoyed a 196km flight not below 8,000ft and up to 12,500ft in 4hrs 3mins, really motoring in a 65.0 handicap glider!

JR was in the back seat of Kookaburra GNZ as his daughter Amy re-familiarised herself with the glider she trained in, showing Dad that she hasn't forgotten how to thermal. Renna was up again, this time for 2hrs 45mins in the cool in the Boomerang.

Our weather whisperer, Peter Bannister, had nothing good to report for Monday the 11th. Our spectacular weather was taking a turn for the worse. A change was coming in, with upper wind speeds already 25kts and surface gusts to 35kts expected with the passing of the trough. A total fire ban was in force, with the fire danger

OPPOSITE TOP: JR and Macca in the Kookaburra, assisted by Peter Raphael.

BELOW: COVID comes to Bordertown!

LEFT: Peter ready in his Cherokee 11, Ka6E next.

BELOW: Mike Renahan almost ready in the Boomerang Inbox

rated as extreme. No wire launching was permitted because of the possibility of sparks. We had a day on the ground in 41 degree heat. Safe hangarage was found for some gliders and tiedowns were inspected for security.

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IRON CLAD INVERSION

Tuesday 12 January offered us the opportunity to fly again. Peter reported that we had a very strong inversion at 5,000ft with a wind change at that altitude to ESE/light. Only the Yellow Witch remained a hangar queen, possibly lamenting the fact that Ged Terry from the UK was NOT attending his first Australian National Vintage Glider Rally in 38 years! It took a global pandemic to keep him away.

After a mutual flight with owner Brian McIntyre, JR enjoyed over an hour in Kookaburra GNZ. Weak lift was a feature of the day, as forecast by Peter. Not to worry, everybody got home. The best heights (less than 4,500ft AGL) under the iron clad inversion were found in South Australia. Peter Raphael flew over 80km in the little Cherokee II in the weak, blue conditions, an amazing effort, while in the Ka6e, Jenne covered 122 km.

Peter's forecast for Wednesday and the rest of the week was most discouraging, but proved correct. However, the social side was to the fore, and late arrivals continued to come. Thursday morning dawned surprisingly calm and the model fliers were in their element. They entertained their audience on the clubhouse hill with a wide variety of models from vintage gliders to modern electric powered racers and home designed aerobatic models, thus continuing a highly valued part of the Bordertown experience. However, by 9am it was all over, as the expected wind blew up from the SW.

TROPHIES AND THANKS

Vintage Gliders Australia's Annual General Meeting on Friday was chaired by President JR Marshall with Treasurer Ruth Patching and Secretary Bob Hickman, and covered a number of items, including setting the dates for next year's Rally, to be held from 8 to 15 January 2022.

The Annual Dinner on Saturday night included a restricted award of trophies due to the low numbers able to attend the rally. The three awards were –

The Golden Eagle Trophy for the best handicap distance flown by a League 2 glider at the National Rally – Peter Raphael, Cherokee II VH-GPR, 196 km

The Renmark Trophy for the best handicap distance flown by a League 1 glider at the National Rally – David Goldsmith, Ka6E VH-GEA, 374 km

Geoff Gifford trophy for the best handicap distance between National Rallies in a vintage glider – Paul Dickson, Dart 17R VH-IZO, 323 km, Warkworth, NSW

Thanks to the Bordertown-Keith Club members who again provided safe, efficient winch launching for us, launch point repartee worthy of a comedy show, a manicured site with irrigated launch pad and a comfortable air-conditioned clubhouse. Thank you, JR and your helpers, who contributed so much by providing meals in the clubhouse. Last, but not least, thank you, Peter Bannister, who put much of his professional time into providing us with highly accurate forecasting for the site, gathering and using real time information, rather than relying completely on the modelling done, by internet services.

The COVID-affected low numbers at the rally and the wind that we experienced later in the week were not permitted to spoil the fun. The great company of the people who were able to come made up for it, along with music, movies, models and a couple of days of spectacular weather.

AROUND THE CLUBS

This summer has seen a lot activity at clubs around the country including many first solos and other achievements. Here are just a few of them.

Ben Cook took his first solo flight at Bathurst Soaring Club in January.

James flew his first solo in February at the Gliding Club of Victoria, Benalla.

Congratulations to Nick Neynens who went solo at Kingaroy Soaring Club in December.

Lachlan went solo in January at Darling Downs Soaring Club, Queensland.

Patrick Rabbath flew his first solo at Kingaroy Soaring Club in December. Congratulations, Patrick!

Sam McKay achieved his Silver Distance & Silver Height Gain on a tricky day at NT Soaring Alice Springs.

Jess flew her first solo at Sunraysia Gliding Club, Victoria in February.

WINNING THE MENTAL BATTLE PART 4

Although we have already delved into a few psychological aspects of gliding, so far we have only scratched the surface. This contribution is specifically tailored for up-and-coming cross country pilots. It deals with the mindset of budding and ambitious novices before they venture beyond the gliding range of their home airfield for the first time.

BY BERNARD ECKEY

STEPPING OUT OF YOUR COMFORT ZONE

We all love aviation because of its many rewards and countless unforgettable experiences, but there is no denying that it involves a certain element of risk. With lots of experience under your belt, you know that gliding is only as risky as you make it and common sense goes a long way towards minimising or eliminating danger. Newcomers, on the other hand, are often concerned that flying beyond gliding range can be hazardous and are frequently adamant that such endeavours would push their own boundaries a little too far. It is therefore no wonder that most new pilots face a mild case of anxiety or butterflies prior to 'leaving the nest'.

The reasons are plentiful and understandable. Their butterflies might stem from a lack confidence in their own thermal finding skills or about outlanding concerns. Other reasons might include worries about navigational issues or mental overload situations but all of this is normal and as old as the sport of gliding. Such reservations can't be surgically repaired. Instead, it must be gradually removed by venturing near the very edge of the gliding range of our home airfield on a regular basis.

ADVENTUROUS

Such serious training will gradually provide a reasonable level of comfort, which is absolutely crucial for making quick progress and for becoming an accomplished pilot. However, a large number of glider pilots keep operating within their comfort zone for much too long. Put differently, they are reluctant to do anything that hasn't previously been done with an instructor or coach on board.

All these timid pilots fail to make real progress and are all too often limiting their soaring to the extended circuit area. As soon as this novelty has worn off, monotony sets in and boredom gains the upper hand. Before long our newcomers look for a more satisfying pastime and, before we know it, we have lost another potential long-term member.

On rarer occasions we meet newcomers with a more adventurous turn of mind. They accept a new challenge on a regular basis and are keen experimenters. After mastering a self-imposed challenge they rightly bathe in their success, they feel recharged and they emerge with an increased level of confidence. No wonder their comfort zone rapidly expands and their progress is obvious and clear to see for everyone. These newcomers are clearly enjoying themselves and are having loads of fun. The thought of quitting never enters their mind.

ACCEPTING CHALLENGES

These two case studies clearly indicate that the individual's preparedness to go the extra step towards expanding their comfort zone is essential for quick progression and for making the transition to a regular cross country pilot. The most obvious question is, "What can a timid newcomer do to overcome his or her reservations?" The answer is straightforward. First, the newcomer needs to decide whether he or she really wants to become a cross country pilot and, if so, whether he or she is prepared to make the necessary sacrifices. If the decision is yes, the only remaining question is how.

HERE ARE A FEW SUGGESTIONS

- Talk to your instructor and request permission to perform a right hand circuit onto a runway that you have so far only used for left hand circuits -- or vice versa.
- Consider a voluntary landing away from the home airfield! Again, talk to your instructor first and get permission for an outlanding only a few kilometres down the road. A nearby airstrip would also be suitable, but either way, it provides a first class chance to get out of that comfort zone again.
- Venture near the edge of the gliding range to your base and practice final glides in headwind and tailwind situations. Take note of the arrival height and fine-tune your approach distance on the next attempt.
- If you are the type of pilot who likes to return to the circuit area with at least 1,000ft to spare, I suggest you make an attempt to get out of this habit and deliberately put yourself into a position where you have to fly accurately, efficiently and cleanly to make it back to the airfield with just enough height for a normal circuit. (Of course, this applies only to airfields with landing options along the approach path.)

Accepting such challenges tends to focus the mind wonderfully and the reward for operating at the limit of your comfort zone is a vastly increased level of proficiency and competency. It also gives you a much better feel for the true performance of your aircraft and you can confidently judge what is safe and what is not – an essential skill for any future cross-country flying. Whatever you do, make sure you never let your aircraft take you to places your brain hasn't been to a few minutes earlier. In other words, have a 'Plan B' and make sure it can always be safely implemented.

DEALING WITH FEAR

We have already mentioned that our sport is not entirely free of risks. Yes, we can minimise it but we cannot eliminate it completely. Even a slight exposure to risks can trigger apprehension or even fear in persons with a low stress threshold and limited experience. When humans sense danger they respond with fear that, under control, ensures that they are vigilant and act in a more disciplined way. As such, fear is important and essential as it protects us from injury and potentially even from loss of life. On the other hand, fear can be a real obstacle to learning because in such situations, the brain is no longer capable of absorbing new information. This crucial fact is often not fully understood.

Sports scientists claim, with evidence, that progress can only be expected when participants constantly seek to extend themselves by training outside of their comfort zone. Put differently, to make progress we need to accept new challenges – even if it causes uneasiness or even a bit of discomfort. That may sound absurd, but it is scientifically undisputed. As soon as this uneasiness or discomfort is overcome it ensures rapid progress, which in turn makes our sport far more fulfilling and more interesting.

In her book 'Move Closer – Stay Longer', Dr Stephanie Burns delves deeper into the nature of fear and its effect on learning. She concluded that moving out of their comfort zone gets most humans into an area of increased discomfort. I'm sure this doesn't come as a surprise to anyone but it is exactly in this area of increased discomfort where learning happens quickly and efficiently. Too far out from comfort, however, can arouse fear. Regardless whether this fear is irrational, obsessive, phobic or based on incorrect information, it greatly interferes with learning. All too often it creates panic and useless, counterproductive action or no action at all. As a result we prematurely give up before we have any chance of learning something new.

NOT SO SCARY

My practical experience underlines these findings without reservation. As an example, I can report on some ridge soaring flights with typical flatland pilots on board. My co-pilots were initially very apprehensive and did not like flying in ridge lift relatively close to steep and rather rugged mountains. However, after less than half an hour they were fully relaxed and began to enjoy the beautiful scenery. After another half hour or so they were quite happy to take the controls and copy my flying style. The lesson is clear and obvious to see for all: activities initially seen as scary become far less frightening after prolonged and controlled exposure.

Let's look at another example. If we have the goal of soaring beyond gliding range of our airfield, we may develop a fear of outlanding at a strange place. This may cause us to avoid the new challenge and invent reason after reason for attempting the flight at some later date. Willingly engaging in an unsettling activity is certainly not easy and the question arises, "What we can do about it?"

Some of the suggestions made earlier might come to mind but concerns about outlanding can also be removed by refresher training with an instructor or coach on board. Fear quickly disappears by practicing outlandings under supervision. A motorglider is a perfect tool for this as it allows repeated outlanding simulations in a relatively short period of time, under different conditions and over different terrain. You are well advised not to pass up such opportunities when they present themselves.

SHARED STRATEGY

Another efficient method of overcoming nervousness in novice cross-country pilots is to fly in pairs. This enhances the feeling of security, and a possible outlanding seems less daunting with a fellow pilot in the vicinity. This also lessens the uneasiness about perceived navigation problems and, with GPS technology on board, any remaining apprehension disappears even further. Experience is pooled and decision making, including whether to press on with the task or to turn back in the face of difficulties, is shared. In short, the biggest favour an experienced cross-country pilot can do for a novice is to take him or her 'in tow' on a few early flights away from the home airfield. The next best approach is to take our more timid friends on a lengthy cross-country flight in a two-seater.

Let's sum it up: to have fear is human, to overcome it requires a strategy, and to laugh is what we do when the blips on the fear radar gradually disappear. Every action we take, no matter how small, is one step closer to our goal and another step we never have to take again. These steps might be difficult at first but the rewards far outweigh the early sacrifices.

BELIEVE IN YOUR ABILITY TO SUCCEED

This is perhaps my most important suggestion. You have every reason to believe you'll succeed. The stronger you are in this belief, the more effort you are likely to expend in shaking off some less desirable habits, and the more you want to persist in the face of an obstacle. Why not dwell on your accomplishments rather than on your failures? Often, our old selves have deep-rooted habits, half-baked ideas, concerns about limitations and perhaps even the fear of failure. A negative frame of mind doesn't go with gliding. Be your own coach, and remember that every time you work on your soaring skills you are getting one step closer to your goals and ambitions. Let that inspire you!

Adopt a new way of thinking – positive thinking. This is what it all comes down to in the end. Winners face life with a positive attitude and focus on successful outcomes. Winners never quit and quitters most certainly never win. GA

GLIDING – THREAT AND ERROR MANAGEMENT

COMPETITION SOARING AND OTHER SPECIALIST FLIGHTS PART 3

BY ARTHUR GATLAND

This three part series of articles was first published in Soaring NZ and is reproduced here with their kind permission.

In the last two articles, I introduced Threat and Error Management (TEM) as a simple yet powerful technique for assessing threats affecting any and every glider flight, and discussed how to use TEM in local and cross-country glider flights. Recognising threats allows pilots to predict situations where they might make errors or forget something, which increases the possibility of accidents.

As I said in the last issue, our accident rate in NZ is poor and yet none of our spate of accidents has been the result of structural or mechanical defects – all have resulted from pilots intentionally putting themselves in a situation that for various reasons has resulted in a crash. Ridges, rocks and trees do not suddenly leap out and hit gliders – yet we manage to collide with them on a regular basis.

This series of articles apply to every glider pilot in New Zealand, regardless of experience.

In this article I will continue the theme of TEM as it applies to competition flying, which of course includes all the threats for cross-country flying, but add a few important extra threats and pressures. Remember that to assess what constitutes a threat, we use the concept of a pristine flight, and look for anything that introduces a variation to this theoretical flight. Let's look at a pristine flight in the competition context.

PRISTINE FLIGHT (COMPETITION)

Recall from the last issue of SoaringNZ that a pristine flight relating to cross-country flying would be a 'straightforward' cross-country soaring flight where everything goes exactly to plan. In brief, it involves a well-prepared glider, a current and healthy pilot, and ideal soaring conditions over friendly terrain, with no time pressure. Additionally you will have chosen the task and this is likely to be based on the best conditions (predicted or observed), and you have ability to select your launch time, length of task, and the choice of shortening it if the weather deteriorates.

Of course, in competition flying there are many differences from a weekend cross-country flight, and these constitute additional threats for the competition pilot, and you need to have a strategy or plan to manage these threats. Let's review some of these:

Threats	Considerations	Strategies
Unfamiliar airfield	A percentage of pilots competing in any competition will not be familiar with the airfield or local area, particularly when entering the Nationals which will be out of region for many pilots.	Arrive at the site early, check on local rules and procedures, fly a few familiarisation flights. Get used to finding the airfield from several directions. If you can't arrive early, try to arrange a short local flight early on day 1 of the contest (in a glider, or hire a light aircraft).
Time pressure (ground)	Pre-flight: this is present every day in a contest; you simply can't afford to be late getting ready for launch. This can lead to rushed pre-flight, distraction from simple tasks, and forgetting critical items such as drink, snacks etc.	Always allow far more time than you think you will need to allow for likely delays. It is far better to get the glider to the launch point very early, allowing time for a relaxed drink / snack before earliest launch time. Use preparation checklists to ensure you have covered everything. Delegate this to your 'crew chief' if you have one!
Time pressure (in flight)	In-flight: Time is everything. The pressure to *keep pushing on* is ever-present, and every time you do one too many turns in a thermal, or choose a cloud which doesn't work as well as you hoped, the frustration and impatience increases. Time pressure can be compounded after what is perceived as a poor result the previous day. "*I only came 3rd yesterday, I have to push on even harder today (i.e. take more risks)!!*"	Preparation: on your weekend cross-country flights you should give yourself realistic tasks and timed challenges for practice. You quickly learn that effective speed-flying is surprisingly relaxed, based on good decisions made by thinking ahead all the time. If the thermals are weak, relax by realising it's the same for all competitors. Try to have a Plan B – *"If this thermal isn't at least 5 knots, I'll go straight to that cloud over there."*
Launch delay	By the nature of competitions, you can't launch exactly when you might like. Pilots can allow themselves to get frustrated by apparent delays in launching and by their place at the back of the grid.	In fact this should make very little difference to the task success. You must accept that (a) you have no control so accept your start time and (b) it's unlikely to penalise you and it could actually be an advantage. Relax and don't stress about it.
Navigation	Navigating over possibly unfamiliar terrain or routes that are not of your choosing add considerable pressure.	On your weekend cross-country flights, set yourself tasks over unknown country for training. At the competition, try to arrive early so you can fly a few local familiarisation flights. Consider hiring a light aircraft for a local scenic familiarisation flight (share the cost with other pilots).
Risk of landout	This increases in competition because you will try to complete the tasks regardless of the weather, whereas in weekend flying you would probably turn around and go home. When you start a contest, you should tell yourself that you *will* land out 2 or 3 times during the contest – and that you will make damn sure it doesn't result in a damaged glider or worse.	Landouts should not present significant safety risk if you obey basic safety rules. Be practiced at short landings, ensure you are *always* within range of good landing areas, and continually monitor wind direction and local weather effects. Never take a risk where a safe landing is jeopardised.
Pressure to get home	Landing out on a cross-country flight is always inconvenient, but in competition it means loss of points, possibly cancelling any chance of winning the contest, and could mean a long retrieve resulting in a late night and fatigue for tomorrow's task, or even missing the start time. There is an overwhelming temptation to push the boundaries to prevent landing out.	In your mind, carefully separate 'tactical risk' from safety risk. It might be smart to ignore a weak thermal and push on to a better looking thermal – albeit getting a bit lower – *as long as* there are good paddocks around. However NEVER defer the decision to land out *hoping* another thermal will appear by magic – because it won't. If you damage the glider, you can forget any chance of winning the contest! A safe landing is *always* highest priority for the competition points as well as your life!
Few landing areas	Many competition flights in NZ involve flights over areas with few landing areas. It is very tempting to just say "I won't have to land out" and push on regardless. This is called DENIAL and has been the undoing of many pilots in all forms of aviation. See also "impatience" below.	Always always always have a landing area in mind at all times. Make sure you have sufficient height to reach your designated paddock, and know your minimum height required to reach it. Do not leave the area until you have enough height to reach the next landing area. To win a competition you first have to finish the contest. If you take risks that *will* eventually result in damage, you will miss out on several days flying which really wrecks your points total (apart from the minor detail of risking your life, incurring repair costs and increased insurance premiums).
Impatience	Competitive pilots are always aware of the need to keep pushing on. This can lead to bad decisions based on impatience. You know you need 5,000 feet to move on, and be able to reach the next safe landing area. But at 3,500 ft the lift drops from 5 knots to 3 knots – you say "I can't waste time, I've got to go now – I'm sure it'll be OK..."	Listen to the little voice in your head that is telling you the required truth – that you are pushing your luck. Safety is paramount at all times – no exceptions. Gliding is a sport and should never be a life-or-death situation, however the evidence proves that some pilots have allowed it to become exactly that.
Frustration	Impatience always leads to increasing frustration, as things never go as well as you would like.	You must be self-aware and recognise when you are becoming frustrated. Then make yourself be careful, be methodical, and double-check all your decisions.
Weather changes	Unexpected weather changes have caught many pilots unprepared. "I didn't expect the wind to change direction"; "Unexpectedly the lift dropped from average 8 knots to about 2 knots"; "I didn't expect that sea breeze"; "Suddenly it started raining and I was forced to land in a rough area."	The term "unexpected weather change" is a contradiction. Nothing is more certain than the fact that the weather is *constantly* changing. This is a threat that you must *expect* to occur, and be ready. How many competition pilots have won the day because they were alert to the "unexpected" changes in the weather? Why do other pilots moan that "he was really lucky!"?
Inexperience	We all have to start somewhere! Pilots who have never flown in competitions can easily be a bit overwhelmed by the event, and excitement or adrenalin affects their thinking.	You must ensure that your first competition flight is the same as your last cross-country flight. Fly within your abilities and don't worry what anyone else is doing. (In fact, this is what the top pilots are doing anyway!) Set realistic goals for each day.

☛ continued over page

Fatigue	As soon as you wake up and start your daily activity, you are starting to accumulate tiredness! This fatigue is more rapid when you undergo challenges, continual decision making, stress/adrenalin, heat or cold, dehydration and hunger.	If you ever say that you don't suffer from fatigue, you are severely mistaken. Adrenalin enables many sportsmen to operate to a high level of physical activity for a period of time, but their decision-making often suffers. Glider pilots *will always* experience fatigue and their decisions at the end of a competition flight are often flawed. You must make safe conservative decisions and be aware of the risks of poor decisions.
Cloud flying	Instrument flying in gliders is a challenge, and requires training and practice. Threats include disorientation, navigation problems, rain or icing on the wings, procedural / radio requirements, inability to see where to go next etc. *I won a day at the Nationals once with lucky cloud climbs, but more often it's been a mistake – examples include icing on my wings which turned the Discus into a K6, or compass / navigation issues which meant I lost any likely gain etc.*	Cloud flying, like any specialist skill, requires training and practice and we don't often get the opportunity. More often than not there is no advantage anyway. I have heard pilots say they can maintain orientation in clouds without instruments – which is utter rubbish – gliders *do* have some natural stability but humans' eustachian canals are *very* easily disoriented. If you're not an expert in instrument flying don't try it in a contest!
Water ballast	Gliders handle differently when carrying water ballast, including during take off, aerotow, thermalling etc. Additionally it is another threat that needs to be handled before landing in a paddock or back at the airfield. There are weight and balance limits to observe, and with high altitude flying a risk of icing.	Don't underestimate the threat. Brief your wing runner, brief the towpilot, ensure you have clearance on both sides in case of ground loop. Know your best thermalling speed. Allow extra space from other gliders when thermalling because of reduced manoeuvrability. Have a contingency plan in case the water won't jettison correctly (or does so asymmetrically). Basically, *practice* flying with ballast routinely before you enter a contest. Also you *must* observe your glider's weight and balance limitations – do you know these?
Overconfidence	It takes a strong person to make an accurate assessment of their abilities and shortcomings, and over-rating your abilities can be fatal. Typically, all pilots go through periods of overconfidence in their flying careers – typically at 100 hours total time, then 100 hours on a new aircraft type or 100 hours after getting a Commercial Licence, or 100 hours of cross-country flying etc. Competitions tempt pilots to push their personal limits, and after one successful contest day you can easily convince yourself that you are a god and can handle anything. Well ... you're not and you can't.	"Pride comes before a fall", Proverbs 16.18, which shows how long humans have been aware of the dangers of overconfidence. Ask any pilot who has flown 10,000 hours and they will openly admit you *never* stop learning about flying, and you will *always* make errors of judgement. Anytime you read accident reports and find yourself saying "what an idiot", or "I would never do that", or "I could have coped with that" – then YOU are overconfident. Always look for your mistakes – because they are there! The important thing is to recognise the big ones!
Poor preparation	Poor preparation can stem from overconfidence. ("I don't need careful preparation because my experience or natural ability will see me through".) Or it can stem from laziness, or lack of organisation or lack of time.	In all cases, don't underestimate the dangers of lack of preparation, which can lead to errors in rigging, forgetting essential equipment, not being mentally prepared, added time pressure, and finally that little nagging voice that says, "I think I've forgotten to do something" which is a huge distraction (but it's probably correct!).
Final glides	Final glides are a huge threat due to their nature – intentionally flying lower than normal, often based on a calculated glide distance which may or not be correct, through unknown lift / sink, coupled with fatigue at the end of a long flight and hours of adrenalin. There is a common threat of crossing the finish line and having no plan on how to actually land! This is partly caused by the phenomenon of 'anti-climax' – after stress or pressure is removed, particularly after a success, the earlier continual adrenalin causes an anti-climax, and people feel very flat and suddenly tired. This shows up as pilots finish a task but actually relax and forget to think about landing safely. *I have personally seen several accidents after misjudged final glides, including trying to pull up into the circuit with insufficient speed.*	Firstly, practise final glides regularly (this doesn't mean a beat-up – it means practising the judgement involved with appropriate radio calls and local rules etc.) Secondly, make sure you always have a safe speed, and plan how you will land. If your plan is to pull up into a circuit, you must always have a Plan B – usually landing straight in if you don't have over 100 knots at the finish line. *Frank Gatland – who was still doing safe final glides at age 85 – was a firm advocate of always landing straight in – it is safe, just as fast, and removed the extra threats and challenges of a low circuit when you are tired.*
Other gliders	Competitions involve large numbers of gliders often in close proximity. Mid-airs are invariably fatal.	Lookout, lookout, lookout. Particularly pre-start and at turnpoints – but just as important at all times.
High altitude	In Part 2, I talked briefly about some of the threats in wave flying. These include: • Use of oxygen • Cold temperature • Higher wind speeds • Icing • Terrain • Aircraft limitations – IAS/TAS relationship • Turbulence In competition the threats are the same but the temptation is greater to push on when you are cold, low on oxygen, or otherwise uncertain about some aspect of the flight.	Without overstating the issues, any of these can kill if you don't understand the issues and procedures. However with correct training, preparation, and self-monitoring and self-discipline, there should be no issues with any of these. Never be complacent with wave flying. Remember the 'catch 22' that hypoxia can lead to euphoria, over-confidence and loss of self-criticism – so if you find yourself thinking everything is fantastic, check your oxygen! All glider pilots should undergo RNZAF hypoxia training – it is an invaluable experience!

I could go on and on – but hopefully you have picked up the themes involved here. It's all about recognising threats on any flight and managing them so that they do not lead to errors or significant risks. In other words, AWARENESS of the Threats and the right ATTITUDE for safe competition flying. As I said in Part 2 of this series, cross-country flying by its very nature has a significant number of threats, including a continual possibility of landout, weather changes, unpredictable lift, different terrain with changes in height above sea level, often areas of partly unlandable country, or flat but very small paddocks, use of unfamiliar hills to find ridge lift, navigation challenges, and so on. It is actually the presence of these threats that form part of the challenge, the fun and satisfaction of cross-country flying. Competition raises this to a higher level, as you test your skills against some very skilled and experienced pilots. However you must not underestimate the risks that these challenges present. Because flights are often of longer duration, dehydration and hunger are always present to some extent, and have an insidious effect on your decision-making. In the Nationals at Omarama years ago, I pushed a bit too far past the last good paddock but didn't find lift and had to turn back to the paddock, and only just made it, ground-looping and giving myself a scare. I should have made the decision to land much earlier. I actually won the day but almost damaged the glider – but why? If I had landed in the paddock first time I would still have won and not risked injury or damage, apart from the embarrassment!

MANAGING THREATS

All these threats increase your likelihood of making an error. In this context we are not talking about errors in speed-flying, like not picking the strongest thermal, or incorrect speed-to-fly technique. We are discussing errors that result in reduced safety margins, or ultimately could contribute to an incident or accident. Most pilots can very easily recognise all threats if they think about it, but a superior pilot will implement a strategy to prevent an error resulting from any of these threats.

INSTRUCTOR RESPONSIBILITY

Once again, instructors and experienced competition pilots must help us lift our game. They should be aware that inexperienced competition pilots (and even experienced ones!) may not recognise all threats existing on any particular day. You can help these pilots by simple discussions about the task, the weather, the terrain etc. A short helpful chat to ensure they are fully prepared, have a plan and iare mentally prepared to land out if necessary, may save lives. It will actually help you to think about the threats and focus your own mind on safety.

As I said previously, the main ways that new pilots can gain experience and knowledge is by instructors or experienced pilots passing on these thoughts, OR letting them learn by making mistakes! Which method is better??!!

CONSEQUENCES OF ERRORS

When competition flying, the most common and most serious safety-related errors – that of late paddock selection and speed maintenance when ridge flying – have consistently proven to have serious implications including major damage, injury or death. Yet collectively we persist in committing these errors. To be blunt – why are we that dumb? I don't know ... but I suspect it's gross over-confidence, or ignorance, or denial – "it'll never happen to me."

All I can say is that if this applies to you, then YOU need to wake up and realise how illogical your attitude is. Just ask your wife/husband what they think about your attitude to survival...

SUMMARY FOR ALL GLIDER FLYING

Every glider flight, whether local, cross-country or competition, involves some threats, and all pilots must ensure they recognise these and have a strategy to manage the threats and prevent errors, and/or have a process to catch errors or slips that may have occurred. Remember we ALL make some mistakes on every flight – the important thing is to ensure they are not critical ones, or that they are captured before they lead to an undesirable position.

USEFUL STRATEGIES

A reminder that the following are just a few examples of TEM strategies that should become automatic to be a skilled and safe pilot.

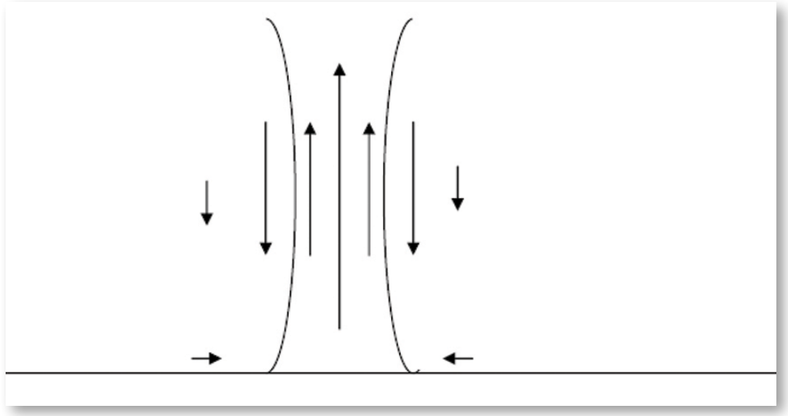
GA

THERMAL STRUCTURE

BY JAMES COOPER

Over some years, I have considered my theories on the development of thermals and streets, as the two blend together, and they consistently appear to be proved correct. Most of the ideas are from my personal observations, but stem from a concept mentioned in Wallington's Weather for Glider Pilots. The use of the lee side of bush as a thermal source works from the very first thought in the morning to the end of the day.

We should be aware of the basic structure of a thermal, once fully developed. Note that in the case drawn, it is a classic thermal with no wind shear, and assumes a nice column length. At the bottom, the thermal is dragging in surrounding air. Remember this when you are low, or you will get dragged into the core. It rises but, due to the friction between the rising column and the surrounding air, the core will rise faster than its edge. As the rising air has to be replaced, a down draft will develop adjacent to the rising air. The friction between the sinking and rising air will develop turbulence that is noticeable as you enter the thermal from the side. As the thermal reaches the top, it is spread out by the inversion and will try to push you



out. If you must continually try to recentre at the top, this could be why, and it may be time to go. You should be able to see from the diagram why the core is so much stronger and therefore why it is necessary to make quite a tight turn.

When considering a bubble rising you will be aware that the core of the bubble will be going up at a higher rate than the edge of the bubble. Therefore, the rate of ascent of the whole bubble will in fact be lower than the core itself. Bearing this in mind, it may in fact be possible to out-climb the bubble. This could indicate why some climbs start well and get a little rough as you climb through the bubble. The climb rate then drops off but becomes smooth as you reach the top of the bubble but continue to climb on the top of it.

THERMALS BEND WITH THE WIND, OR IS IT AGAINST?

As we have seen from the descriptions above, the thermal will form a vertical column. Just look at a willy willy and you will see its vertical tendency. Thermals do not bend into wind or down wind. There are some cases where kinks may occur in a thermal.

They may also lean as they exit the thermal source on the basis that the air leaving the ground is still and the upper air will be stronger. The rising air will need to accelerate and, having mass, this may take time.

WIND SHEAR

When considering what happens to a thermal column you need to think of it in a box of air that is travelling downwind with it. The bubble will be rising vertically in the box and so form a vertical column, while the whole box is drifting downwind. The problem arises when the top of the box is moving downwind at a different speed, compared to the bottom.

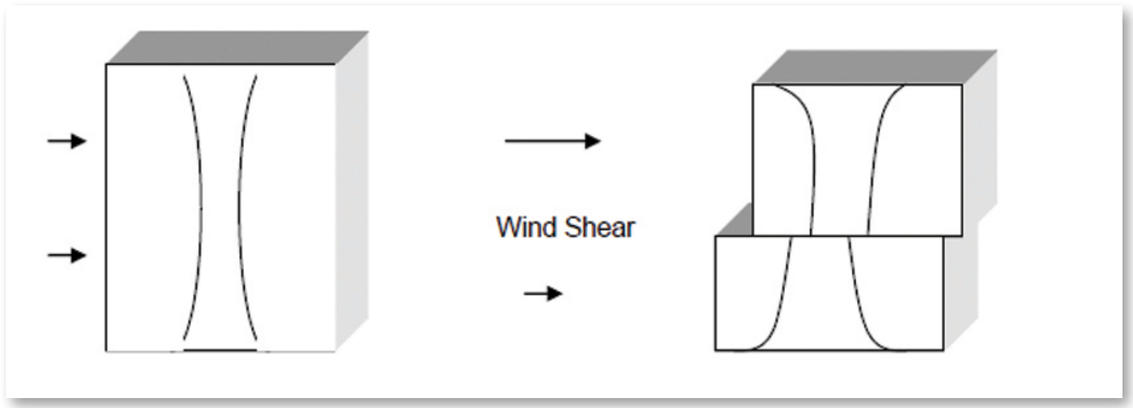
We can see in the figure on the right that the wind shear will move the upper column downwind.

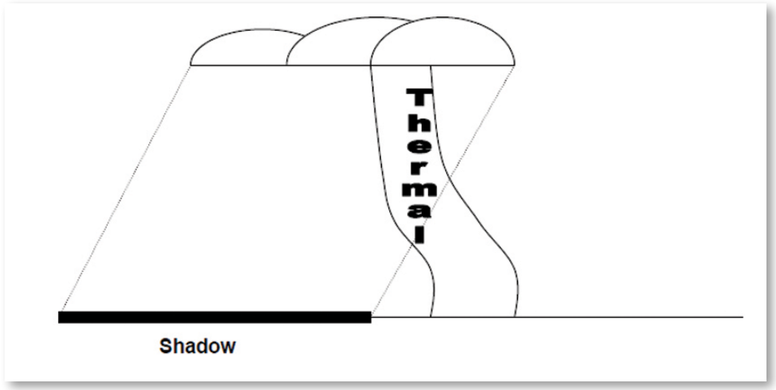
SHIFT INTO WIND OR DOWNWIND

When you have lost the core of the thermal, you will have to recentre on the assumption that you have not lost it due to inaccurate flying. The general comment is move into wind. This is good when you have reached the top of the thermal, or fallen out of the bottom. Move into wind to find the original thermal source. However, if there is a wind shear, wind usually gains strength with height, and it will be necessary to move downwind, i.e. with the shear. You can see from the diagram that if you are at the top of the bottom half of the thermal, to move back into the core you need to move with the shear to get into the bottom of the top half of the thermal. On this basis it makes sense to examine the weather report in the morning.

CUMULUS

If we are lucky enough to have cumulus forming, cross country speeds will be increased dramatically. You can see the thermals and will be able to use them like stepping-stones to fly like across the sky from one to the other. With careful observation you can see the core as you approach.





In addition, the thermal strength is generally stronger under a cu so that for the same thermal height in the blue, normally 1kt strength per 1,000ft height band, I have also heard 1kt per 1,000ft minus 1. This makes a little more sense.

WHY DOES A CUMULUS INCREASE THE LIFT?

- When you boil a kettle you have to put in energy to convert the water to water vapour. Knowing Newton's law - for every reaction there is an equal and opposite reaction - if you convert water vapour to liquid water, you get energy back.
- Air can only hold so much water vapour. The cooler it is, the less it can hold.

As the thermal rises, cooling at 3° per 1,000ft, it will eventually reach a height where it has cooled to the point at which it can hold no more water vapour. This is the dew point. The water condenses and, as we have seen above, we will get some heat input into the thermal. There will now be an added boost to the thermal. Once the cloud has developed sufficiently, it will actually begin to suck air in. If you can keep in contact with the cu's, there is a great advantage.

When flying on a cumulus day it is worth noting how it will affect the thermal sources. If the sun is high in the sky, in effect, it produces shadows directly under the cu. This will cut off the thermal source, so the thermal will not last for long. Well, this is what we may think at first. On the basis that the sun is on the ground adjacent to the shadow producing the hot layer of air, that will now become thicker than the air above the ground in the shadow.

Another thermal will rise, but to the side of the cloud along the shadow line. It will tend to rise vertically and then shear to one side so as to be directly under the sucking Cu. If there is any wind, we can assume that the thermal column will not be upwind of the cu as it will already have consumed that air. If the sun is other than directly overhead, there will be a tendency for the thermal source to be on the sunny side of the cu as this gives the least path of resistance to the rising thermal.

WAVE

Wave is a phenomenon that we get more often than we recognise, although sometimes we recognise it when it is not actually there. On the flat lands where we fly, the wave is generated either by wind shear or by a frontal system to the west. The wave can be visible by producing wave bars in the form of lenticular or cumulus with smooth tops. The effect of the upper level wave will affect the thermal activity right to the ground. The secret is to recognise it and act accordingly.

When the wave is on the up stroke, there will be a tendency for the wave to pull thermals from the surface. They will break away smoothly and tend to achieve higher altitudes than we would normally expect the day to achieve - that is, under the cloud and towards its windward edge, that being the upper wind.

When the wave is on its down stroke, it will tend to depress the thermals. If the thermal rises due to the reasons mentioned previously it would in turn be depressed by the upper wave. On that basis you will tend to get large areas of air trying to gain height but in turn being depressed - in other words, areas of rough thermals going nowhere. The danger is assuming the thermals are no good and pushing on when all you are going to run into is further subsiding air. The wave length may be many many kilometres.

Remember that it is unwise to go cross wind in the down part of the wave. Better to push into or down wind to find the best part of the wave before going across.

ROGUE THERMALS

We have a term called rogue thermals, which are considerably stronger, smoother and go higher than others found on a given day. The problem is recognising them and being aware that the day has not actually improved. The tendency of the glider pilot having taken a 10ktclimb, for example, is to push on hard, leaving the 6kts he would had previously taken behind, until he starts calling Kilo Uniform and landing out.

I do not know the reason for these rogue thermals forming and would dearly like to know how to track them down. Don't confuse them with the sea breeze front, which can have a similar effect, but in addition has a strong wind and no thermals behind it!

jamescooper.com.au

TRANSPONDERS, CLASS E AND THE MISSING SAFETY CASE

PROFESSOR SIDNEY DEKKER
National Safety Advisor

The recent proposal by Airservices Australia to lower the limit for Class E airspace between Cairns and Melbourne has created quite a bit of turbulence in the country's aviation community. Pure gliders are, purportedly, exempt from the resulting transponder requirement but tugs, motorgliders and self-launchers wouldn't be. It also creates the requirement to monitor Class E radio frequencies.

The proposal came across as half-cocked to many in the community. For example, there was no indication of any awareness of or effort to understand the practical consequences and cost that this proposal imposes on an aviation activity like ours. Also, no accompanying Regulatory Impact Statement was delivered that could somehow justify to the Australian Government that the cost of this proposal is 'reasonable.' On the face of it, the proposal appears to be designed to lock out some airspace users from large sections of little-used airspace.

SAFETY CASE

But perhaps even more centrally, there was no safety case. Presumably, the argument would be that this proposal, if implemented, makes aviation safer. I asked around in Europe, and there is actually no coherent evidence that carrying transponders in gliders has made aviation there 'safer'. This could be, of course, because we don't know the accidents transponders have supposedly prevented, but you'd think that there would be strong data on reductions of airspace incursions, midairs, airproxes and more. To date, I haven't found such data – but if you have it or know where to get it, let me know.

So, what is a safety case? A safety case is a justification that a product, system or policy is acceptably safe for its intended role. Implicit in the growth of safety regulation across industries, including aviation, was the development of formal processes for demonstrating to a regulator that a system, installation, substance or process was safe—or that some intervention could make these things safer, which would then justify the cost. Disasters such as the 1988 Clapham Junction rail collision in London and the Cullen enquiry into the Piper Alpha disaster of the same year led to extension of a safety case approach into other sectors, like rail, offshore and, again, aviation.

EXPLAIN AND JUSTIFY

In tightly regulated industries, individual organisations have little flexibility in what to present or how to present a safety case. It is largely built around compliance with what other stakeholders tell them to demonstrate. In cases of more flexibility about what standards or processes to follow, we have an obligation to explain and justify why those standards and processes are deemed appropriate and why others are not. A safety case, in either sense, presents a record of all the safety-related information concerning the product or system. This includes:

- an overall safety argument
- safety evidence from analyses of the product or polcy or system
- applicable design information
- evidence from development, testing and in-service experience

The role of argument in safety cases is frequently neglected in favour of voluminous but unstructured numeric evidence. Of course, argument without evidence is unfounded and probably unconvincing. But evidence without argument, without contextualising and explanation, can lead to pressuring stakeholders through sheer weight of numbers and the putative hard work needed to generate them. In the case of Airservices' proposal, we actually – and remarkably – have neither.

LISTENING TO STAKEHOLDERS

So, here are some of the things that a safety case would discover and demonstrate. It would first show that the proposal does not actually list any possible adverse consequences of the change. This suggests that no one behind its creation has even thought about non-IFR users. The first thing a safety case might do, therefore, is show some curiousity about who the stakeholders are, and listen to them.

What about the claimed benefits? Aligning Australia closer to ICAO and US ways of doing things is pretty spurious. Australia, after all, has maintained differences from ICAO and FAA regulations for many years – in some cases for good reasons. A safety case should demonstrate what benefit there is in this alignment, other than simply a goal in and of itself. The idea that it has anything to do with overseas aircraft operating here is not really applicable. They fly way above anything like the airspace being considered here on their way in, and then mostly operate into major airports already served by class C airspace. So, nothing matters to them there.

AIRSPACE USERS

What about the supposed improved safety for Regular Public Transport (RPT) and other airspace users, by reducing complexity for pilots and controllers? RPT aircraft operating into uncontrolled airports will still need to transition from class G to class E – and at a lower level shortly after takeoff which will increase, not reduce, workload. Even if this is justified, why reduce the floor over such a large area when only small areas around the airports concerned might need it?

Then there's the argument that the proposal enables enhanced surveillance service. A safety case would show that this doesn't matter, because IFR aircraft are required to be in contact with ATC in class G anyway. If radar coverage is available, it will work in class G just as well as E. The same goes for the argument – again, unsupported by a safety case – that this proposal would assist controlled airspace in the containment and separation for IFR flights.

How is that helping safety? It actually isn't. In fact, for IFR aircraft operating into uncontrolled airports, the inability to self-separate from other flights may actually be a net negative. A further claim states that this facilitates Continuous Descent Operations. There's no evidence for that whatsoever, and also no argument that it would actually help safety.

HALF-BAKED

A safety case would show that most, if not all people operating IFR in class G airspace have never had any issue with continuous descent. In any case, this would only matter in the vicinity of uncontrolled airports with significant IFR traffic. Again, a safety case would have shown this. Finally, there is the argument that this proposal improves the use and value of existing investments such as ADS-B, ACAS. Really? This is the sunk-cost fallacy of a solution looking for a problem. A serious safety case would have no time for this argument alone. What implications for safety does the 'improved use' of these investments create? We are left none the wiser.

For those who find a proposal like this half-baked, you find plenty of support in the science of system safety and safety cases. They've been around for a while, and there is no excuse for creating such havoc in aviation in Australia without using the sorts of methods that exist exactly for the purpose of combining evidence and argument. Safety people, safety engineers – or hopefully any engineers – don't slide, gloss over or assume. They develop, they test, they check and then they do it again. I look forward to seeing even a whiff of that in relation to this proposal.

Many thanks to Clyde Stubbs for his helpful experiences and insights.

MINIMUM EQUIPMENT SERVICEABILITY

ANTHONY SMITH
Chair Airworthiness Department
cmd@glidingaustralia.org

Every sailplane has a Minimum Equipment List (MEL) that the design is certified with. This equipment is listed on the Type Certificate Data Sheet (TCDS). The equipment on the list is dependent on which standard the aircraft was designed to and the requirements of the country it was designed in.

A separate list of equipment is required to operate an aircraft in Australia. For example, Civil Aviation Order (CAO) 20.18 lists the instruments which must be fitted for flight under the Visual Flight Rules (VFR). CAO 20.18 includes the often debated requirement to have a magnetic compass fitted.

Operational and airworthiness requirements, including the aircraft type design approval requirements, require that every item of equipment installed in the aircraft must be operational at the beginning of a flight.

Civil Aviation Regulation (CAR) 37 provides CASA with the authority to approve a list of equipment that is allowed to be unserviceable under prescribed conditions. These lists of unserviceable equipment are referred to as Permissible Unserviceabilities (PUs). Lists of aircraft components such as undercarriage doors that are unserviceable are referred to as Configuration Deviation Lists (CDLs).

GFA has an exemption to CAR 37. Instead, the GFA has a minimum equipment list that comprises of the minimum equipment list from the Type Certificate Data Sheet for the sailplane and the equipment listed in MOSP 3, Chapter 8. The GFA also has AIRW-M15 – Permissible Unserviceabilities which legally enables operation of sailplanes with unserviceable or removed equipment that do not compromise safety.

In the past, GFA has operated with a system allowing flight with minor defects which are recorded in the maintenance release and do not affect safe flight. This is still in effect and allows flight with minor defects considered safe by the Daily Inspector as detailed in MOSP 3. AIRW-M15 – Permissible Unserviceabilities is an extension of this system and gives legal coverage for some unserviceable items which would otherwise be in breach of either the type certification or CAO 20.18. AIRW-M15 – Permissible Unserviceabilities also lists the conditions and procedures that are required to be implemented.

While a Daily Inspector or higher can allow flight by documenting unserviceabilities that don't affect safe flight as a minor defect, if the unserviceability is listed in AIRW-M15 – Permissible Unserviceabilities, the requirements listed in that document must be met.

The classic example is where aerotow clubs remove the belly release from a sailplane. With some aircraft types, the belly release is included in the minimum equipment on the Type Certificate Data Sheet. Removing the belly release is a breach of the type certification of these aircraft. AIRW-M15 – Permissible Unserviceabilities allows for the belly release to be removed provided a placard is installed adjacent to the release handle and an annual inspector checks to ensure the release activation cable is appropriately stowed and there is nil effect on the operation of the nose release.

AIRW-M15 – Permissible Unserviceabilities can be found https://bit.ly/3aYP80B

Occurrences & Incidents

All clubs and GFA members are urged to report all occurrences 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 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.

From 1/11/2020 to 31/12/2020

Damage	VSA	NSWGA	WAGA	GQ	SAGA	Total
Nil	3	7	2	3	1	16
Minor		5	2	3	2	12
Substantial	1	1	2		1	5
Total	**4**	**13**	**6**	**6**	**4**	**33**

Injury	VSA	NSWGA	WAGA	GQ	SAGA	Total
Nil	4	13	6	6	4	33
Total	**4**	**13**	**6**	**6**	**4**	**33**

Phases	VSA	NSWGA	WAGA	GQ	SAGA	Total
Launch	1	6	3	1		11
Landing	2	5	1	3	2	13
Ground Ops		1	1			2
In-Flight	1		1	2		4
Thermalling					1	1
Outlanding		1			1	2
Type of Flight	**VSA**	**NSWGA**	**WAGA**	**GQ**	**SAGA**	**Total**
Training/Coaching	3	1	2	2		8
Local		5		3	2	10
Ground Ops		1	1			2
Cross-Country	1	5	2	1	2	11
Competition		1	1			2
Total	**4**	**13**	**6**	**6**	**4**	**33**

Level 1	VAG.	VSA	SAGA	ISWG	GQ	Total
Airspace	1	1	1			3
Operational	3	3	3	12	6	27
Technical	2			1		3
Total	**6**	**4**	**4**	**13**	**6**	**33**

1-NOV-2020 VSA
GROB G 103C TWIN III SL - PIPER PA-25-150
ROPE/RINGS AIRFRAME STRIKE

What Happened

As the tow plane was taking-up the slack in the rope for an aerotow launch, the glider pilot observed the tow rope pass over the starboard wing. The glider pilot released the rope, but the rings caught in the aileron gap and the glider was pulled to a position 60-70 degrees off the runway heading before the tug was brought to a stop. An airworthiness inspection determined that the damage to the glider to be superficial and the glider returned to service.

Analysis

The incident occurred on the first flight of the day. The tow pilot taxied to the launch point on RWY 10 and parked adjacent to the runway leaving the tow rope across the runway. Subsequently, the glider was towed into the launch position a short distance downwind of the tug and ahead of the rope that was concealed in the grass. The glider pilot reported that during their pre-boarding checks she noticed the tow rope laterally about 2-3 meters and slightly behind the starboard wingtip. The pilot suspects she either considered the rope to be in an acceptable position or that there was more rope hidden in the grass that was not visible. The launch commenced shortly thereafter, and the tow pilot taxied to take up the slack. At this stage it was not apparent to either the glider pilot or ground crew that the tow rope was not properly positioned. As the slack was taken up the tow rope was drawn over the starboard wing which has downward curving wingtips. The wingman, who was holding the port wing, noticed the tow rope lying over the starboard wing and alerted the glider pilot. The glider pilot released the tow and radioed the tow pilot to stop. The tow pilot began to take-off and the glider pilot made another radio call to stop the launch. The tow pilot reported that he misinterpreted the first radio call as a signal to take off, as he had hesitated for some time while attempting to get a clear view of the wingman. The tow pilot applied power but a few seconds later he heard the glider pilot radio a second time to stop and brought the tow plane to a halt. However, before the tow plane could be stopped the tow rings caught in the starboard aileron slot and the glider was rotated about 60-70 degrees from runway heading.

Action Taken

The CFI interviewed the glider pilot, tow pilot and wingman on site immediately following the incident. The glider was inspected by the Technical Officer who determined the damage determined to be superficial and cleared the glider for flight. The club has since carried out the following actions to avoid a recurrence of this type of incident.

All pilots were reminded of the need to ensure that the tow rope is properly laid out forward of the glider before connecting the launch.

Tow pilots were reminded that radio calls should be regarded as unreliable and launches only commence based on standard ground crew signals.

All members were reminded of the importance of correct launch procedures and signals and particularly the procedure for stopping a launch.

Additional emphasis has been placed on the training of new members in ground crew duties.

A forward signaller is now employed for normal operations.

14-NOV-2020 NSWGA
OTHER POWERPLANT/PROPULSION ISSUES
SZD-50-3 "PUCHACZ"- PIPER PA-25

Under investigation. During the aerotow launch the tow plane accelerated slower than normal and once airborne the rate of climb was low. At about 200' AGL the glider pilots noticed black smoke from the tow plane's exhaust, and at 250ft AGL the tow pilot signalled for the glider pilots to release. The glider pilots immediately released from tow and conducted and downwind landing on the reciprocal runway. The tow plane safely landed shortly afterwards. The tow pilot identified that he had conducted the launch with carburetor heat turned on. When flying in conditions that appear conducive to the development of carburettor ice, carburettor heat will be applied by the pilot at regular intervals as both a preventative measure against the formation of ice and a method to test whether or not carburettor ice is developing. If a normal drop in RPM or manifold pressure accompanies the application of carburettor heat, it is reasonably certain that ice is not forming in the carburettor. However, the use of carburettor heat will decrease engine performance by up to 15%, so pilots should beware of flying around with it continuously selected as the aircraft will use more fuel than planned for and this practice could potentially decrease the life of the engine due to an inappropriate mixture setting.

18-NOV-2020 VSA
HARD LANDING
SZD-50-3 "PUCHACZ"

Under investigation. During a flight review of a solo pilot, the instructor was too late to take control and prevent a heavy landing. The instructor conducted an inspection of the tail for damage and found none. The glider was then re-launched by aerotow, and during the ground roll the pilot under check dropped the right wing and took a while to get the wings level. At about 200ft AGL the flight crew identified they had no left aileron control. The command pilot informed the tow pilot of their difficulties and requested they be towed into position to conduct a right-hand circuit to the operational runway. The landing was completed without further incident and a post-flight inspection revealed nosewheel damage, a cracked front bulkhead with delamination from the skin, and interference with (and possible bending of) the aileron control circuit. This incident highlights the importance of always having an authorised inspector, who is familiar with the loads that the sailplane is likely to have been subjected to during a heavy landing, conduct a thorough inspection of all the likely damage points. For specific guidance on heavy landing inspections, refer to GFA Basic Sailplane Engineering, Chapter 25 https://tinyurl.com/yytzwo3d.

19-NOV-2020 WAGA
OTHER POWERPLANT/PROPULSION ISSUES
STEMME S10-VT

Under investigation. During a ferry flight from South Australia to Western Australia and while over the Nullarbor, the engine began to run roughly. The vibration caused by the rough-running engine dislodged the nose probe, which hit the propeller. The probe smashed one blade of the propeller, chipped the other blade, and made a small hole in the wing. Fortunately, the glider was over Loongana WA airstrip, where a safe landing was made.

21-NOV-2020 NSWGA
DOORS/CANOPIES
SZD-48-1 JANTAR STD 2

During aerotow launch the glider climbed through sharp and relatively severe turbulence. At about 2000ft AGL the pilot released from tow, at which point the glider's canopy departed, missing the airframe entirely. The pilot observed the canopy tumbling towards the ground and then joined circuit and landed without further incident.

The pilot reported the glider was being flown for the first time with the seat back one notch further forward to allow reach of a newly installed instrument (LX100). When the canopy was put onto the glider the pilot found his head was touching the canopy. The pilot readjusted the seating to move it down and forward to allow adequate clearance. The pre take-off checks were then resumed and take-off initiated.

The pilot believes he locked the canopy when it was placed on the glider and thought it curious that the canopy stayed in place during the turbulence in the early part of the launch. The pilot suspects that either the locking mechanism was disturbed when he adjusted the seating position, or it may have gradually unlocked in the turbulence. The pilot stated that he did not recommence his pre take-off check after it was interrupted, so he could not state with certainty that the canopy was secured prior to launch. In hindsight, the pilot suspects his past incident free experience had led him to become complacent regarding his 'checks' when flying solo, and was perhaps combined with reduced currency due the COVID-19 pandemic.

21-NOV-2020 NSWGA
WHEELS UP LANDING
JS1 B

The pilot was flying "hors concourse" at the NSW State competition. On the last day of competition an assigned area task had been set with a 15km finish circle around the home airfield. After rounding the final turnpoint the pilot realised he would need to lose height in order to land off a straight-in approach, so flew the latter part of the approach at 80 knots with the airbrakes extended. On nearing the airfield, the pilot made his flap and rim adjustments but forgot to lower the undercarriage. The glider landed on the grass runway with the wheel retracted.

The glider suffered only minor abrasions to the lower fuselage. This is not an uncommon incident at competitions where straight-in approaches are encouraged to minimise circuit congestion and potential conflicts. Under normal flying operations a pilot will conduct at least three legs of a circuit and will conduct a pre-landing check during the downwind leg. However, a straight-in approach off a racing finish is a departure from normal operating procedures that requires the pilot to amend their normal routine, especially in the conduct of checklists.

It is also a time of high workload that can cause a pilot to become overloaded and goal fixated. Concentrating on only one thing while flying, such as how the approach is to be conducted, can be dangerous, leading to loss of situational awareness and control. It is for these reasons that pilots conducting straight-in approaches at competitions must plan for the landing well in advance and

ensure that once the finish line has been crossed that they make the transition to landing pilot and properly configure the aircraft while maintaining situational awareness.

25-NOV-2020 NSWGA
WHEELS UP LANDING
LS 6-C

What Happened

After arriving at the home aerodrome in turbulent conditions during a storm, the pilot forgot to conduct a pre-landing check and did not identify that he had not configured the aircraft for landing. The aircraft touched down with the undercarriage retracted.

Analysis

The pilot was flying in the Narromine Cup and had returned to Narromine aerodrome after a 3½ hour flight where he found localised storms and quickly changing weather conditions. The pilot intended to land and flew towards the circuit area between the rain showers where he experienced significant turbulence and sink. The pilot stated: "I was concerned about the power of the falling rain and the associated wind. My focus was to avoid the rain cells and get the glider into the circuit as I was losing height rapidly." The pilot made a radio call to the ground operations and requested wind direction and preferred runway. Over the next few minutes, he was advised of 2 different wind directions and 2 different preferred Runways as the wind direction was changing ever few minutes. The pilot elected to land on RWY22 Grass and found he had to modify his circuit due to the strong sink. The pilot made a successful landing in turbulent conditions but touched down with the undercarriage retracted.

Safety Advice

Pilot workload varies, even during routine flights, from low to high and will rise in the event of abnormal weather conditions or aircraft malfunctions. During high workload, pilots are especially vulnerable to error and psychological issues such as task fixation. In this case, abnormal weather conditions, high workload and an element of stress resulted in the pilot omitting to complete his prelanding checks that would have alerted him to the undercarriage being retracted. The risk of error is higher in single-pilot operations where there is no co-pilot to assist with resource management. The task of managing threats and errors is difficult in single-pilot operations but can be improved if pilots conduct a Situation Awareness review after a period of high workload. For more information, refer to the document 'Gliding – Threat and Error Management' available from the GFA Documents Library.

6 DEC -2020 GQ
OTHER CREW AND CABIN SAFETY ISSUES
DG-1000S

What Happened

A training flight was being conducted with the student, following pre take off checks, take-off commenced uneventfully. At approximately 200 ft AGL the instructor in the rear seat noticed the right-hand shoulder strap of the front seat harness was hanging loosely over the student's shoulder. The instructor took control of the glider while the student fastened their harness.

Analysis

The instructor and student boarded the glider for the student's second training flight on the day. The instructor listened to the student correctly verbalise his pre- and post- boarding checks in preparation for the aerotow launch. During the launch the instructor noticed the loose shoulder harness and asked the student to check if his harness was secure at which point the student found the harness was not secured at all. The student fastened the harness while the instructor had control of the aircraft.

Findings

The student did not secure the harness on entry to the glider. The student conducted the pre- and post-boarding components of their pre take-off checks but failed to physically confirm that his harness was secured. The harness type in this glider is four point with a central buckle which is turned to release. The instructor confirmed that there was no noticeable distraction while they prepared for the launch. The student had flown in this particular aircraft on approximately ten previous occasions.

Causal factors

The student stated that he must have checked the parachute harness and not his seat harness while conducting the pre take-off check. The instructor cannot visually see that the harness has been secured from the rear seat. The student had only completed 10 training flights at the time of the incident and is relatively inexperienced and still getting familiar with boarding and pre-launch procedures.

Safety Advice

On boarding a glider, the crew should always secure their harness as a first priority. Instructors might consider visually checking the security of the student's harness before boarding during initial training flights until the student has developed this habit. When checking the 'Harness' during the post-boarding component of the pre take-off checks, the pilot must visually look at the harness buckle and apply pressure against the straps to confirm it is tight and secure. This incident serves as a reminder to all pilots of the importance of completing checklists in a thorough and methodical.

11 DEC -2020 VSA
AIRCRAFT SEPARATION
PIK-20 - PIPER PA-28-161

What Happened

The pilot of a Piper PA-28 reported passing close to a glider approximately 35NM WSW of Wagga Wagga at 6000ft in Class G airspace while flying on a converging heading.

What Happened

The pilot of a Piper PA-28 reported passing close to a glider approximately 35NM WSW of Wagga Wagga at 6000ft in Class G airspace while flying on a converging heading.

Analysis

The Piper PA-28 crew were on a closed-circuit training flight from Wagga Wagga, with waypoints being Albury and Narrandera. The glider pilot was flying a 340km closed-circuit task originating from Tocumwal, with turn points being Corowa and The Rock. At about 14:58 local time the Piper PA-28, on a heading to Narrandera, and glider, on a heading to Tocumwal, passed within proximity of each other. Flight data logs for both aircraft were made available for review. The glider pilot carried a 'NANO' flight recorder that features an integrated 66-channel GPS receiver, built-in antenna and built-in battery. Flight data, such as GPS derived time, position and altitude, are stored directly in IGC format and are downloadable through a USB connection. The unit was set to record data points at two-second intervals. The track from the PA-28 was derived from Flight Radar 24. Altitude was derived from the ADS-B unit that was set to standard pressure (1013.2 HPa). The Area QNH pressure difference on the day was about 9Hpa, or about 270ft. At the time of the Airprox event, the glider was flying in the cruise at about 70 knots on a heading of 247 degrees at about 5,800ft, having been in the glide and slowly descending from 6,000ft. The PA 28 was in the cruise at about 98 knots on a heading of about 345 degrees at about 6,000ft. Analysis of the flight logs, coupled with the statements from the pilots, revealed the glider passed right to left of the PA-28 about 200ft below and 0.45NMs to the left of PA-28. The glider pilot stated that he did not see the PA-28 approaching from the left and said that at that time his focus was likely to be on threats in front, above and below, and at least 60 degrees either side. He further stated: "I would like to think that I try to keep a good lookout at all times, however it is impossible to be looking everywhere at every second of a flight." The PA-28 command pilot stated that the glider passed within an estimated few hundred feet under his aircraft, and that the crew had not seen the glider coming. He stated, "The glider passed under the right wing to the left and continued west. We were maintaining A060. We contacted Melbourne Centre to report the glider."

Safety Advice

In this case CAR 162 requires that when two aircraft are on converging headings at approximately the same height, the aircraft that has the other on its right (i.e the PA-28) must give way. In addition, power-driven heavier-than-air aircraft must give way to gliders. However, this rule relies on the principle of see-and-avoid. By itself, the concept of 'see-and-avoid' is far from reliable. It is important that pilots apply the principles of 'see-and-avoid' in conjunction with an active listening watch. Research has shown the effectiveness of a search for other traffic is eight times greater under alerted circumstances than when un-alerted. However, pilots should be mindful that transmission of information by radio does not guarantee receipt and complete understanding of the information. Without understanding and confirmation of the transmitted information, the potential for alerted see-and-avoid is reduced to the less safe situation of un-alerted see-and-avoid. Although glider pilots are not required to monitor the Area Frequency in Class G airspace, if a radio with dual frequency monitoring is fitted the pilot should monitor the area frequency to enhance situational awareness. The following publications provide some useful information on the see-and-avoid principles:

ATSB publication - Limitations of the see-and-avoid principle (1991)

ATSB publication - Safety in the vicinity of non-towered aerodromes (2010) AR-2008-044(2)

Civil Aviation Advisory Publication – CAAP 166-01 Operations in the vicinity of non-controlled aerodromes

Civil Aviation Regulations 1988, CAR 166 – Radio broadcasting by pilots overflying non-designated, non-controlled aerodromes

Civil Aviation Advisory Publication – CAAP 166-2 Pilots' responsibility for collision avoidance in the vicinity of non-towered (non-controlled) aerodromes.

Be heard, be seen, be safe - Radio procedures in non-controlled airspace

GFA Operational Safety Bulletin (OSB) 02/12 - Lookout for Glider Pilots GFA Operational Safety Bulletin (OSB) 02/14 - See and Avoid for Glider Pilots

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6 DEC -2020 GQ
CREW AND CABIN SAFETY
DG-1000S

What Happened

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Analysis

The instructor and student boarded the glider for the student's second training flight on the day. The instructor listened to the student correctly verbalise his pre- and post- boarding checks in preparation for the aerotow launch. During the launch the instructor noticed the loose shoulder harness and asked the student to check if his harness was secure at which point the student found the harness was not secured at all. The student fastened the harness while the instructor had control of the aircraft.

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GA

GFA APPROVED MAINTENANCE ORGANISATIONS

AEROSWIFT COMPOSITES	BALLARAT JOE LUCIANI	0428 399 001	comcom2@bigpond.net.au
AUSTRALIAN AIRCRAFT KITS	TAREE OLE HARTMANN	0429 165 498	aircraftkits@bigpond.com
AVIATION COMPOSITE ENGI	TOCUMWAL PETER CORKERY	0439 842 255	corkerys@bigpond.com.au
AVTEC AVIATION	BOONAH ROGER BOND	0409 763 164	avtecaviation@bigpond.com
CAMDEN SAILPLANES	CAMDEN MIKE DUGAN	0418 681 145	camdensailplanes@bigpond.com
GVC WORKSHOP	BENALLA GRAEMA GREED	0428 848 486	gcvworkshop@benalla.net.au
HOLMES HOLDINGS	BRISBANE PETER HOLMES	07 5464 1506	holmbros@gmail.com
JONKER SAILPLANES	SOUTH AFRIC AMARISKA NORTJE	+27 82 879 8977	mariska.nortje@js1.co.za
KEEPIT GLIDER TECH	LAKE KEEPIT GRANT NELSON	0417 843 444	keepitglider@outlook.com
LOCKWOOD SAILPLANES	BENDIGO PHIL ORGAN	0407 315 511	
MADDOG COMPOSITES	IPSWICH ANDREW MADDOCKS	07 3143 3131	andrew@maddogcomposites.com.au
MORGY'S GLIDER WORKS P	WAIKERIE MARK MORGAN	0427 860 992	morgans@sctelco.net.au
NORTH EAST AVIATION	LACEBY DIANNE	0408 440 172	neaviation@optusnet.com.au
SL COMPOSITES	TEMORA SCOTT LENNON	0438 773 717	scottl@internode.on.net
T & J SAILPLANES	TEMORA TOM GILBERT	0427 557 079	tnjgilbert@internode.on.net
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