

GLIDING

AUSTRALIA

Issue 61 September - November 2022

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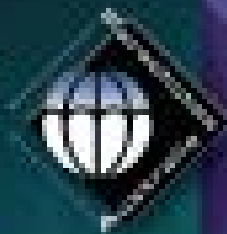
JUNIOR WORLD GLIDING CHAMPIONSHIPS

FLYING IN THE FRENCH ALPS
WGC: TWO-UP IN HUNGARY



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MAGAZINE

No. 61 SEPTEMBER - NOVEMBER 2022

COVER: JAMES NUGENT FLYING AN LS8 AT THE JWGC TABOR CZECH REPUBLIC

2 FROM THE PRESIDENT AND GFA EXECUTIVE OFFICER
Steve Pegler gives his report to the GFA AGM.

6 EVENTS - BADGES
As the 2022 gliding season picks up again, check for upcoming events, coaching opportunities and competitions in your state.

8 FLYING IN THE FRENCH ALPS
Sean Young describes his unforgettable gliding experiences across the French Southern Alps, from Vinon to St Aubin to Barcelonnette.

18 TWO-UP IN HUNGARY - 20M WGC AT SZEGED
Australia's two-man team faced enormous challenges at the WGC, including intense competition, heat and Covid, but came away with great stories to share.

26 JUNIOR WORLD GLIDING CHAMPIONSHIPS - TABOR
James Nugent and Ryan Driscoll overcame many hurdles to get to the JWGC in Czech Republic. Despite a few setbacks, the learning experience was not to be missed.

36 VINTAGE
Following its restoration, the first flight of the Australian Gliding Museum's K8b since 1995 took place in August 2022, earning enthusiastic reviews from the club.

38 AROUND THE CLUBS - FIRST SOLOS
Join in congratulating the many new pilots in clubs around the country who have achieved first solos.

39 FLYING THE AS 34 ME
Bernard Eckey was lucky enough to take a test flight in Schleicher's new electric self-launcher, the AS 34 ME and compare notes with Schleicher MD Uli Kremer.

42 OCCURRENCES

46 AIRWORTHINESS
Check your knowledge of Tost rings, vital for the safe connection and reliable separation of tow cable and tow release.

47 CLASSIFIEDS

Sean Young
Editor
sean@glidingaustralia.org

Adriene Hurst
Deputy Editor
adriene@glidingaustralia.org

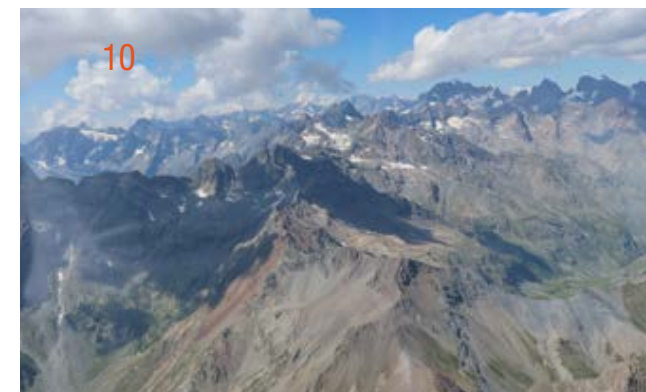
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email sean@glidingaustralia.org
Other large files and photographs and can be uploaded at www.glidingaustralia.org/ga

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

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

9am-5pm Monday - Thursday, 9am-3pm Friday
Tel: 03 9359 1613 Fax: 03 9359 9865
C4/ 1-13 The Gateway
Broadmeadows VIC 3047

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FROM THE PRESIDENT



PRESIDENT'S REPORT ANNUAL GENERAL MEETING – 31ST AUGUST 2022

REFLECTION

It's a relief to see that we're all getting back to life that is more reflective of times pre-COVID. The Australian population is almost fully vaccinated, and it seems that much of the hysteria, and what some may argue has been an over-reaching political response, has subdued to the point where we can all get back to former pursuits in a manner that is close to normality. COVID is still about and of course we still need to be careful, but it is fantastic to see that most clubs have recovered with good activity levels over the last year. The weather of course is another matter – if only it would stop raining along the eastern seaboard.

In May this year the Board had its first face-to-face meeting in over two years. Although we've worked together well and productively via video conferencing it is so much easier when everyone is in the same room. Moving forward we plan to implement a combination of face-to-face and video conference meetings as we believe a mix will provide the most productive outcome at reasonable cost.

MARKETING AND DEVELOPMENT

A couple of years ago the Board took the decision, as part of modernising its marketing and promotion of the sport, to rebrand The Gliding Federation of Australia or GFA to Gliding Australia. As part of the

process all regions were consulted and have universally accepted the idea and have rebranded themselves in a similar way, eg, Gliding Queensland.

Our official ABN is, The Gliding Federation of Australia Trading as Gliding Australia. Although our legal entity hasn't changed, wherever possible, you will now see our documents reference Gliding Australia rather than The Gliding Federation of Australia or GFA.

We understand that members will still use the acronym of GFA and that is fine, but we do hope, that over time, the term Gliding Australia will be taken up as the default descriptor for our organisation.

Our Marketing and Development team is headed by Sarah Thompson, and she leads a group that is passionate about the continued development and promotion of our sport which is essential to ensuring its long-term viability. For some time, Gliding Australia has engaged Amanda VanderWal from VanderWal Sports Consultancy to be part of Sarah's team. Amanda is a consummate professional specialising in club development. She can and is keen to assist all clubs in a wide range of areas such as promotion, fundraising, assistance with grant applications, constitutional reform, governance, conflict resolution and just about anything that affects the ongoing development of a club. Amanda has been able to assist many clubs in identifying and achieving their development needs, but there are many that have not taken advantage of her wealth of experience and knowledge. Amanda's services are offered free to clubs and Regional Associations, so why not give her a call.

Amanda's contact details are on the Gliding Australia website – she will be very pleased to hear from you.

INTEGRATED TRAINING PROGRAM

At the last AGM I reported on the development of the Integrated Training Program (ITP) which has been a long-term collaborative effort by the Soaring Development and Operations Departments. We have always done a great job of training

pilots to be safe and competent in the circuit area, but there were real gaps with providing formal training support beyond that point and as a result we have been losing members. The ITP has addressed that training gap and, we believe, will greatly assist with member retention.

The ITP is now complete and is in the roll-out stage across all clubs. There won't be anything new that instructors will teach, but there will be a clearer structure and pathway for both instructors and students with much more and better training support tools that are readily accessible. Not only will we have an improved training package, but the task for instructors will be better defined and supported – in short it will help to make the instructor's job easier and more satisfying. The clubs that have been trialling the new program are extremely enthusiastic in singing its praises – both students and instructors love it.

PART 149

Last year I reported that the Board had determined that our future would be best served by becoming a Part 149 Approved Self-Administering Aviation Organisation (ASAO). Part 149 is legislation that was enacted in 2018 and it lays out the rules around how aviation sporting organisations, like Gliding Australia, can become self-administering. Currently we rely on exemptions to the CARs and CASRs to carry out our gliding specific functions, and if we don't become a Part 149 ASAO, in the future we will have to pay CASA for the time it spends processing our exemptions, which will be ongoing and prohibitively expensive. The big advantage for ASAOs is that they will have greater autonomy over their whole of business operations, but with these enhanced freedoms comes added responsibilities. We will need to establish effective self-auditing and change management processes that identify risk and safety as core elements, and of course, as happens now, we will be audited by the regulator (CASA) to ensure our compliance. The requirements around this are quite complex and are specified in the Part 149 Manual of Standards.

The overarching document that will support our application is called an Exposition. It was originally due for submission to CASA last December

but as often happens the timeline was unrealistic, and it has now been extended to December 2022. It is vital that we meet this deadline to ensure CASA's consideration of our Exposition is done on a no-cost basis. Submissions after that date will require CASA to charge for time spent at an hourly rate which is currently \$160 per hour. This is not CASA being difficult or greedy, it is legislation enacted by the Australian Parliament. Under the current rules the implementation of the changes to become a Part 149 ASAO must be made by December 2023.

The past 12 months has seen an enormous effort put towards things Part 149. The raft of documents that will support our Exposition are quite mature and close to completion – we will make the date! Although there are many people involved in this process, I would like to acknowledge Anthony Smith as the lead of our Part 149 Sub-Committee and Drew McKinnie who is playing a pivotal role in the overarching area of safety.

As I pointed out last year, it is not expected that members will see any real, direct impact as a result of adopting Part 149. The changes are more related to management of our activities and how accountability is attributed – the adoption of Part 149 will result in a better, stronger organisation. Part 149 will mean change; it is a challenging process and I strongly believe that provided we develop our Exposition such that it serves the best interests of Gliding Australia, it will go a long way to ensure our future sustainability.

CONSTITUTIONAL REFORM

Our move to Part 149 will require some significant changes to Gliding Australia's management structure, which in turn will necessitate a revision of the Articles of Association. The Board has also been considering other changes to the Articles that will modernise and improve our structure to help streamline our decision making and clearly delineate areas of responsibility. We've also conducted a gap analysis of our compliance with the 2012 Victorian Reform Act and found some minor discrepancies that should be rectified.

The Board is quite purposefully not advocating a complete rewrite of the Articles of Association as we thought it important to specifically address

changes required to support matters associated with Part 149, compliance with legislation and other important management structural change that will enable Gliding Australia to operate more efficiently.

The work on this project has been progressively undertaken by the Board over the past 18 months and has resulted in a proposed updated Constitution. Of course, the Gliding Australia Membership will need to approve the changes before any alterations to our association's rules can be implemented. The plan is to hold an Extraordinary General Meeting (EGM) in early November where Members will be asked to approve the proposed changes. The Board will soon distribute the proposed Constitution along with some background information as to why the changes are being promoted, plus a summary of changes and some questions and answers that will assist Members' understanding. As part of the consultation process there will be plenty of opportunity, prior to the EGM, where members will be able to ask questions and seek clarification. Our plan is to conduct a series of webinars and perhaps some face-to-face meetings where the changes will be presented and where Members will be able to ask questions.

CLOSING COMMENT

This past year has been a very busy and productive one for your Board. Apart from normal business, much of its time and effort has been invested into preparation for the submission of our Part 149 Exposition and the proposed reforms to the Articles of Association. I must say I have been very fortunate to work with such a diverse group of very talented people. This AGM will see the retirement of our long serving Board members, Viv Drew, Greg Beecroft and Beryl Hartley and I for one will miss their wise and insightful inputs to the Board's deliberations. I would also like to acknowledge our paid employees and contractors who do put in above and beyond. They are passionate about what they do, and we are a richer organisation for that.

Fly safe and be kind to each other.

STEVE PEGLER
PRESIDENT

President@glidingaustralia.org

FROM THE EO



TERRY CUBLEY AM
EXECUTIVE OFFICER
eo@glidingaustralia.org

EXIT SURVEY

Currently something like 70% of members leave within the first 12 months of membership. Changes to our training system are aimed at reducing this loss, but we also want to find out the reason why so many members try the sport and then leave. We have asked clubs to send out a quick survey link to members who have not renewed, to ask them to give us feedback.

Club Admins can see a list of members who leave each month on Just Go, and we have asked them to send out the link. We feel that clubs are more likely to get a response from a leaving member rather than GFA, so hopefully committees could make an effort to review your list of leaving members and to follow up with finding out why. Sometimes a simple question could encourage the member to continue in the sport.

If club admins are not sure where to find the report or the survey link you can contact the GFA office at returns@glidingaustralia.org, or eo@glidingaustralia.org.

INTEGRATED TRAINING PROGRAM

The Glider Pilot Certificate (GPC) was introduced in 2009, but recently we have supplemented this program with a whole range of training resources.

New members are asked to purchase a GPG Pilots Logbook, which gives a lot of explanation about the new program. Once members have achieved their GPC they can purchase the normal pilots

logbook that you are all so aware of.

Trainers (Instructors and Coaches) have access to the Trainer Guides that detail the performance standards required to progress, and the Student Pilot can access the Pilot Guides which effectively become the text book for flying gliders, aligned with the GPC units.

Many students are already studying the Pilot Guides so they are better prepared for their next flying lesson, and it also gives them the opportunity to develop questions about any topic that is unclear to them.

The documents are available on the web page: Click on the Glidingaustralia.org web page and under Member Area click on Training/ Coaching and then GPC.

The resources include some well developed theory presentations.

Talk to your trainer and they will be able to help you find the correct information.

We have been providing details to Level 3 instructors and CFIs, and shortly all instructors and coaches will have the opportunity to get details about the training packages. Student pilots should expect to see the new approach to training prior to the end of this year. Feedback from clubs that have been trialling the new system has been very positive, with restructured, consistent training from all trainers and improved progress for students.

THE GFA AGM

This was held on 1 August via Zoom and quite a few members chose to join in. The agenda was quite limited, with only the core tasks to be completed.

We were introduced to some new Board members, with changes to the Board representatives from NSW (Mike Cleaver replacing Beryl Hartley), Victoria (Duncan Robertson returning to replace Viv Drew) and WA (Sally Crawcour replacing Greg Beecroft). The outgoing Board members were congratulated for their work over the past years, and the new Board members welcomed.

President Steve Pegler gave his report, which detailed much of the work that the GFA Board has been involved with. Key items were -

- Developing our submission to CASA on Part 149, which will ensure our relationships with CASA as a co-regulator, and which gives GFA more autonomy over its actions, saving money in the process. This project was led by Anthony Smith who is Chair of Airworthiness.

- Proposed changes to the GFA constitution, with an aim to streamline responsibilities between the Board and the Executive. Constitution changes require a vote of GFA members and it is proposed that this should take place before the end of the year. Over the next 4 to 8 weeks the Board will explain the proposed changes and the reasons for the change, and you will all be invited to attend an Extraordinary General Meeting to vote on its implementation.

Following the meeting, we announced the recipients of the various awards and trophies. This is a great opportunity to celebrate some great work by many of our volunteers.

A Members Forum was also held, where members were invited to ask questions of the Board and to offer suggestions for future activity.

CHILD PROTECTION

National and State Governments are increasing demands on volunteers who work with children. GFA has a system of Working With Children (WWC) checks for some roles, but the increased government demands look like making it compulsory for any club member to

have a WWC card if people under 18 years are attending your club.

Getting a WWC check is quite simple and requires an application using the provided online form. It is free for volunteers. Each State Government has their own process and you should look on line to find details for your state.

GFA has a range of INTEGRITY policies on the GFA web page and there are some free online courses that you can do. Quite a few club committees are using these to ensure a common understanding. You can claim a credential for each of the following.

WORLD CHAMPIONSHIPS THIS YEAR AND NEXT

Reduced Covid restrictions have meant that some of our competitive members are now able to travel again to compete internationally.

In the past two months we have had four members competing in Europe.

The 20m 2-seat Championships were held in Hungary, and Allan Barnes and Harry Medlicott competed for Australia, flying a hired Arcus. Of note is that Harry is Australia's oldest World Comps pilot at 90 years old.

James Nugent and Ryan Driscoll both competed in the Junior World Championships, both flying LS8 in Standard class. Russell Edwards, who has experience with model aircraft championships, did an excellent job as Team Captain.

Narromine will host the 2023 World championships in Club, Standard and 15m Classes, in December 2023. The Narromine Nationals this coming December will select our team pilots.

VALE TONY TABART

Tony represented Australia in several World Gliding Championships, including the 1974 Waikerie WGC in Open Class, flying his Nimbus 2 GTT. At the age of 70, he flew in the 2006 WGC in Sweden.

Tony served as Australian Team Captain several times. He held many gliding records, including 1000km flights, and was known throughout the gliding movement for his love of and dedication to the sport. Tony also famously competed in every Horsham Week until recent years.

Tony was 86 years old when he passed away in late August this year, and is survived by his wife Jo and son Tracey.



GFA AWARDS AND TROPHIES 2022

The following list shows the recipients of the GFA Awards and Sporting performance awards for 21/22.

The sporting awards are now determined from the results listed on WeGlide, so members are encouraged to save your flights there.

Congratulations to all recipients.

Award	Awarded for	Claim process
GFA AWARDS		
Bill Iggulden Award	Services to gliding as a volunteer	• Vivienne Drew
Ryan Award	Services to Airworthiness	• David Villiers:
J R Muller Award	Services to Promotion and Marketing	• Sarah Thompson
Hoinville Award	Services to Operations	• No award
Wally Wallington Trophy	Services to the Sport of Gliding	• Arnold Geerlings
FLYING PERFORMANCE AWARDS		
Martin Warner Trophy	Greatest claimed Gain of height for the season (May 2021 to April 2022)	• Peter Temple 16,198 Ft
Wally Woods Trophy	Longest X/C flight of the season (May 2021 to April 2022)	• Peter Temple 1166 km
Bob Irvine Trophy	Flight with highest WeGlide points score (May 2021 to April 2022)	• James Nugent 1164 points
WeGlide Ingo Renner Cup	3 best flights by a single pilot	• Tobias Geiger 3538.92 point
WeGlide Winter Cup	Longest flight over winter	• Chris Woolley 1380.2 points
WeGlide Australian League	Accumulated points from a club, weekend flights.	• Beverley Soaring Society 286 points
Roger Woods Trophy	Best place by an Australian at World Championships	• Matthew Scutter 3rd 15m class
RAeS Shield	Highest speed by an Australian at World Championships	• Matthew Scutter 92kph

BILL IGGULDEN AWARD VIVIENNE DREW

- Viv led the re-write of the Gliding Australia integrity policies.

- Viv has been VSA president for 5 years, driving 'Yes Girls glide' and the development of 'Youth Centres'.

- She has negotiated significant Vic Government funds for gliding in Victoria/Tasmania, and managed the allocation of those funds.

- Viv is Secretary of GCV, Australia's largest gliding club.

- She is an active glider pilot and Air Experience Instructor.

RYAN AWARD DAVID VILLIERS

David applied his CASA expertise to help get GFA back on track after the damning CASA audit of 2013. He came on-board as a specialist in Airworthiness Management and wrote a detailed report on what was required, re-wrote MOSP 3, wrote the RO Handbook and provided extensive advice to the Executive Committee. He helped edit and review many Airworthiness documents to get them into shape for CASA approval.

David had just retired from CASA having been Certification Manager et al. He was trying to build a new house and establish a garden but took extensive time out to assist GFA. Without David's expertise the Airworthiness Department would not have resolved the situation as quickly or as well.

David subsequently took on the RTO-A role for Queensland after

Training courses for the Integrity Credentials:

Credential code	Integrity Policy	Link to course
C00103	Integrity - Complaints Handling	
C00101	Integrity - Putting Integrity into Action	Walking the Talk – Putting Integrity into Action (mini online course)
C00100	Integrity - Ethics and Ethical Decision-Making	Ethics and Ethical Decision-Making in Sport (mini online course)
C00099	Integrity of Sport	Introduction to the Integrity of Sport (mini online course)
C00098	Integrity - Harassment and Discrimination	Harassment and Discrimination online course
C00097	Integrity - Child Protection	Child Protection online course



Laurie Simpkins. David served well in this role for 5 years till November 2021. In this time he ran numerous airworthiness courses in Queensland and continued to provide extensive advice to the Airworthiness Department including the revision of the Weight and Balance Manual.

JR MULLER AWARD SARAH THOMPSON

Sarah resurrected the Marketing and Development role for GFA starting essentially from scratch in 2020. She has no helpers or committee for the role. All promotions and marketing has had to be done by Zoom and phone calls, as COVID has made it difficult to go to clubs, regions and events.

She has:

- developed the new logo and branding
- Developed a new Gliding Australia website
- Created resources for marketing including posters, branding
- Created club resources for marketing
- Helped the ITP with posters and documents, and feedback systems
- Built the new Gliding Vic website
- Currently building the Gliding Qld website
- Facilitated webinars, AGMs etc online
- Liaised with S2F and Mandy Temple for S2F and now with Amanda Vanderwal (club development officer)
- Produces material for special events and groups (Juniors and

Women included)

- Organising and supporting aviation events as requested
- Assists on IT related issues.

She is the president of DDSC and continued the club's journey of being the most advanced club in promoting and continuing Junior and women's membership.

WALLY WALLINGTON AWARD ARNOLD GEERLINGS

Arnold is the Soaring Development manager in WA

- He assisted with the writing of the Soaring Development unit for GPC and is a strong promoter of the new training system.

- Arnold has run Silver Coach courses and Flying Further courses

- He introduced the GPC Wings which are now available nationally

- He takes students flying in his own aircraft in competitions for coaching

- He runs excellent winter coaching ground school sessions and again is generous with his time and encouragement of new members to the sport.

Come and Fly with US!

Lake Keepit Soaring Club is a great place to fly... A 7 day a week club operation with a relaxed, fun atmosphere. LKSC has a modern, well maintained fleet and launches are by aerotow and winch. The region's varied terrain from plains to mountains with plenty of safe out-landing opportunities and year-round good conditions make LKSC ideal for pilots wanting to fly further, faster... sooner.

If you want to learn to fly gliders, get cross-country training, fly badge flights, work towards a GPC, or be part of the best gliding club in the country, come to Lake Keepit.

Tel: (02) 6769 7514
Email: manager@keepitsoaring.com
www.keepitsoaring.com

- Arnold has supported Women in Gliding in WA tirelessly
- He is always willing to impart cross country knowledge and is passionate about coaching the coaches.

GFA CALENDAR

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

QLD STATE CHAMPIONSHIPS 2022

24 Sept – 2 Oct 2022
Soaring Club (Gliding Club),
Contact Jenny Thompson

glidergal7@gmail.com

Entries are now open <https://bit.ly/3TnvMqy>

NARROMINE CUP

20 – 26 November 2022
Narromine Gliding Club

The Narromine Cup will be running this year. **Contact Beryl Hartley on email arnie.hartley@gmail.com** for futher details

ORANGE WEEK

16 - 20 November 2022
Waikerie Gliding Club

Bill Mudge, President, Waikerie Gliding Club

Ph 08 8541 3570

Mob 0429 413 570

AUSTRALIAN NATIONALS PRE WORLD GLIDING CHAMPIONSHIPS

27 November – 10 December 2022

Narromine

Narromine Gliding Club is hosting the 2022 Standard, 15 Meter and Club Class National Gliding Championships at Narromine Airfield. This competition attracts 100% selection points for the Australian Team to compete at the World Gliding Championships Narromine 2-16 December 2023.

As it is the Pre-Worlds event for the 2023 World Gliding Championships it will also attract many international competition pilots.

Entries are now open, click on this link narromineglidingclub.com.au/AusGlide/AusGlide2022 to go to the Comp website and register.

The competition will comprise

AusGlide

WGC 2023 - PRE WORLDS NARROMINE 2022

FAI

GLIDING AUSTRALIA

three classes. An Unballasted Club class and Ballasted Standard & 15m Classes, same format as WGC Narromine. It will be run in accordance with the GFA National Competition Rules and will employ the GFA National Handicaps for Ballasted and Unballasted gliders as appropriate. The highest placed pilots in each class will be eligible for selection for the Australian National Team at the WGC Narromine 2023. Practice Day is **Sunday 27 November 2022** with the first Competition Day on **Monday 28 November 2022**. Contact Beryl Hartley on email arnie.hartley@gmail.com for futher details.

JOEYGLIDE 2023

Lake Keepit Soaring Club
11-18th December 2022

Contact:

admin@juniorsoaring.org

SKYRACE GP

2 - 8 January 2023

Skyrace GP event to be held in Corowa Event organiser Nick Gilbert

Website : skyrace.com.au

SAILPLANE GRAND PRIX AUSTRALIA - GAWLER

27 December 2022 - 5 January 2023

Entries to SGP Australia which will be held at Gawler 2 - 8 January 2023 are now invited. australia23.sgp.aero

VINTAGE GLIDERS RALLY SA

7 - 14 January 2023

Millicent Airport

The Vintage Gliders Australia annual rally will be held at Millicent South

Australia from 7 to 14 January at the Millicent Gliding Club, Mt Burr Rd Millicent

JR (John Marshall. President Vintage

Gliders Australia) jma99350@bigpond.net.au

bigpond.net.au

OPEN 18 M & SPORTS NATIONAL CHAMPIONSHIPS WAIKERIE

10 - 21 January 2023

Waikerie Gliding Club

Competition contact Bill Mudge email

billmudge@bigpond.com

20 M TWO SEATER NATIONAL CHAMPIONSHIPS COROWA

10 - 21 January 2023

Corowa Airport

Contact Keith Gateley email

keithgateley1@gmail.com

NSW STATE CHAMPIONSHIPS

4 - 12 February 2023

Temora Gliding Club

Contact Tim Causer

0418433665

HORSHAM WEEK

4 – 11 February 2023

The 57th Horsham Week Gliding

Competition will be held at the Horsham aerodrome horshamweek.org.au.

WORLD GLIDING CHAMPIONSHIPS NARROMINE

November - December 2023

Narromine Gliding Club is honoured to be selected by the IGC and we look forward to hosting an amazing gliding competition.

FAI GLIDING BADGES

1 JUNE - 31 AUGUST 2022

A CERTIFICATE

JEFF CHANG
LACHLAN PENDARAKIS
GLENN PETERS
CAMERON TUNBRIDGE
FERNANDO SANDRI
TIM MCNAMARA
GARY HILL
ROSS MONCRIEFF
NEILL THOMSON
JONTY BOSHIER
ADRIENNE SCOTT
TIM KULLACK
HARRY DOCKING
LACHLAN HAYES

NARROMINE GLIDING CLUB
BATHURST SOARING CLUB
SOUTHERN CROSS GLIDING CLUB
LAKE KEEPIT SOARING CLUB
ADELAIDE UNI GLIDING CLUB
AKE KEEPIT SOARING CLUB
LAKE KEEPIT SOARING CLUB
LAKE KEEPIT SOARING CLUB
SUNSHINE COAST GLIDING CLUB
BATHURST SOARING CLUB
NT SOARING
BEVERLEY SOARING SOCIETY
LAKE KEEPIT SOARING CLUB
BYRON GLIDING CLUB

GLENN PETERS

CAMERON TUNBRIDGE
FERNANDO SANDRI
JONTY BOSHIER
PETER DEHAAN
TIM KULLACK
LACHLAN HAYES

C CERTIFICATE

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STEVEN FELIX
CAMERON TUNBRIDGE
FERNANDO SANDRI
JONTY BOSHIER
PAUL FISHER
BRETT POOLE

BERYL HARTLEY
FAI CERTIFICATES OFFICER
faicertificates@glidingaustralia.org

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FLYING THE SOUTHERN ALPS

BY SEAN YOUNG



One of the great things about gliding is the opportunity to fly in locations around the world with a variety of soaring conditions. Early on in my gliding career I had a few flights in the northern Alps in France. It was a tantalising glimpse of the excellent soaring conditions there. Since then I had wanted to return and fly in the French Southern Alps at the famous sites of St Auban and Barcelonnette.

After the pandemic lockdowns, at last I had the opportunity to fulfil my dream. It took some planning, however, and below is some advice for Australian pilots who would like to make the journey in the future.



PREPARATION

If you want to fly solo in Europe, you will need to apply for temporary accreditation unless you intend to take the time to get a full European Glider Pilots License. Accreditation or full licenses issued by any EU country are valid in all 27 EU countries. The UK is no longer part of the EU and has a separate system. However, if you only intend to fly in a 2-seater with a European pilot, you do not need anything.

GPL

To be eligible for accreditation you must first have an Australian Glider Pilots License. This is obtained through Gliding Australia (GFA) and is ACAO accredited. You will also need to have a current Class 2 medical.

Once you have these, you can apply for accreditation in France, Germany or any other EU country. As I was intending to fly in France, I applied to their governing authority, DSAC.

dsac-se.licences@aviation-civile.gouv.fr

As I had been advised to apply well in advance, I put in my completed application in January. Six months later I still had not received my accreditation and frustratingly, to this day, I still do not know why not. So do your groundwork very early if you are going to apply for a French accreditation.

LEFT: Flying the 'Royal Way', a designated airspace route across des Ecrins National Park.

BELOW LEFT: Vinon-sur-Verdon airfield is located next to ITER, an international fusion energy reactor.

FLYING DUO

Although I have some mountain experience, I am a flatland pilot. Also I had no experience flying in the Southern Alps and had always intended to fly with an instructor for much of my time in France. In the end, I was very happy to do all my flying dual. The terrain and conditions are very challenging. The mountain ridges are numerous with many peaks and cols (mountain passes). You need to have a good knowledge of these before you can fly very far into the mountains.

WHEN TO GO

In a normal year, July is not the best time to fly in the southern Alps. There can be high pressure systems that sit over the area with stable air

and low blue soaring conditions. The best period is usually August through mid-September. The spring in April and May also produces good conditions, while February and March are famous for excellent wave soaring. I was booked to fly during the first two weeks of July, but that was the only time I could schedule to be there.

WHERE TO FLY?

The Southern Alps are dotted with many gliding sites. During the summer months pilots from all over Europe flock to them with their gliders from home. Although you'll find many clubs, there are not that many gliders for private hire. The most famous of the training sites is at Château-Arnoux-Saint-Auban, or St Auban. The Centre National de Vol à Voile (CNVV), France's peak glider training organisation, is based there as is the FF Vol en Planeur, the French gliding organisation. The well funded French Gliding team is also based at St Auban, and many pilots visit with their own gliders as well.

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TOP: A barbeque at the AAVA clubhouse with CFI Jonathon Withers.

ABOVE: Regis Kunst, the Competition Director for the French Sailplane Grand Prix at Vinon.

BELOW: Climbing on the massive rock face of the Cheval Blanc.





ABOVE: Flying over the Nine Lakes near the border with Italy.

BELOW: Gridding at St Auban.

You can book to fly in one of several Duo Discus or Arcus. They also have a wide range of single seaters for hire including Discus 2, ASG 29 and JS1.

Well-priced onsite accommodation is available, as well as numerous other options in the surrounding towns and villages. cnvv.net/en

VINON-SUR-VERDON

Another good option is the AAVA at Vinon-sur-Verdon airfield which is 50 km south of St Auban. They also have Duo Discus' and Arcus for hire with instructors and experienced club members who you can fly with. They also have single seaters for hire.

vinon-soaring.fr/en



I booked to fly Duo Discus for one week at each location.

GETTING THERE

The Alps form an arc from Austria all the way down to the Mediterranean Sea at Nice on the Côte d'Azur. You can fly to Nice from Australia with several airlines via one of the Arabian Gulf cities such as Abu Dhabi. Vinon is a two hour drive from Nice Côte d'Azur Airport, where several car hire options are available.

FLYING AT VINON

My first port of call was Vinon. I was booked to fly with the club CFI Jonathan Withers who speaks fluent French and English.

Vinon is a friendly and very active gliding site with onsite accommodation. Since pilots from all over Europe fly there, you will find lots of people to talk to and learn about soaring in the region. A short distance from the airfield is a large industrial complex with a striking new monumental building under construction, the International Theronuclear Experimental Reactor (ITER).

Europe has become very integrated and the lingua franca is undoubtedly English. Whether you are talking to Serbian, Czech, German or even French pilots, everyone seems to be able to communicate in English. So, although some knowledge of French is a good idea, it is not necessary. It is standard for non French speakers to use English on the radio when flying. For example, a gliding site 30 km away at Puimisson at



the foot of the mountains caters only to German pilots, and they use English exclusively on the radio.

HEATWAVE

Before leaving home, I watched the European weather with both awe and dread. By the time I arrived at Vinon, southern France had just come out of an extreme heatwave with temperatures in the 40s. Vinon had reached 43 C under blue skies and stable conditions. On the first day I flew, the temperature had

ABOVE: East of Barcelonnette, the Alps are high with numerous mountain peaks.

BELOW: The Valensole Plateau between Vinon and the foot of the Alps, covered in fields of lavender.

dropped to a mere 37 C, but the airmass was not stable and cu's reached to over 13,000ft in the mountains. This weather pattern remained the same for the week.

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ABOVE: Once more flying the 'Royal Road' across des Ecrins. I was fortunate to be able to fly this route four times.

BELOW: Over the peak of Morgon and the Lac de Serre-Ponçon.

RIGHT TOP: In the distance is the peak of Monviso in Italy.

RIGHT MIDDLE: The distinctive cliffs adjacent to St Auban airfield are called 'Les Mées'.

RIGHT BOTTOM: Georges Sana, flying instructor at St Auban, flew with me everyday in the Duo Discus.



been able to reach either Vinon or Puimoisson to land. On the way home each day, we would reach final glide long before leaving the mountains, so it was always a straight glide home.

As Vinon is not in the mountains, you have access to other thermal soaring options and can fly cross country without having to mountain soar. This makes Vinon a good site if you are flying a single-seater and don't have much mountain experience.

PARKOUR COMBATTANT

After launch we quickly made our way to Serre de Montdenier, the first ridge in the mountains. Using a combination of ridge soaring and catching tight, strong thermals twisting up the mountain sides and breaking away at the top, we were soon climbing above the dramatic vertical ridge of the Coupe. This ridge starts at 1,451m and over 7km rises to 1,703m and leads to the higher and enormous rock face of Cheval Blanc, then higher again to Trois-Évêchés at 2,819m, to La Blanche, Dormillouse and onto Morgon, which overlooks the Lac de Serre-Ponçon.

This is the famous Parkour Combattant ('commando course' in English) that many European pilots are ambitious to soar – all at the same time, or so it seems. It is crowded and the flarm keeps flashing and buzzing, which means flying in a 2-seater does have the advantage of two pairs of eyes. If the Coupe is working you can fly onto it below ridge level and ridge climb all the way along. You may stop to circle in a particularly strong thermal or just climb as you go through them. When you are above the ridge you can fly along it, climbing all the way to the top of Dormillouse. Once you are above that, you can cut across the mountains straight to the airfield at Barcelonnette or continue on to Morgon.



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ABOVE: Climbing over the ridge of Serre de Montdenier, the first ridge of the Alps and the way into the region from Vinon and Puimoisson.

This day, the Parkour worked very well and we were soon flying over the Ubaye valley at over 3,000m with Barcelonnette airfield below us at 1,130m. From there you can continue into the mountains north and east with Barcelonnette as your landing option.

Heading north, the next objective was to cross the Col de Vars, which is about 2,300m with 3,000m-plus peaks on either side of the pass. The next airfield north is St Crepin in the high valley of the Durance. From there you can head further north via Biranson and mountain valleys all the way to Aosta or Mont Blanc in Italy, the Matterhorn in Switzerland and all the way to Austria. Or you can venture into des Ecrins.

DES ECRINS – THE ROYAL ROAD

Des Ecrins National Park has the highest peaks in the southern Alps, rising to over 4,000m. In recent years, vultures and eagles have been reintroduced into the region and restrictions on gliders flying over the park put in place so that breeding areas are not disturbed. A corridor over the highest ridges of the park has been created that gliders can follow if they are able to climb to over 4,000m. It has become known as the Voie Royale (Royal Road). In some years it is only possible to fly the Voie Royale on exceptional days. This was my first flight and as we climbed to 4,200m over Tête du Peyron, the high mountain glaciers loomed up before us.

Flying across the high peaks was a beautiful and inspiring experience, crossing glaciers, jagged cliffs and

steep mountainsides with sweeping views across the mountains in all directions. I felt that the efforts I had made to get to France had already been more than worthwhile.

By the end of my two weeks in Vinon and St Auban, I had flown the Voie Royale four times. I feel truly privileged but sad and concerned at the same time. The amazing soaring weather I experienced took place with forest fires raging, extreme temperatures on the ground and the worst drought in France and Italy that has ever been recorded. Even young pilots who have only been flying in the Alps for a few years have seen the glaciers retreat. More experienced pilots have witnessed the glaciers retreating kilometres up the mountainsides.

NUMEROUS RIDGES TO LEARN

Day by day on each flight I was introduced to more of the numerous mountain ridges and peaks in the region. There are dozens of ridges and, depending on the wind direction, multiple combinations of routes that can be followed along varying ridges, taking into account the wind direction and strength and the position of sun. The wind was a constant northwest all week, which made the task of figuring out which ridge would work in the wind more straightforward. To get to know the area takes time but, of course, that is what makes it fun and rewarding.

After flying six days in a row, going far into the mountains on each flight, I decided to have a rest day and not fly on my last day at Vinon. The next day I was booked to fly at St Auban.



CNVV – ST AUBAN

The airfield at Château-Arnoux-Saint-Auban lies about 50 km north along the Durance River valley. I arrived in time for daily briefing. The CNVV has a purpose-built facility featuring an auditorium with tiered seating for lectures and briefing. A number of visiting pilots were at the site, most with their own gliders and several renting gliders or on instructional courses.

As at Vinon, the CNVV instructors give a very comprehensive weather briefing in French, and repeat it in English. As was the case at Vinon, each day the forecast was for strong thermals, hot, cumulus, light northwest winds with cloudbases of 3,500 – 4,000m plus.

I flew with Georges Sana who is also the CFI of a gliding club in the Pyrenees. He has thousands of hours of experience flying in the Alps and is a fountain of local knowledge.

The airfield is an irregular shape with various marked runways but can be used as an all over field. At the southern end the land drops away to the river below. Nestled to one side of the airfield on the river floor is a chemical plant that manufactures chloride. Hmm. George reassured me that if it went up in smoke we would be vaporised

ABOVE: The Coupe is an impressive vertical ridge line that produces strong thermals and is a lead onto the massive Cheval Blanc.

BELOW: In the distance, the 15,780ft peak of Mont Blanc in Italy can be seen, the highest mountain in the Alps.





ABOVE: A glacier in des Ecrins coloured red by dust blown from the Sahara.

BELOW: Hans getting ready to launch.

in an instant so not to worry. Across the river is an unusual weathered rock formation called Les Méés (stacks of wheat) which are often shown in photographs of St Auban.

The airfield is below some of the first ridges of the Alps, which provide several places to tow out to and climb away from along the ridge. This close proximity to the Alps does save time getting into the mountains.

To the west is the long curved ridge of the Lure which leads to Mt Ventoux. To the north the Durance valley widens leading to Gap and the volcanic massif Pic de Burre. The areas to the west and north are not in the



main Alps, with flatter areas and more outland options. The soaring conditions there can be superb. If you want an alternative to flying in the high mountains, you could spend all season exploring this area.

After flying six intense days at St Auban, I again decided to have a rest on my final day. The next day I drove into the mountains to see them from the ground for the first time.

BARCELONNETTE

Barcelonnette - Saint-Pons Airfield is in the Ubaye valley with high mountains all around. It is the home of the Centre de Vol à Voile de l'Ubaye

aerodromebarcelonnette.fr

Pilots visit from all over, including German pilot Hans Raschke, who many Australian pilots will know from Narromine. Hans has been a fixture at Narromine for the last 30 years, spending three months or more there, most years. During the northern spring and autumn he flies from his home club at Unterwössen in the northern Alps. For the past 30 years he has spent extended periods in the northern summer flying from Barcelonnette. He invited me to fly with him in a Duo.

Next to the airfield is the impressive mountain Chapeau de Gendarme (policeman's hat). On the northern side of the valley is the Grand Béard rising to over 3,000m. The ridges and cols lead north and east into the high Alps. Flying from Barcelonnette, you don't have to go anywhere to get into the mountains. You are in the middle of them from the moment you take off.

Hans said, 'We don't fly the Parkour or the little Alps. They aren't worth bothering with.'

I was happy for Hans to fly the aerotow and initial climb away. He released on a low ridge below Grand



Béard and started to turn figures of eight below the ridge. In Australia I am not used to flying close to huge rock faces or below the level of trees. The most difficult thing for me is to judge just how far away the glider is from them, but to get into the rising air, you need to fly close to the mountain.

If you are not close enough, not only will you not climb but you risk flying into heavy sinking air and flying onto the slopes below. Looking out at the trees as we whizzed by I wondered, are those trees just 2 or 3m tall – or 30m? As we got closer I realised, yup, 30m alright. Soon we were above the tree line and flying close to the rock face. How close are we to the mountain? We were close enough to climb rapidly and soon Hans expertly had us over the top of Grand Béard at more than 3,500m.

We headed northeast towards Monviso and the Italian border. Encountering a lot of cumulus, the day looked like it would overdevelop. A curtain of cloud streamed along the top of the ridge of mountains along the border. The air from Italy rising up from the Po Valley was meeting the air flowing east from France. Hans took us over to play in the convergence.

We flew further north than I had been before, while Hans pointed out the various valleys and ridges. A few times we had to climb away from below peaks but Hans knows the area and assured me that we were always within reach of an airfield. Rain began to develop to the north so we turned south and tracked along the side of des Ecrins and made a tour around the mountains before heading back to Barcelonnette.

My gliding adventure in the Southern Alps was over – and what magnificent flying I had.

GA

ABOVE: Flying with Hans in the convergence between the air rising from the Po Valley in Italy and the air from France.

BELOW: Hans Raschke and Sean Young at Barcelonnette airfield with the Chapeau de Gendarme behind them.



TWO-UP IN HUNGARY

BY ALLAN BARNES AND SEAN YOUNG

BY SEAN YOUNG

The World Gliding Championships in 20m multi-seat, 18m and Open Classes was held at Szeged in the south of Hungary near the Serbian border in July and August. The competition took place under the shadow of Russia's invasion of Ukraine, which borders Hungary. The competition site was moved to Szeged when the war began as the airfield the organisers had chosen originally is very close to Ukraine. It also took place under the shadow of COVID 19, which caused the rescheduling of the championships from 2020 to 2022.

Allan Barnes and Harry Medlicott had decided to compete in the 20m Multi-Seat Class just a few months before the championships. Overcoming the

challenges and concerns caused by the pandemic and war, they persevered and were the only Australians to take part.

They were accompanied by a small crew including Harry's partner Wendy, Jacob Bloom, Andrew White and Katie Fobbe.

As I was not far away in France, I decided to pay a visit to Szeged to offer support. I arrived in the city on the official rest day, after six racing days, and the next morning made my way to the airfield, which is on the outskirts of the city, for daily briefing. There, I found Allan and Harry, on their own without any of their support crew who were all recovering from or in the midst of COVID infections. Harry had also suffered a bout of the virus in Szeged but had recovered in time to fly the championships.

Allan said, 'The level of competition has been very high. All the pilots are very good and flying well, which has made the point spread very narrow. On day 6, we were only 108 points behind the leader but came in at 13th position for the day.'

Harry had recently turned 90 years old, making him the oldest person ever to compete in a WGC. He said, 'The competition has been very tough. Everyone is flying at the top of their game. Allan and I fly well together. We have the same notion of where to go in the sky.'

For the last few years some gliding competitions have been using a Pilot Event Button (PEV) in an effort to discourage excessive pre-start gagging and waiting. Pilots must push the PEV five minutes

TOP: Allan Barnes and Harry Medlicott landing the Arcus at Szeged.

LEFT : Allan and Harry at the Australian Headquarters.



TOP: Allan and Harry ready to launch on another long task. Eleven tasks were flown in the contest with distances from 450 - 650km each day.

RIGHT: Allan and Harry with crew Wendy Medlicott back on duty.

BELOW: The Australian team and crew at the opening ceremony. Left to right - Jacob Bloom, Andrew White, Wendy and Harry Medlicott, Allan Barnes and Katie Fobbe.

before they intend to start. If they start before the five minutes is up, they receive a 50 point penalty. After the 5 minutes has elapsed they have an additional 8 minutes to launch. They can push the PEV three times, after which they must start.

Allan said, 'This is having some effect in preventing pre-start games.'

THE WEATHER

Unlike so many gliding championships, the weather provided many excellent soaring days. A series of heatwaves was gripping southern Europe, and Hungary had been hot and dry for many weeks. Every day the temperature was in the mid 30s and early on in the contest the mercury had reached 43 C. Most days had cumulus but some, like the final day, had large areas of blue sky conditions.

There were tricky days, as to be expected. But eleven competition days were flown, many with very long tasks and high speeds in all classes.

THE CONTEST

In all, 83 gliders took part in the contest with 43 in 18m Class, 19 in 20m Multi-Seat Class and 18 in Open Class. Fortunately, the Szeged





airfield is large and, even with all the gliders on the grid or coming in to land, there was plenty of room to accommodate them.

Many of the top competition pilots in the world took part in the championships. Previous world champions were competing across all three classes. Some countries, notably France and Germany, sent over large, well-funded, well-organised teams, while other nations, such as Slovenia, sent just one pilot – and no crew at all.

Japan had two pilots including Mac Ichikawa from Australia who flew in 18m class. He was one of four pilots to fly an AS 33 ES. But the 18m field was dominated by JS3s, with 21 flying in the competition, and 11 Ventus 3s. Both of these gliders debuted at WGC Benalla in 2017, the JS3 in its 15m version. It was impressive to see how these two models have become so popular with competition pilots.

WINNERS

The 20m class was won by Czech team Ivan Novak and Petr Krejcirik with 8,898 points. Once again, they flew consistently, always at the top of the table. They beat the Polish duo Jakub Barszcz and Lukasz Kornacki who took 2nd place with 8,783 points flying a HpH 304 TS Twin Shark.

Of the contestants in this class, three flew Twin Sharks, and the other 16 gliders were Arcus. At least in the WGCs, the range of glider models flown in this class is very narrow. Most of the gliders in 20m Class were self launchers, as they were in Open Class.



18M CLASS

After an exciting final race at WGC Szeged, Christophe Abadie from France held onto his lead, coming home in 7th place on the day, but taking the 18m World Gliding Championship title with 8,957 points gained over 11 races.

In second place was Italian Riccardo Briigliadori with 8,856 points, followed in 3rd place by his teammate Davide Schiavotto with 8,843 points. They finished the day in 3rd and 4th places respectively, but their consistent performance over the two competition weeks ensured them of places on the winners' podium.

OPEN CLASS

The new Open Class World Gliding Champion is Felipe Levin from Germany with 9,088 points. Felipe finished the race with now former World Champion and teammate Michael Sommer in 8th place. But he kept his overall lead and beat Oscar Goudriaan from South Africa by 72 points.

EB 29s took six of the top ten positions in Open Class while JS1s took the remaining four. The only other model of glider in the field was an ASH31.

There were two pilots from the USA, two from Australia and two from Brasil flying in 20m multi-seat class plus pilots from South Africa and Japan. So although this was mainly a European event, it was a truly worldwide championships.

The townspeople of Szeged have been warm and welcoming and the organisers have achieved a professional, well run competition.

TOP LEFT: Allan and Harry self-launching in the Arcus. Nearly all the gliders in the 20m class were self-launchers.

BOTTOM LEFT: At briefing in an open, well-spaced hangar on the airfield.

BELOW: Harry and Allan plan their flight after briefing.





BY ALLAN BARNES

On Day 1 of the Worlds, with a 380km task ahead, we didn't want to wait too long to launch. We had a really good run down the first three legs, but on the fourth leg missed a good climb and ended up out in front, but low. We scraped up from 300m and lost 20 minutes doing it.

Tuesday, 26 July, was another 35 degree day with strong conditions. After the difficulties we had yesterday, we were happy to wait for a gaggle to depart with. However, a major cold front was forecast to hit the airfield in the late afternoon, so we still wanted to leave as early as possible. The task was a 317km 4TP race. We were 4th to leave, which apparently was still too early, but we just didn't want to risk getting caught out by the weather.

The run felt much better than it showed in the scoreboard, with the winner achieving 140kph versus our 124. That was enough to put us way down at 17th place, but at least we came up a place overall! As forecast, the wind picked up to 20kt on the final leg and many of the landings were very interesting to watch, with several ground loops. As we were on downwind I counted 12 gliders in the circuit in front of us. Fortunately it's a big airfield.

CHANGING TASK

Finishing at 140kph on Day 4 of the worlds, we thought we had probably had a good day. Well, it was good enough for 17th. Still, we were less than 100 points off the winner's score. The day was originally going to be a racing task but changed just before launch to an AAT. Thunderstorms were predicted by 3pm, so 2.5 hours was set.

On the initial leg we were in good company but chose a slightly different TP and second leg. We



never got low or slow, the cu were good, and on the final leg we met up with the fleet again. This was lots of fun – we did one surplus turn on final glide and gained enough in the cruise to extend out the 1km timesoak. The storms stayed east of the field, which meant they were out of the task area, but more were forecast for tomorrow.

FAST AND FURIOUS

Today they set a huge task of 642km, and we were last on the grid. It was clear that there would be no hanging around playing start games! Clouds were already forming when we launched, and we quickly climbed and positioned ourselves for an early start at the upwind end of the line.

A few minutes after the gate opened we took off. The first leg was straightforward but some deviation was required to get to the turnpoint on the Danube, which was in the usual blue area. There were quite a few gliders in front of us but of mixed classes, as all three tasks flew similar lines. On the second leg we passed very close to the nuclear power station and stopped for nothing less than 5kt. It was good having other gliders around to pre-centre for us.

The third leg was fast and furious – and very long. We passed within a whisker of the Kecskemet MTMA, but there were good climbs everywhere. After the 3rd turn, we took a big 50 degree deviation to get to better cu and it paid off.

Then, after the 4th turn, we

TOP LEFT: After coming 2nd in 15m Class at WGC Benalla at this championships Makoto Ichikawa flew in 18m Class for Japan.

BOTTOM LEFT: Tilo Holighaus from Schempp-Hirth paying a visit before launch.

ABOVE: Launching on a classic cumulus day.

BELOW: The view from the cockpit over the flat farmlands of southern Hungary.





deviated a huge 40 degrees for over 100km to stay upwind and under the clouds, taking the 5th upwind turn fairly low and coming back again to the upwind side with an even greater, almost 90 degree, deviation. One last really strong-looking cu looked like our passport to final glide but it failed to deliver and, after a few minutes of only 2kt, we abandoned it and headed for the wisps on track. These allowed us to make up our final glide without turning, and we joined circuit with nine others in the pattern in front of us.

Finally, we had a good result for the day – 4th place, sadly just short of the podium.

STRONG CLIMB

Another fantastic day at the WGC, our task on 3



August was over 500km again, so with the sky looking like it could well overdevelop, nobody hung around too long. We pressed the PEV (pilot event button) just as the window opened, then extended to almost the full 13 minutes before rolling out at cloudbase through the line. With a small fast gaggle we still couldn't catch the very earliest starters. Down the Danube was a large blue area. We topped up and headed out across it, fortunately finding a strong climb in the blue.

After the second turn, the next leg was 160km, back into the cumulus. We found 6kt but quickly left it when we saw gliders going up faster ahead. On the final glide, we started well below and built it up by weaving through the best energy at high speed. Again, at the finish there were 10 or 12 gliders in circuit as we joined. Somehow it always works itself out!

This competition was memorable for its fantastic weather and the quality of the organisation, which was superb. It was also memorable for the enormous health issues that our team faced, and the resulting need to separate those with COVID from those without. Although we were booked in accommodation for the whole time, I personally had to pack up and relocate three times to different hotels as people I was staying with tested positive. In the end, I was the only team member of six to avoid it for the whole time, although often I felt sick enough that I was surprised to test negative.

MEMORABLE

TOP LEFT:
Many Australian pilots will remember Michael Sommer, 5-time World Champion in Open Class, from his visits to Australia.

BOTTOM LEFT: New 18m World Champion Christophe Abadie landing on the final day of the championships.

ABOVE: Italian Riccardo Brigliadori finishing with Takeshi Maruyama from Japan in 18m Class.

37TH WORLD GLIDING CHAMPIONSHIPS
SZEGED HUNGARY 24 JULY - 5 AUGUST

20M MULTI-SEAT			
1	Ivan Novak / Petr Krejcirik	8,898	
2	Jakub Barszcz / Lukasz Kornacki	8,783	
3	Steve Jones / Garry Coppin	8,666	
18	Allan Barnes / Harry Medlicott	6,508	
18M			
1	Christophe Abadie	8,957	
2	Riccardo Brigliadori	8,865	
3	Davide Schiavotto	8,843	
OPEN			
1	Felipe Levin	9,088	
2	Oscar Goudriaan	9,016	
3	Radek Krejcirik	8,646	

Full results at soaringspot.com
bit.ly/3w4hAcc

JUNIOR WORLD GLIDING CHAMPIONSHIPS

TABOR CZECH REPUBLIC

BY JAMES NUGENT



Normally after a competition I find myself eager to jump on the computer, coffee in hand, and jot down my experiences, frustrations, celebrations, and what I learned. However, after arriving home from the Czech Republic, I have to say that it was a chore. The championships were years in the making, I threw (almost) everything at it, and by the time the FAI flag was lowered we were reeling and healing from the events that were the 12th FAI Junior WGC.

alternatives. I put plans in place to maximise my qualifying chances, intent on securing a first-place selection. This included acquiring and setting-up a competitive club class glider, and practising as much as studies, work and finances allowed.

COMMITMENT ISSUES

The COVID-19 pandemic arrived, and all world championships scheduled for 2021 were delayed until 2022. Additionally, the age limit for a 'junior' was raised from under-26 to under-27 for this championship only. Unfortunately, the 12-month delay now meant that the Tàbor championships would be the last that I would be eligible for. The increase in age limit also meant that some very experienced pilots were now eligible to compete once again. On the bright side, the advantage of having more time to prepare was the same for everyone, and I considered it important to make the most of it. Arguably, these decisions led to this JWGC being described as the most competitive JWGC in a decade.

Fast forward to the start of 2022 and it was time to commit to the trip or otherwise. At this stage, alleged new COVID strains were still appearing, people were still getting sick, and most importantly, Russia

was making moves in Ukraine. Paying the entry fee was one of the most difficult decisions I have made as the circumstances were extraordinary. By this stage, Ryan Driscoll had also qualified to come along, and we had several long phone calls in an attempt to decide what to do. The devastating reports out of Ukraine – less than 500km away from the task area – made the decision that much harder.

Probably against most people's better judgement and the information available at the time, I decided to submit my entry. On the same night, I booked accommodation, confirmed a car and glider, lodged some documents with CASA, and ordered assorted items needed for the trip. I had to try very hard to convince myself that I was going!

PLANNING

We decided early in the planning to seek gliders with maximum performance. The thinking behind this was that more performance could be used to help cover mistakes in unfamiliar territory.

Additionally, Ryan had been spending a lot of time flying Open Class and it can be difficult to go backwards in performance, as they say. Neither of us had flown ASW20s, and efforts to find two solid LS3s were unsuccessful. Given the reputation of the Discus 2a as difficult to tame without practice, we decided that it would have to be two LS8s flying in standard class. Through an old friend, I managed to source a beautifully refinished LS8neo from the UK, and I was incredibly happy that I had the perfect tool for the job – all I had to do now was focus on the pilot.

The paperwork to make the pilot legal was exhausting. Ryan and I were the first to discover that the well-trodden path used by Australian glider pilots to obtain foreign aviation medical certificates was no longer an option. We hustled and thought outside the box in attempts to get around this problem, while managing several other problems along the way. For several weeks, I would arrive home from the office, to go straight to the home office, to do several hours of paperwork. Preparing for a world comps abroad was truly a huge effort.

Several weeks out from departure, I got word that the owner of my glider had a change in circumstances and had to sell the beautiful LS8neo that I was planning to fly. While devastated, I quickly shopped around for alternatives. The glider search was made challenging by licensing limitations and clashing competitions, such as the WWGC in the UK. I eventually locked in another LS8, after doing the best background research I could, hoping that I would not regret it. Where our fellow competitors from Europe would have been able to call



ABOVE: James gets some advice while waiting to launch.

on a network of friends to get them out of similar jams to what we were having, I felt that we were falling victim to both geography and language. On a positive note, all the (very delayed) paperwork necessary for both Ryan and I to fly legally arrived just in time, as we worked through some final challenges - like Ryan losing his crew – twice.

As the A380 turned westbound, I felt organised, but genuinely depleted. We had been practising at every opportunity, chasing paperwork for months, managing relationships and expectations, dealing with last-minute cancellations, and counting on people to come through for us. I had also been working hard in the lead up to going on leave. I mentioned to some people that moving the stick was going to be the easy part - and I was not joking.

THE AUSSIES HAVE ARRIVED

We were the first full team to arrive on site at Tàbor and quickly got to work securing the best tie-down spot for the gliders, and the best campground location for Aussie Base. The reason for arriving on site so early was simple – neither Ryan nor I had flown in Europe before, and we had to work with the limited time, money and annual leave budgets that we had. I can only assume that there were other teams flying from sites not too far away - though we never managed to find them on OGN.

Opening our glider trailers for the first time was a nervous moment. As the owner lifted the lid on my LS8, the first thing I saw was the state of the gelcoat on my rudder - it was cracked and flaking off. I knew immediately that my aspirations for the competition had just taken a hit. Searching further around the airframe did not help, to the extent of Matt Scutter suggesting that he could have stubbed his toe on my spar bump. Obviously, by this stage, I was very committed to this glider. It became a matter of working with what you have. Unfortunately, tweaking the glider during the practice period drew far more energy from me than I would have liked. I managed to correct a mistrim by intentionally flying out of balance laterally. We managed a badly leaking tail tank, and on each flight I was running out of battery power. The list goes on! Some people claim that deficiencies in gliders make a small difference in the grand scheme of things, and they might be right in some cases. However, what it

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ABOVE: James Nugent coming in to land at Tàbor.

RIGHT: The team gathered at the opening ceremony - pilots Ryan and James joined by Russell Edwards, Joe O'Donnell, Andy Horton and Noah Tanzen.





ABOVE: Ryan Driscoll looking optimistic on the grid.

BELOW: Pilot and crew get to work repairing the LS8.



and hoped for just a few during the competition...

We also got a day of classic cumulus racing, a cold front day, a day with classic European overdevelopment, and a day that was wiped out by high-level cirrus. While this was good practice for the competition, there were also a few surprises that cast some doubt in my mind about the conditions.

Perhaps the biggest thing I took away from our week of practice was how defensive flying in Europe was, even if the forecasts were theoretically as strong as ours. In Australia, we regularly fly the track line until we need to fold and divert to trigger points. In Europe, the default was to track for the nearest line of energy, deviating as required to use it. This ensures that you stay high and maximise available climbing options – because often you’ll need more options.

THE BIG DANCE

Day 1 dawned, and after a day off for the opening ceremony I was feeling refreshed and excited. At the last JWGC I flew, we were flying on our own soil and felt some pressure to perform. By contrast, the morning of Day 1 as an Australian flying in Europe was very different.

The day served up some classic European low-level cumulus conditions, with cloud base just over 3,500ft AGL and widespread areas of spread-out. This forecast could easily be considered a threat for an Australian, but armed with my new flying style of rapid and smooth deviations, I was focused, relaxed and flying well.

I was by no means connecting with strong climbs out of the weeds, but often when I found myself cruising low into a bad part of sky, I was in the company of a very good pilot, when and where I needed to be. For the second half of the task, I was able to form a fast-running mini gaggle comprising of two Dutch, a German and a Hungarian pilot that worked very effectively. We made excellent pace through to the final 60km.

Approaching the final turnpoint, it was clear that the next leg had some mild overdevelopment to be negotiated. “No problem,” I thought, as there were several reasonable clouds enroute, and I was armed with the mini-gaggle. First, second and third clouds did not produce, and I threw some searching turns to allow the other pilots to arrive on the scene. Departing the third cloud we were faced with a decision – glide slowly on track, through the mild overdevelopment to arrive over the sunny forests on the other side, or fold completely, and continue directly through the turnpoint to where there was a glider climbing in 2.5kts on the other side, drifting downwind. The six of us cruising together all went for the first option, likely each considering the probability of someone connecting with better than 2kts to be quite high.

The gaggle cruised around the turn point and we each spread out across the overdevelopment. We cruised on and on and on, finding absolutely nothing! Despair eventually turned to desperation at 800ft AGL, as wings and water went everywhere. The glider turning the steepest saw everyone swarm – even if it was only 0.2kts. The emotions would have been boiling in each of



ABOVE: Gliders landing after a difficult day.

BELOW: Ryan Driscoll and James Nugent.

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these cockpits. A group of pilots from all over the world had been working together beautifully all day, and each of us were one top-up away from a perfect flight to open our accounts. Now we were wrestling to not be the first glider to drop into the field below!

I eventually assembled a final glide from the ruins that was my flight and flew home, desperate to get out of the cockpit and away from the place. While my position on the score sheet seemed reasonable, several pilots did get home unscathed and therefore enjoyed a huge points reward - well done to them.

TASKING

Even before the competition started, the organisers were clear in publicising the fact that they would be looking to set fixed racing tasks as much as possible. I believe the reasoning provided was that they were concerned that luck would play a larger role in assigned area tasks (AATs). Throughout the competition, many of the experienced pilots and team captains raised concerns about relying on fixed racing tasks, since sizeable proportions of the fleet were consistently finding themselves in the same part of sky at the same time. Unfortunately, some reinforcement for the AAT and luck theory came on Day 2, which played a role later in the competition.

The day was forecast to overdevelop badly with potentially large areas of rain and associated gust fronts and convergences. The forecast for rain did not eventuate, however the convergence forecasts certainly did. Towering cumulus streets aligned themselves with the wind alongside areas of overdevelopment. If you were able to ‘hook up’ a convergence line and run it while it was sucking, then you had an exceptionally fast day. If you were unable to because you were in the wrong place at the wrong time, then you had a horrendous day in windblown and broken thermals, lacking the time and range to correct the situation all day.

Ryan and I both found ourselves on the interior of the two convergence systems, separated by 5 to 10 minutes

after I turned a bit deeper in the first sector. Fortunately, Ryan was able to make reasonable use of the convergence, being slightly earlier, but I got the absolute dregs. The system disintegrated unceremoniously and the struggle got worse and worse, to the point where I had to bounce off the ground in 1 to 2kts - twice. I think both of us were cognisant to the fact that the pumping convergence system was 15km to the north of us, and that our fellow competitors were testing the speed of sound while they used it. A big part of our sport is working with the conditions you are given, and I put my head down to focus on leaving the area as soon as possible – maybe the day had another twist in it?

Some time later, I finally climbed into a position where I could make the transition over to the north to





ABOVE: Flying over Tàbor city.

TOP RIGHT: View from James' cockpit.

connect with the better convergence system. Once connected and cruise-climbing at 110kts at cloud base, I could have been sick with how disappointed I was. I knew that my fellow competitors had been using this all day, and that my goals for the competition were in tatters.

FIRST WEEK

The first week continued with more racing tasks and some more strong European conditions. I used Day 3 and Day 4 to settle down and find some rhythm, which I was able to do reasonably well. For the first time, I felt that I was starting to get some luck – whenever I was cruising into a slightly tight spot and half a dozen clouds hadn't worked, I was now finding that bubble that eluded me previously. While it felt like luck, the cause was probably much more rational. Most likely it was that I was now understanding the European wind-trigger-sun-cloud relationship and was positioning the glider correctly. It is a shame this happened four days into the contest, but that's life!

On Day 5, we got our blue day, and we were pumped. The sun was beating down on the grid and we almost felt at home. Our European colleagues were far from impressed, and many of them had clearly identified that the day was a threat and decided to fly very conservatively.

Unfortunately, Ryan and I muddled the start by activating our final PEV window several minutes too late, meaning that we had to entertain ourselves over the start gate while the fleet disappeared downrange. In some ways this might have been a blessing because it gave us several minutes to recompose ourselves after two hours of absolutely gruelling start games and gaggle flying.

Throughout the first week, the standard of gaggle flying by the Standard Class pilots was excellent. Everyone was rock-solid, allowed each other room, and mistakes were few. However, owing to the sheer

quantity of gliders, the pre-start gaggles were still incredibly stressful. This was especially true when Club Class arrived on the scene and when timers were running to monitor the PEV windows.

Back to the blue flying. Ryan and I set off in pursuit of the fleet with the confidence of, well, two Victorians flying in blue conditions. We didn't have a particularly good run, but by being focused and disciplined we started to reel in and overtake gliders. Approaching the bottom of final glide, we became separated at the worst possible time, and had to search for our final climbs independently. Both of us knew that two solid climbs would land us a good result, while one excellent climb would land us a comfortable podium. As is often the way when you are 'overflying' the glider, those sorts of climbs tend to elude you. We struggled home in some average late afternoon bubbles, never really climbing on to a strong final glide. Once again, I climbed out of the cockpit regretting a missed opportunity, expecting to get rinsed for my mistake. To my surprise, Joe and Andy drove up to me on the runway with big smiles on their faces. They had been watching the live scores on the tracking all day and thought that I might have secured a top 5. I explained that there must have been a mistake. Sure enough, it was P6 for my efforts, immediately behind the Germans, but a long way back from the French Trio. Ryan came home in a very solid 12th.

I was surprised at how much this decent result lifted the Aussie camp. Everyone relaxed, the crews worked with purpose, and the conversation took care of itself. Both Ryan and I regretted not being able to produce a similar result on the opening days.

Day 8 was another solid result, and Ryan's best day. We flew a clean and tactically strong flight, starting after and eventually catching the fastest gliders in the class. While on the way home to Tàbor for what would have been a podium result, I had a moment of distraction while following a glider immediately ahead, and managed to fly past the control point, losing



several minutes while I returned to collect it. I was incredibly disappointed to say the least – having never overflowed a turnpoint before. I managed to do it while trying to bank my best result at this world comp.

SECOND WEEK

The second week started with Czech evening, followed by two rest days. The Aussie team spent the first rest day in southern Czechia at a tourist hotspot of Cesky Krumlov. I was intentionally wandering in to as many tourist shops and attractions as possible, to keep myself as distracted from the state of my place in the score sheets. On the second rest day, Joe and I went to Prague, which was perfect for achieving this, although I cannot recommend waiting to see the Astronomical Clock strike the hour.

It was interesting to see how different pilots flew at different stages of the competition. By this stage, German Simon Briel, the French Trio and the Czech pair were putting in some very strong performances. It was clear that some other pilots with high aspirations attempted to respond, often resulting in a major mistake, possibly even an outlanding. Ryan and I focused on performing consistently, to put ourselves in a position to benefit when a top 10 pilot took a swing at the podium and missed.

To the tactical detriment of some pilots, Pilot Event Markers (PEV) were being used extensively in an attempt to manage start games. My observation throughout the competition was that they did little to help. This was likely due to the specified 'wait time' being too short, and the 'start window' time being too long. Combined with many tasks being perhaps shorter than the conditions allowed, the scene was set for some very long, very tense start games. Given the additional pilot workload required to manage the PEV windows while monitoring other gliders and communicating (often in code) with teammates, I

think we still have some progress to make with the implementation of PEVs before they are a benefit to both safety and competitive fairness.

Having been out of flying at this level for several years, I was surprised at how much more gliding had become a 'team game'. This was due to the use of live tracking. Tracking for the competition was OGN-based, which worked very well across at least 90% of the task area. The user interface was through the Glide and Seek website, with tasks simply overlaid and a scoring script running. Pilots were given the option to configure their FLARMs as they wished, provided collision avoidance functionality was maintained. Many teams, including us, accepted the potential disadvantage of appearing on the tracking (such as not enabling stealth mode) in order to benefit from our team in Aussie base quite literally steering us in to climbs. Aussie base

BELOW: Noah, Ryan and Russell

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ABOVE:
Gliders fill the sky, waiting for the start gate to open.

enjoyed this immensely, and as pilots we usually always benefited from the information, especially once everyone was practised.

MID-AIR COLLISION - BACK TO THE ACTION

Day nine arrived, and Ryan and I were both keen to bank some more solid results to ensure that we remained in the mix. The organisers set a 500km fixed racing task, initially east of Tabor, then west. Ryan and I lost some time through an area of heavy overdevelopment early in the task. Both of us then slightly mishandled the transition back into the strong convection. As a result, the fast French trio (who had started a minute behind us) slid past us some 150km into the task, but we were determined to keep tabs on them.

A good routing choice allowed us to reclaim the deficit to the French, and the five of us then cruised together towards what looked like an excellent line of energy. We hoped that this energy line/street would be our ticket to the German border, where the turnpoint of Entenbuehl was waiting. Unknown to us at the time, a very large Club Class gaggle had formed to our south-west, and this gaggle was funnelling into and out of their own turnpoint nearby.

As we arrived at the street, I immediately identified that we had a problem. The Club Class gaggle of approximately 20 to 25 gliders was now directly ahead, flying the same street on a reciprocal heading. I warned Ryan of what I saw, and quickly zoomed in the FLARM radar on both the LX9000 and Oudie for maximum awareness. The next minute or so was very tense; gently stepping left and right to avoid the oncoming gliders, while remaining as predictable as possible. I spotted several gliders far later that I would have liked in the European haze. I intentionally passed up a reasonable climb in an effort to not get eaten alive by the Club Class gaggle.

As the oncoming gliders became fewer and the stream of FLARM targets slowly subsided, I let my

shoulders sink back in the cockpit – it was time to recompose. Shortly afterwards, I was met with a strong surge and cautiously started turning. Ryan joined behind and below. It was the best climb we had had that day. Thanks to its excellent feel, we had it centred by the second turn – 7.5kts and building. I scanned the area and could see the Club Class gaggle departing to the east, the French trio above, and several other gliders darting around in the vicinity. One of the gliders darting around was a glider approaching from the east, which I assumed must have been one of our Standard Class colleagues. Ryan and I continued happily climbing for several turns in what was now 8kts and building. Ryan was behind and below me - unfortunately in my blind spot at the time.

The radio suddenly crackled with the words no pilot wants to hear. I heard the startle in Ryan's voice. I continued the turn, eyes darting everywhere. Suddenly there it was, appearing from behind my wing, the exact confronting scene you would expect to see.

I could see Ryan departing the thermal intact, and the plan view of an LS4 which appeared intact but was clearly in trouble. I observed the pilot jump safely, and plotted my escape from the area immediately.

After raising the alarm and talking Ryan down a bit, what followed was nearly 20 minutes of coordinated air-to-air visual inspections and observed functional checks of Ryan's glider. As we descended towards minimum bail-out altitude, I really felt the weight of my words. I knew I had a huge responsibility to correctly identify and assess the damage. Fortunately, my background assisted, and we elected to outland Ryan near the town of Kladruba. Sometime later, I also outlanded next to Ryan, to assist him through what was going to be a challenging evening.

I threw open the lid and ran over to give him a hug. After collecting ourselves, I was horrified to see the extent of the damage to Ryan's wing. The damage was at the severe end of the range I was expecting. On



balance, we got the decision to land Ryan right, but the damage would not have needed to be much worse.

After being detained by the police and assisting the civil aviation accident investigators with their enquiries, we eventually arrived home at nearly 1am. While it was a day that I would not wish upon anyone, it could have been so much worse.

As the incident is currently subject to an investigation, I am unable to provide any analysis or opinions. I think it will be worthwhile to share the experience in more detail in due course - there are some good lessons to be learned.

HOME STRETCH

The trip had obviously gone pear-shaped by this point, and I only had maybe an hour in the morning to decide whether to continue. I was mentally and physically spent from the day prior and expected to find it difficult to focus while in the air. However, thanks to a strong forecast and the organisers setting large assigned area tasks for both classes, I opted to get on with it and fly the next three days.

British Standard Class pilot Henry Inigo-Jones was also down a teammate, so we formed an alliance. Henry has been through the British Gliding Team system, and it shows. The way he approaches the flight is great to both work with and watch.

On Day 10, I released from tow with a clear plan to conserve energy by flying alone pre-start, only meeting up with Henry just prior to making our start. Every time there were gliders inbound for my climb, overlapping circles or gliders turning both directions, I politely made my exit. As the start gate opening time neared, I was reminded of the balance between competitive and safety risk in gliding. By actively choosing to avoid the gaggles, I found myself badly out of position pre-start, while my fellow competitors charged around at cloud base.

I eventually re-joined the gaggle for the customary start games just as the start gate opened. The next 10

or so minutes of gaggle flying saw me moving around a bit more than I normally would. The reason for this was that I was busy checking from the tip of the tail to the tip of the tail!

The first leg of the 3-hour AAT with Henry was an absolute blast. For almost the first time in the competition, pilots had a large sector, plenty of time, and a pumping sky to earn their points. After some classic cumulus racing, Henry and I found ourselves on an excellent line which carried us deep into the sector, where Henry masterfully picked his way through some overdevelopment. Before we knew it, we were careering downwind on the second leg with a task speed of over 140kph.

Day 10 was also the first day when we were tasked into the mountains. The Czech mountains are by no means the Alps, but they are comparable to parts of the Victorian high country and warrant a degree of respect. Unfortunately, our day took a turn for the worse while traversing the mountains – as I'm sure it did for everyone else, too. The third sector had been switched off by some high-level cloud cover, and this sector was positioned over a very high, very unlandable plateau.

Henry and I discussed a large excursion to remain in the soarable conditions and access the back of the sector but decided against this due to the option being high risk. The route we ultimately pioneered (and most fellow competitors followed) was a relatively direct track to collect the sector at minimum distance, followed by a careful glide clear of the plateau and clear of the mountains. This option, while popular, was fraught with inexplicable sinking air. Gliders deviated everywhere in pursuit of better, but ultimately several of us all lost our once comfortable glide clear of the plateau. Henry used a team flying term that I had not come across before, but I thought communicated exactly what it needed to – "nervous"!

We eventually struggled clear of the mountains. Too many times during this competition, during very difficult patches, I often found myself losing ground on other

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gliders. I attributed it to the Europeans simply being better than I was in weak, disorganised conditions. Day 10 was one of those experiences, and while Henry and I became tangled in a slow-running gaggle leaving the mountains, the German trio were able to get a wingspan clear above, and we did not see them again until the tie down area.

Day 11 was relatively uneventful. Henry and I worked well together in strong cumulus conditions to assemble a flight good enough for 9th place. However, it was the beginning of the end for Henry, who finally fell to the severe gastro attack that had been sweeping through the British camp. He was unfortunately off to hospital for monitoring and was out of the competition.

The final competition day dawned, and I was humbled to be invited on to the British Gliding Team frequency to exchange information with Finn and Toby, who were looking to secure the world title in Club Class. This information was potentially very useful for both parties, since the directions of the day's assigned area tasks were opposite for the two classes. I elected to fly with the local Czech team for some additional coverage, expecting that they would be full of motivation to secure 2nd and 3rd place overall. Unfortunately, the three of us had a low point in the first sector, and our day unravelled following the scare that this was to them.

While already having a terribly slow day, we were confronted with a genuinely wiped-out final sector of

the final task of a world comp. Some cumulonimbus had overdeveloped and started dumping to the extent that access to the back of the sector following a very long excursion was barely achievable. Because we were running late, our access to the sector was even worse than our fellow competitors who had run through 10 minutes earlier. Any gliders behind us found themselves landing in very wet fields. I eventually flew home to an underwhelming 17th place for the day, which saw me slip down to 15th overall. It was a disappointing way to bookend what was a disappointing and character-building competition.

SIGNING OFF

I would like to extend a huge thank you to our Team Captain, Russell Edwards, for his commitment and efforts throughout the entire campaign. Russell worked with us through it all - from licensing, medicals and glider swaps, through to the good days, the bad days and, of course, the incident. In every case, he was a huge resource and took everything in his stride. Thank you, Russ.

Our crews were ever committed and resourceful. Noah Tanzen did a fantastic job crewing for Ryan, showing maturity and capability well beyond his years. My guys – Joe O'Donnell and Andy Horton – were a delight to work with and rode the bumps with me like legends. I truly cannot thank them enough for their efforts.

The GFA membership all contribute funds for international teams to represent them in these events, and while the expense of the paperwork, travel, administration and surviving the ordeal is vast, the funding contributes to this exercise and is appreciated immensely. In return I hope that the information and new techniques gained by having Ryan and I attend the competition are communicated and retained within the gliding community. Competition at this level is critical to our continued progress as a sport here in Australia, and I would like to thank each and every one of you for your contribution.

GA

SOARING RHAPSODY

'Soaring Rhapsody' is a series of linked poems in the style of Haiku. The leading verse is a meta, the seed from which all the subsequent haikus germinate in their first word.

Together, they seek to convey a glimpse of the sensations and rewards of soaring flight as experienced by sailplane pilots. Hopefully, they provide some insight into what motivates pilots to venture enthusiastically again and again into the sky, flying unpowered aircraft.

For sailplane pilots, whether gliding simply for the sheer joy of it or competing for championships and records, they are a reminder of the wondrous visual, physical and spiritual exhilaration we are privileged to enjoy in the sky.

DREW MCKINNIE, COLIN VASSAROTTI



12TH JUNIOR WORLD GLIDING CHAMPIONSHIPS

TÁBOR CZECH REPUBLIC 30 JULY – 12 AUGUST			
STANDARD CLASS			
1 Simon Briel	Discus 2	Germany	8,068
2 Lukas Kriz	LS8	Czechia	7,660
3 Jaromir Macoun	LS8	Czechia	7,633
15 James Nugent	LS8	Australi	7,102

Full results at soaringspot.com
bit.ly/3JWKqAI

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 ENG	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
GCV WORKSHOP	BENALLA	GRAEME GREED	0428 848 486	gcvworkshop@glidingclub.org.au
HOLMES HOLDINGS	BRISBANE	PETER HOLMES	07 5464 1506	holmbros@gmail.com
JONKER SAILPLANES	SA	MARISKA 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 WORKSHOP	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
ULTIMATE AERO P/L	BOONAH	NIGEL ARNOT	0437 767 800	nigel@ultimateaero.com.au

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

John Amor jbamor@optusnet.com.au 0408 178 719 03 9849 1997.

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



K8B RESTORATION AT THE AUSTRALIAN GLIDING MUSEUM

BY PETER RAPHAEL AND DAVE GOLDSMITH

The first flight of the Museum's K8b since January 1995 took place on Tuesday, 9 August 2022. Normally on Tuesdays, activity in the Museum and workshop is in full swing, but today we had other plans. A beautiful sunny day at Bacchus Marsh, with cumulus clouds and light winds, encouraged the keen team to go flying.

Peter Raphael, the restoration team leader, went first and when he returned after a soaring flight was very enthusiastic, declaring the glider handled beautifully and was a delight to thermal. Others who enjoyed the soaring were Jenne Goldsmith, Dave Goldsmith and Leigh Snell. Meanwhile, James Stevenson missed out, disappointed to be the only tow pilot available.

The restoration work on K8b - GMA was very comprehensive, with the objective of restoring it to a 'better than new' condition, as it was evident that the glider had the potential to be an excellent representative of the type, not exhibiting some of the glue problems faced by imported models. Ultimately, the work involved disassembly to component level, with all old finishes removed. This effort gave us the opportunity to identify and rectify not only unseen damage but also some flaws hidden in the construction.

The program commenced in July 2018 when the wings of the K8 were transferred from John Ashford's 40ft shipping container to the museum workshop at Bacchus Marsh. Component restoration, inspections and repairs were then undertaken in preparation for the wings to be re-covered at the November Fabric and Refinishing course run by the Australian Gliding Museum. The museum has specialised in covering courses focusing on the Poly-Fibre system for a number of years, and these courses are very popular, providing supervised, real-world experience in the process.

In January 2019, the wings were moved to the spray booth and the fuselage was transferred to the workshop when the major task of refurbishment commenced. It was stripped completely of its cotton covering and paintwork, which was in poor condition, and all components removed from the steel tube frame. While these assemblies were overhauled and refinished, the arduous task of removing the old

TOP LEFT: Peter Raphael in the K8b, James Stevenson, Jim Barton, Jenne Goldsmith, Alan Hopkins, Hal Hopkins, Trevor Odering, Dave Goldsmith, David Slater, Andrew Willox and Leigh Snell.

paints and glues from the tube frame proceeded. This gave us a good opportunity to examine the tube, when it was noted that a few minor repairs would be required before painting.

The fuselage then had a brief holiday away from the museum and when it returned it had been refinished in 2K lacquer and fitted out ready for covering. Unfortunately, the Covid crisis then stepped in and stalled the covering process until March-June 2020, and it wasn't until July 2020 that the fuselage occupied the spray booth. Another 12 months of lockdown interruptions and travel restrictions ensued before the completed fuselage could move back to the workshop for final assembly and rigging.

The Melbourne region was getting very good at this lockdown caper!

Finally, in March 2022 it was down to Weight and Balance, minor detail and paperwork. Thanks are due to Roger Druce who presided over the W&B, and to CTO Dennis Stacey, who helped with the documentation process and issue of a new C of A. A little over 55 years had elapsed since this glider's first flight and it was with some elation that several museum members could be present at Bacchus Marsh to share in its recent resurrection and return to the sky.

As the museum volunteers only meet on Tuesdays, and occasionally Fridays, a restoration on this scale can

take some time. While it may have been completed some two years earlier, the loss of manpower through global events had conspired to drag the process out and volunteer numbers have suffered since. Nevertheless, many museum members past and present will now, for their part in the restoration, be able to share in this accomplishment.

Our attention has now turned to completing a suitable trailer as the intent is for museum gliders to be available for AGM members to fly at vintage rallies across the country. This should be ready for the 2022/23 season.

HISTORICAL INFORMATION

The K8 was designed by Rudolf Kaiser in 1957 and built by Alexander Schleicher. It has been described as the single seat version of the K7 Rhoadler. The K8B, the second variant of the design, is distinguishable by a larger blown Plexiglas canopy and improved ailerons. Over 1,100 were produced.

The K8 proved popular with clubs in its role as a sailplane for early solo flying. Its pleasant flying characteristics and ability to stay airborne in weak conditions endeared it to many glider pilots.

The Museum's example was built by the RAAF Williamtown Gliding Club from kit supplied by Edmund Schneider Ltd of South Australia as agent for Alexander Schleicher. It was test flown on 8 July 1967. For a period from August 1994, it was owned by a syndicate at the Bendigo Gliding Club. The last entry in the log book is dated January 1995 at which time the glider had accumulated 1,148 hours from 2,303 flights.

From 1967 to 1994, the glider was flown at numerous places including Williamtown, Bellata, Warkworth, Dubbo, Waikerie, Quirindi, Tamworth, Redding, Narromine, Leeton and Lake Keepit. During 1994 and 1995 it was flown a few times at Bendigo. A notable flight recorded in the logbook is dated 31 October 1971 when W. Kenny reached 11,000ft in height during a flight of 5 hours 10 minutes.



AROUND THE CLUBS



Last flight of the day and first solo for Alicia at Darling Downs Searing Club.



Congratulations Marco for going solo at Adelaide University Gliding Club. Now the real fun begins.



Congratulations Todd Longworth on his first solo in the DG1001 at Hunter Valley GC at Warkworth. A very capable pilot with a light touch on the controls.



Sixteen year old Bille Allan-Bryant was presented with the Dickie Bird Trophy for Outstanding Student Pilot at Southern Cross Gliding Club, Camden NSW in early June. Soon after she had her first solo. She is in the photo above with her proud instructor Greg Dillon (right) and Tow Pilot Steven Waller (left).



Beverley's newest solo glider pilot, Barry Padman, being congratulated by instructor Alan Gartland

FLYING THE ALL ELECTRIC AS 34 ME

BY BERNARD ECKEY



After two years of Covid travel restrictions, it was great to say 'goodbye' to winter in Australia and head off to see family and friends in Europe again. Of course, a visit to the Schleicher factory was another good reason for the long trip. The highlight was an opportunity to fly the new, all electric AS 34 Me. After its EASA type approval, the prototype and factory demonstrator was recently upgraded to production standard and is now released for test flying by interested pilots.

The timing of my factory visit couldn't have been better. A few cumulus clouds had already popped up as early as 9am and by the time I arrived at the factory, the sky was full of them. Uli Kremer, the Schleicher MD, kindly conducted the briefing on the AS 34 Me himself. It didn't take long but when I tried it for comfort we swapped the slim pack for a backpack parachute and even added a small cushion for additional lumbar support. Even then I had to put the adjustable rudder pedals in the middle of the available range and with my height of 178 cm there was still plenty of clearance between the canopy and my almost totally bald head.

By early afternoon the moment of truth had arrived. The AS 34 Me prototype was rolled from the hangar onto the little 1,380ft high airstrip right behind the factory. Now I could see for myself what the hype has been all about and whether the engine operations were as simple as advertised.

I had self-launched from the little factory airstrip quite a few times before but only in gliders with combustion engines. Due to obstacles in the narrow valley, takeoffs and landings are always in opposite directions. This time I even had a slight tailwind to deal with. "That's not a problem, Bernard," Uli Kremer assured me while at the same time reminding me of the almost invisible fenceposts on landing, just short of the threshold.

Uli levelled the wings and gave me the thumbs up. As the engine master switch was still turned on, I just moved the power lever – or 'throttle' – to the first indent. An unmistakable high-pitched noise sounded for about 12 seconds and confirmed that the extension mechanism was working. When it went silent again the propeller was fully extended. But if you think that pressing the START button activates the drive system, think again. For safety reasons, the little lever first needs to be moved into the 'Power' range. But when this happens the beast comes alive.

Applying the entire 35 kW (48 Hp) of electric power created a low frequency roar in the cockpit while the aircraft accelerated on the runway. At around 50kts, the AS 34 Me left me in no doubt

that it wanted to fly and I let it do so. While climbing at a speed of around 55kts the variometer hovered just above 3.5m/s or 7kts – equivalent to a tow behind a generously powered tow plane. Very impressive indeed!

I was briefed to keep an eye on the engine instrument and reduce power to 25kW (34hp) when the display changed colour from green to amber. That happened after about two minutes and at around 1,300ft AGL. Now the climb rate was between 2.5 and 3m/s (5kts) but on approaching the first wisp of a cloud, I was already at 2,700ft AGL and figured that it was about time to turn the aircraft into a glider again. Putting the little 'throttle' into its bottom position promptly stopped the motor and the propeller rotated into a vertical position before it retracted automatically. A rather loud clonk confirmed that it was back in its box and that the engine bay doors were fully closed. Just magic!

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Flying an unfamiliar glider with metric instruments made me stop in broken 2kts of lift for a while and thermal a bit faster than necessary. It took a while to work out that the ideal thermalling speed is just under 50kts. Not bad for a self-launching Standard Class glider, I thought, but soon a nearby pretty neat looking cu tempted me to look for something a bit stronger. Sure enough, my climb rate promptly doubled and I decided to stick with it until cloud-base, which turned out to be around 6,500ft.

From then on, plenty of fluffy thermal markers made for relaxed flying. I had to remind myself that I wasn't here to enjoy myself but to find out what this aircraft is capable of. So, forward with the stick until the ASI read between 80 and 85kts, but this changed the sound from the front air vent to an almost irritating hiss. The solution was to open the fully adjustable airliner style vent on the right cockpit wall and close the one in the nose, which not only restored the cockpit serenity but also made for a more pleasant and more effective airflow in my little office.

The wing loading was in the 43kg/m² range courtesy of 33kg of batteries in each wing plus the weight of the motor, propeller and whatever else is necessary to turn a glider into a self-launching aircraft. On a day like this you can't be heavy enough, I thought, and that must have occupied the minds of other pilots as well.

There was no shortage of other traffic around, partly due to the nearby historic Wasserkuppe mountain with its famous airfield right on top. So I pointed the nose towards another glider climbing further north but on my arrival its pilot decided to level out and head north. That's great, I thought, let's fly side-by-side for a while and keep an eye at each other. Sadly, the opportunity was short lived, because my newly found flying buddy was in a 15m glider and couldn't keep up with my modern 18m ship. At the end of our next climb he or she was too far below and we went on separate tracks again.

To my delight, the next thermal turned out to be the strongest of the day. It catapulted me back to cloud-base where the opportunity presented itself for some handling tests. First, I checked the stall characteristics by slowly moving the stick back until it hit the stop. It made the nose go up and it went eerily quiet in the cockpit but other than that, nothing else happened. Only after applying some rudder the glider protested by wanting to drop a wing, but just easing the stick forward a little gave me full control again. That was very reassuring and exactly what can be expected from a modern glider.

Now to the next test – 'rolling on a point'. As an Open Class pilot I'm used to a rather sluggish rate of roll but there is none of that in the AS 34. Its agility is truly impressive and so is the perfect coordination of the controls.

Some air starts were next on the agenda. With the throttle in the first notch, I pressed the Start button and when it was put in the Power range, the glider immediately climbed under its own steam again. No ifs or buts, as a long-time pilot of aircraft with combustion engines, my already high expectations were definitely exceeded.

What a pleasant change! No need to wait for temperatures to

come up, no observing engine revs, limiting flying speed or keeping an eye on maximum temperatures. Unlike conventional 'turbo' sustainers, the motor revs can even be freely selected just by adjusting the power. Of course, there's no drop-off in engine output with altitude like there would be with a combustion engine. Another advantage of electric!

Because I was still near cloud base, there was no point in keeping the motor running. Therefore, the throttle was promptly put into the bottom position again and the propeller disappeared almost instantly from view in the rear vision mirror before that unmistakable clonk confirmed that it was fully retracted again. The automation is truly impressive – just one pilot action and the rest happens by itself. No cooling down the engine and no ensuring that the propeller is in a vertical position for retraction. This was really good fun! No wonder that I did another air start a little later but with a longer motor run – just to experience this innovative technology in action again.

On the way back to the factory airstrip, I could not resist the temptation to make a little detour and fly right over the Wasserkuppe mountain. After all, this is where gliding started all those decades ago and where I used to slope soar radio controlled sailplanes in my younger days. Plenty of pleasant memories came back and I could hardly believe my luck to see this part of Germany again in such luxury and from such a lofty position.

But all good things must eventually come to an end. After almost two hours it was time to land, though not without trimming for around 85kts and a lap around the provincial city of Fulda. However, on my return over the little airstrip, I still had height to burn. It allowed me to do a few orbits around the factory and check the effectiveness of the airbrakes before landing and taxiing back to the hangar.

Uli was waiting for me and asked, "What do you think?" I replied, "You are definitely on the right track with this aircraft, Uli. It's just so easy to fly and the motor management is almost unbelievably simple. Even early solo pilots can self launch in it and the performance definitely exceeded my expectations. I must admit that on takeoff, the cockpit noise level was not as low as expected but that seems to be due to the proximity of the propeller tips to the ears."

"That's right, but it is much quieter than FES or petrol powered gliders and the external noise emissions of only 55 dB(A) are scarcely noticeable on the ground," Uli said. "Our tests have shown that an AS 34 Me overflying at full power and at 1,000ft will hardly be detected by people in the streets, especially in the presence of ambient noises or traffic sounds."

While putting the aircraft back in the hangar Uli stressed that the AS 34 Me's simple operation is complimented by simple power plant maintenance. "It is limited to visual inspections and systems checks, and all three main components – namely battery, power regulator and electric motor – are basically maintenance free," he said.

"Only the main bearing on the EMRAX motor must be replaced after 500 hours. However, given that a normal self-launch takes less than 5 minutes of motor running time, this will only become an issue after approximately 6,000 launches. Just keep in mind that the power plant operates on 400 volts, and in the unlikely event that a service becomes necessary it is recommended to return a damaged or faulty component to the manufacturer for repair or exchange."

"Can you check how much juice is left in the battery, please?" I asked. "That's very easy," Uli replied, and while he rotated the push-button on the engine instrument he said, "68%."

"That's amazing, given that I launched to 2,700ft and did a couple of air starts as well," I replied. "It means that I could have easily climbed another 6 or 7,000ft."

"Yes, that's right," Uli said. "The avionics battery doesn't need

charging either, because it is automatically topped up in flight by the engine battery."

After a while, he continued, "Safety was paramount during the development of the AS 34. The two battery packs for the electric motor are shaped like slender sticks, which slide into safety enclosures in the inner wing panels. We decided on Lithium-ion batteries in 18650-Format with a metal shell and with a capacity of 8.6 kW.

"However, the core of our safety concept is the Battery Management System (BMS). It monitors and displays voltages, temperatures, current flow and remaining battery power. Incorrect operations are impossible as the BMS also avoids deep discharging, overcharging or overheating. In case of mechanical battery damage, the individual cell connectors act as fuses and limit a possible short-circuit to a confined area."

While Uli connected the automatic battery charger, he added, "A totally flat battery requires charging for only 4 ½ hours, provided a 15 Amp power outlet is available. Of course, it takes longer with a lesser power supply but that doesn't matter as recharging usually takes place over night. Owners can also select a lower charging rate on the engine instrument.

"However, we are reluctant to quote a service life for the battery pack. Our supplier has quoted 300 full charging cycles before the battery capacity might begin to decline. This assumes that the batteries are always fully discharged, but usually only a small battery top-up is required. Therefore, it is likely that the batteries will last much longer. Of course, even an ageing battery doesn't require a swift replacement, but before we can comment further we need more practical field experience." Please note that 300 charging cycles correspond to approximately 100 hours of engine running time.

"What made you go down this path, Uli, and what was the thinking behind your AS 34 Me development?" I asked.

He replied, "After the successful introduction of our ASG 32 El the logical next step was to apply this technology to a single seater and make it capable of self-launching. Our ASG 32 is a much heavier two-seater with 20m wingspan and in this glider our new electric power plant only serves as a sustainer. Our AS 34 Me is aimed at clubs and individual pilots interested in relaxed flying, even from airfields without any gliding infrastructure. In other words, this aircraft is for aviators who are looking for total independence and the freedom to fly whenever they want, wherever they want.

"Therefore we have integrated wingtip wheels for unassisted takeoffs and made sure that this glider is very simple to operate on the ground and in the air. As long as pilots can find a power outlet at the end of the day, they can expect a fully operational aircraft when they want to fly again.

"As most early customers have ordered the aircraft with 18m span we have decided to make the 18m version our standard but offer exchangeable 15 m wingtips as an optional extra. With the longer wingtips the best L/D is 48:1 and, with a 75kg pilot on board, the wing loading is in the 41kg/m² range. As you would have just noticed, the polar curve remains rather flat well into the mid to upper speed range. For competition purposes, or for pilots preferring to fly with wing loadings of around 50 kg/m², we can install an optional water ballast system."

Then I asked him why he had not gone for an FES system. "This is what I get asked a lot," Uli replied and added, "The FES system is also an easy-to-operate drive system and when used as a sustainer, the poorer efficiency of the small diameter propeller does not play such a big role. But the majority of our customers want a powerful self-launcher, which even allows trouble-free takeoffs from soft, unsealed airstrips.

"But that alone doesn't explain why we selected a fully retractable drive system. We also considered aerodynamic and



performance aspects as well as pilot comfort. A foldable but external propeller creates a turbulent airflow along the entire length of the fuselage. It affects a glider's performance and that holds true even when fellow manufacturers claim an 'almost negligible performance degradation'.

"Also, the space requirement for the motor dictates that the rudder pedals have to be mounted further aft, which often becomes problematic, especially for taller pilots. Another problem is the cooling of the internal motor. The heat and noise generated impacts on pilot comfort, which is totally contrary to our philosophy. Poor motor accessibility and high voltage cables in the cockpit are other reasons for our decision to put the motor in a fully enclosed box behind the pilot."

"That makes perfectly good sense," I said. "But do you think that batteries will be the dominant power source in future?"

Uli replied, "Our research indicates that the rapidly increasing acceptance of electric cars is slowly swapping over to glider pilots. That's not surprising. After all, to get airborne we only need power for a few minutes and a battery is ideal for that. Still, for today's customers, total independence is usually right on top of the list of priorities, although reliability, a low cost of ownership and environmental friendliness are also important factors.

"Our AS 34 Me ticks all these boxes and, on top of that, it offers a very simple motor management, low noise emissions, no relevant power reduction at altitude, vibration-free running and – last but not least – it eliminates fuel smells and exhaust fumes. Finally, not carrying the batteries in the fuselage gives the AS 34 Me a wide cockpit load range of 70 to 115 kg plus an additional payload for baggage. I'm sure this technology will revive the attraction of our sport in all corners of the globe."

I thanked Uli for taking half a day off and for letting me test his latest creation – but not without first adding my 2 cents worth on the future of gliding. "In the long run, only gliders will prevail that require no more power plant maintenance than a mobile phone," I said. With these words of wisdom it was time to say "Auf Wiedersehen" and get back to my brother's granny flat to crack a cold one and put another sausage on the barby. Yes, I know, it's a tough life, but... **Bernard Eckey is the Australian agent for Alexander Schleicher**

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.



The Gliding Federation of Australia Inc
SOAR Accident and Incident Occurrences
General Statistics
Date From: 01/02/2022
Date to: 30/04/2022

Damage	VSA GQ	SAGA	NSW	WAGA	Total	
Nil	14	8	6	4	1	33
Minor	2	2	1	6		11
Substantial				1		1
Total	16	10	7	11	1	45

Injury	VSA GQ	SAGA	NSW	WAGA	Total	
Nil	16	9	7	11	1	44
Minor		1				1
Total	16	10	7	11	1	45

Phases	VSA GQ	SAGA	NSW/WAGA	Total	
Launch	7	2	2	1	12
Landing	6	3		7	16
In-Flight	2	4	3	1	11
Ground Ops	1		1	2	4
Outlanding		1			1
N/A			1		1

Type of Flight	VSA GQ	SAGA	NSW WAGA	Total		
Training/Coaching	4	4	2	2	12	
Competition	4				4	
Local	7	3	2	5	1	18
Cross-Country		3	3	1		7
Ground Ops	1			2		3
AEF				1		1
Total	16	10	7	11	1	45

Level 1	VAG.	VSA	SAGA	ISWG	GQ	Total
Airspace	1	4	2	1	2	10
Consequential Events		1				1
Environment					1	1
Operational		11	4	10	7	32
Technical			1			1
Total	1	16	7	11	10	45

5-FEB-2022 VSA DISCUS B AIRCRAFT SEPARATION

What Happened

The pilot was competing in the Horsham Week competition and was one of the first group of gliders launched from RWY 35. After release, the pilot could not find lift and soon found himself at 1200ft AGL about 1km south (downwind) of the airstrip. The pilot was about to conduct a straight-in approach onto RWY 35 when the glider encountered a weak thermal. The pilot attempted to work the thermal, but this led to the glider drifting into the circuit area. At the time there were four tugs actively launching the remaining gliders. One of the tug pilots, upon joining base leg, spotted the glider in his path and radioed the glider pilot asking his intentions. The glider pilot stopped thermalling and conducted a straight-in approach and landing, while the tug pilot conducted a go-around. The Competition Safety Officer counselled

the glider pilot and used this incident as the focus of his Safety presentation at briefing the following morning.

10-FEB-2022 NSWGA DG-500 ELAN ORION WHEELS UP LANDING

What Happened

During a training flight the student pilot landed with the undercarriage retracted, a configuration that was not identified by the instructor.

Analysis

The student was landing at an unfamiliar airfield and was conducting a braked decent from height. The pilot lowered the undercarriage during descent but then raised the undercarriage when conducting the pre-landing checklist. The instructor did not recognise the student had retracted the undercarriage, and the aircraft landed on its belly suffering minor gelcoat abrasions. The instructor noted that the undercarriage position placard was obscured and that he was unfamiliar with the aircraft. The lack of consistency between gliders in the direction of landing gear activation was identified by the CFI as a casual factor, which can be a trap for instructors who are changing between glider types.

Safety Advice

This incident highlights the problem of using "checklists" as "to do lists". Rather than checking that the gear was in the correct position during the pre-landing checklist, the student used the list as a prompt to action. OSB 01/14 'Circuit & Landing Advice' confirms that the pre-landing checklist is a 'check' and not an 'action' list. The undercarriage check should verify the undercarriage lever is matched to the lowered position on the placard.

19-FEB-2022 GQ IS-30 INCORRECT CONFIGURATION

Under investigation. The pilot turned onto final high and deployed full airbrake to intersect the approach path to the aiming point. Identifying that an undershoot was starting to develop, the pilot partially retracted the airbrakes but the glider continued to undershoot. The pilot stated "instead of retracting the airbrakes some more I inexplicably pulled them out fully, believing that I had fully retracted them. I was aware that the undershoot had become serious enough that I would not have reached the runway, but because I believed the airbrakes were already fully retracted I attributed the situation to severe sink". Persons at the launch point observed the glider undershooting with full airbrakes deployed and alerted the pilot by radio. The pilot closed the airbrakes, just cleared the boundary fence and landed safely on the runway.

12-MAR-2022 GQ

DISCUS BT HARD LANDING

Under investigation. On the return leg of a cross-country flight and about 15kms from the home airfield, the pilot found themselves low. The decision to break-of the flight was left very late, and when the engine failed to start during the downwind leg into a paddock, the pilot found themselves too low to properly align with the paddock direction. The final turn into wind across the side boundary fence was low and slow, and the glider stalled wings level from about 10ft just inside the boundary fence, and struck the ground heavily while drifting to the right. The aircraft suffered superficial damage, and the pilot suffered minor whiplash. The pilot stated the "possibility of making home no doubt influenced the poor judgement" and "in the final minutes of the flight I failed to divert all my attention to the landing." The pilot also mentioned that, upon reflection, they were "not in a suitable frame of mind to fly this day due significant background stress from work- and business-related matters."

19-MAR-2022 GQ DG-1000S AIRCRAFT LOADING

What Happened

Executive Summary

On 19 March 2022 during a series of Air Experience Flights (AEFs), the glider was flown in an unapproved configuration (i.e. without the tail battery or 5.5kg of ballast weight installed) for 3 hours and 47 minutes. The glider had returned to the Club from routine maintenance undertaken at an Approved Maintenance Organisation (AMO) the day prior to the flight. It was rigged on the airfield (not at the hangar) on the following morning by two Club members who subsequently conducted the daily inspections and signed the Daily Inspection Record. The aircraft subsequently flew 8 sorties with several instructors and student combinations without incident. On the following morning during the daily inspection, it was identified that the tail battery was not installed. A replacement battery was installed, and the aircraft returned to service. An independent control check, which requires two consecutive independent signatures on the Daily Inspection Record after the controls have been disconnected and reconnected, was not completed.

Analysis

Following routine maintenance, the glider was delivered in its trailer to the aerodrome, two pilots elected to tow the trailer to the operational runway (RWY 09) and rig the aircraft in situ. The two pilots who conducted the rigging then conducted separate daily inspections. A mandatory evaluation flight was then carried out by one of the two pilots who had previously conducted the rigging and inspection of the aircraft. On completion of the mandatory evaluation flight, no adverse flight characteristics were identified, and the Maintenance Release was completed. Across all the remaining eight flight, which were operated by five instructors, covering AEF, solo and instructor currency flights, no combination of student/instructor approached the forward CG limit. During the Daily Inspection on 20 March 2022, a pilot who had flown the aircraft on the previous day, identified that the tail battery was not installed following a failed the voltage test of the fin

battery. A spare battery was located and fitted allowing for the aircraft to be deemed serviceable and returned to operations. The Daily Inspection Record 'GFA Form 1' was not signed off with two consecutive independent signatures as required after controls were disconnected and reconnected. A phone call was placed to the AMO to locate the missing fin battery, which identified that the fin battery was with the AMO.

Duplicate Inspection

GFA MOSP3 outlines the requirement for an independent duplicate check of an aircraft that has been reassembled and includes the need for the person undertaking the duplicate inspection to annotate the Daily Inspection record to this effect, such as by writing "duplicate inspection rigging/controls" alongside their signature. The need to remain vigilant and diligent is also highlighted in this section. The Sailplane Maintenance Release and Daily Inspection Record also highlights the requirement for two consecutive independent signatures following the disconnection and reconnection of flight controls, although it does not include the requirement to need to annotate the Daily Inspection record to this effect. The signed Maintenance Release on the incident aircraft did not include a note to reflect that a duplicate inspection of rigging/controls was conducted prior to the aircraft flying without the fin battery installed. Furthermore, following the installation of the fin battery, the requirement to have two consecutive independent signatures on the Daily Inspection Records was again not completed.

Fin Battery

The Flight Manual provides an exemption for the aircraft to be flown without the fin battery, but it either requires a ballast weight of 5.5kg to be installed in the battery box located in the fin, or it may be removed for an extremely light pilot flying solo as it reduced the minimum front cockpit load by 16KGs. In the case of this glider, the ballast weight was not installed in lieu of the fin battery. , and no pilots who flew the aircraft solo that day met the requirement to be considered an extremely light pilot. The Flight Manual also provides the direction to either install the battery or the ballast weight in the battery box of the fin while rigging the stabiliser.

Battery Checking

The battery voltage check is the critical control in ensuring that the fin battery is installed. The Daily Inspection Schedule in the Maintenance Release and Daily Inspection Record (GFA Form 1) carried in the aircraft makes reference to observing specific items shown in the Flight Manual. The schedule includes guidance to check Battery(s) installation and the instruments & radio. All pilots who were interviewed were unaware of the requirement to check battery voltages > 12 V during the pre-take-off checks. However, during the investigation several daily inspections being conducted were observed, and those few pilots directly referring to the 'Daily Inspection Schedule' in the Maintenance Release stated that it provided a useful prompt in conducting a deliberate inspection.

Safety Advice

Daily inspections are a crucial part of flight operations and are required prior to the first flight of the day. A properly performed daily inspection by a trained person

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follows a standard procedure and permits detection of conditions that render an aircraft un-airworthy. However, complacency and a lack of understanding of the standard procedure may prevent it from being totally effective among less experienced pilots. A daily inspection must be carried out using approved maintenance data (e.g the Aircraft Flight Manual or GFA Daily Inspection Schedule) and recorded in the Maintenance Release prior to the first flight of each day. Many factors influence the outcome of a daily inspection, such as level of training, weather, time pressures, stress, and fatigue. Awareness of their presence and actions to mitigate their effects are paramount to properly completing the procedure. A daily inspection may appear to be a simple task, but it is more than glancing at a checklist and wiggling flight controls. These inspections require an understanding of normal and abnormal conditions. For the flight, it is the start of the aeronautical decision-making process. If unsure of what a checklist item refers to or whether the item is airworthy or not, enlist the help of a Maintenance Authority Holder or instructor for assistance. 14-Mar-2022 saga

3-APR-2022 WAGA PIPER PA-25-235 - ASTIR CS NEAR COLLISION

What Happened

A tow plane and glider nearly collided head-on in the circuit.

Analysis

It was not a busy day for the club and in this case, it was the last flight of the day with only the tug and glider airborne. Operations had been conducted on RWY 16 (left-hand circuit direction), but as the wind was changing the duty instructor informed the low hours glider pilot to land on RWY 34 (right-hand circuit direction) after release. Unfortunately, this information was not passed onto the tow pilot, who positioned land on RWY 16. The two aircraft joined their respective downwind legs from the same side of the runway, which placed them head-on to each other. The tow pilot advised that his descent back to the circuit took him downwind to RWY 16 where at this point, he saw the glider coming towards him. The tug's FLARM activated, and the tow pilot turned to the right to avoid the glider. The glider pilot advised that he released from tow and turned right, which placed the glider into wind in a good position for the downwind leg for RWY 34. The flight was shorter than planned as the aircraft was in sink. The glider pilot advised that he never saw the tug, nor does he recall his FLARM activating. The glider pilot did not make a downwind call but made a call on base leg.

The CFI noted the following Contributing Factors:

- * The tug pilot was unaware that the duty runway had changed (The Club will review its procedures to ensure all parties are notified of a runway change).
- * The tug pilot did not expect to see the glider at that height at that point on his downwind leg.
- * The circuit direction for RWY 34 is right-hand, and for RWY 16 it is left hand. This placed both downwind legs on the same side of the aerodrome.



- * The glider pilot experienced sink from the point of release, which shortened the into wind leg.
- * Both aircraft were descending at about the same rate.
- * The Glider pilot did not make a downwind call.

Safety Advice

This incident highlights the risks when operating at aerodromes with non-standard circuit directions and the importance of good communication, both on the ground before flight and in the air. When communicating a change in runway, all relevant persons need to be informed by whatever means is appropriate. It is also strongly recommended that pilots of radio-equipped aircraft use the 'standard' traffic circuit and radio broadcast procedures at all non-controlled aerodromes. These procedures are outlined in sections 7 and 8 of CASA Advisory Circular (AC) 91-10 'Operations in the vicinity of non-controlled aerodromes'. In areas outside controlled airspace, and especially in the circuit, it is the pilot's responsibility to maintain separation with other aircraft. For this, it is important that pilots use both alerted and un-alerted see-and-avoid principles.

9-APR-2022VSA DG-500 M OTHER RUNWAY EVENTS

What Happened

The pilot of a locally-based self-launching sailplane commenced its take-off roll while the runway ahead was occupied by gliders awaiting launch.

Analysis

Gliding operations were being conducted at this uncertified aerodrome from on the grass verge to the left of the bitumen runway within the runway strip approximately 60 meters behind (downwind of) the displaced threshold in accordance with local procedures. The ERSA entry for this aerodrome advises:

- Gliders and tugs operate from the grass on side of RWY short of the displaced threshold. Other ACFT must not make low/shallow approaches and must land beyond the displaced threshold.
- All powered ACFT take-offs shall commence

from the displaced threshold unless operationally required. When the runway strip is occupied by a tug aircraft or glider, the runway is deemed to be occupied. Aircraft using the runway may, however, commence their take-off run from a position ahead of a stationary glider or tug aircraft (Refer Chapter 3 of the CASA Visual Flight Rules Guide and AIP ENR 5.5-2, paragraph 1.2.4). Safety Advice

Taking off behind other aircraft and persons is potentially dangerous, as a loss of control during the take-off roll could result in a collision with the other aircraft or associated personnel. Regulation CASR 91.375 requires, among other things, that "When operating on the manoeuvring area, or in the vicinity of a non-controlled aerodrome you must: keep a lookout for other aircraft to avoid a collision; (and) ensure that your aircraft does not endanger other aircraft." CASR 91.410 requires a pilot to only take off or land if it

can be done so safely considering all the circumstances, including the prevailing weather conditions. 'Considering all the circumstances' should include consideration of the risk posed to persons on the ground (refer CASR Part 91 Plain English Guide, Version 2.0).

12-APR-2022 GQ HK 36 TTS FIRE FUMES AND SMOKE

What Happened

Under investigation. Just after take-off a witness observed white smoke streaming from the glider and called emergency services. The command pilot reported the smell of oil coming from the air vent and decided to return to the aerodrome for an engine-off landing. After exiting the glider the command pilot reported seeing oil on RH undercarriage leg below the oil reservoir overflow.

25-APR-2022 NSWGA ASW 27-18 E UNCOMMANDED RELEASE

What Happened

An Alexander Schleicher ASG 29 (ASW 27-18) fitted with a TOST E 22 release suffered an uncommanded release on hook up prior to launch. The TOST rings literally fell out of the closed release when the rope was rattled.

Analysis

The investigation revealed a fully functional release system and release. The release showed little wear, was in good condition and deemed serviceable. The sailplane had logged 388 launches. The TOST rings used in this case measured 4.66mm. New TOST rings measure 6.7-7.0 mm. It was also noted that the E 22 beak when fully closed was about 3mm short of the casing slot. This was confirmed to be normal as per the TOST design. Subsequent tests carried out on the release using the same worn rings with 4.66mm diameter showed that with only slight upward angle of the tow rope, the curve of the rings would slip under the closed beak. The following is an extract from correspondence received



Figure 1: TOST E 22 release. Beak when fully closed has 3mm gap



Figure 2: TOST E 22 release. Worn rings wedging under beak.



Figure 3: TOST E 22 release. Note the wear on the side plates.

from TOST: "The release E22 was designed and certified to be only operated with the connecting ring pair according to LN 65091. According to the aerospace norm LN 65091 the circular link (the small ring) needs to have a diameter of 7 mm (tolerance: +0,0 mm and -0,3mm). A diameter of 5,1 mm is way too far from any allowable tolerance. Please do not use connecting rings with a diameter of 5 mm with our releases, that's very dangerous." Sailplanes fitted with a E 22 release, if not using rings meeting new or close to new dimensions, have an increased risk of an uncommanded release.

Safety Advice

The GFA currently have no standalone guidance material on the TOST E 22 release and permitted TOST ring wear tolerances. The GFA recommends following manufacturers guidelines. Following this incident, the GFA Airworthiness Department issued 'AIRWORTHINESS ALERT 2022-1 - TOST E22 Aerotow Release'.

RINGS AND THINGS

BY ANTHONY SMITH



FIGURE 1

Over the last few years, there have been several reports of uncommanded release events during aerotow with sailplanes fitted with the TOST E22 nose release. This has resulted in the GFA Airworthiness Department issuing Airworthiness Alert 2022-1.

The TOST E22 nose release is a compact and lightweight nose release used in many modern sailplanes. The small size of the release results in the mechanism not fully closing the beak. Measurements show that the gap between the beak and the edge of the side plate slots is approximately 3mm. Testing has demonstrated that worn tow rings can wedge themselves past the closed beak.

FIGURE 1: AN EXAMPLE OF WORN RINGS WEDGING UNDER THE CLOSED BEAK.

In the process of wedging past the closed beak, the rings put very high pressure on the inner

corners of the side plate slots which results in deformation. This deformation of the corners of the side plates results in less worn rings being able to wedge past the beak in the future.

FIGURE 2: EXAMPLE OF DAMAGE TO THE INSIDE CORNERS OF THE SIDE PLATES

Advice from TOST states that the minimum ring size to be used with the E22 release is 6.7 mm. Unfortunately, this is also the minimum size of new rings. So, according to TOST, there is zero tolerance for wear or erosion of the small ring when using the E22 release. Consequently, operators should be routinely checking the wear on the aerotow rings if sailplanes with the E22 release are participating.

WEAR PROTECTION

Some clubs have gone to great lengths to develop systems to reduce ring wear. These clubs typically operate off bitumen runways which are very abrasive on the rings when the tow plane lands or taxis. These ring protection systems usually consist of a sleeve or cone which is threaded onto the tow rope which slides back under air pressure to cover the rings after the sailplane has released.

At present there is no regulation governing the use of ring protection systems and GFA approval is unnecessary. However, any operation wanting to use such a system would need to assess the inherent risks of malfunctions and glider impacts in accordance with their Safety Management System. Such assessments should consider the environment they operate in (or are likely to operate in if they visit other airfields) like obstacles on approach to their runways, the potential for airframe damage (particularly for sailplanes using a compromise belly release ie dual function aerotow and winch release), and any possible injury to persons on the ground.

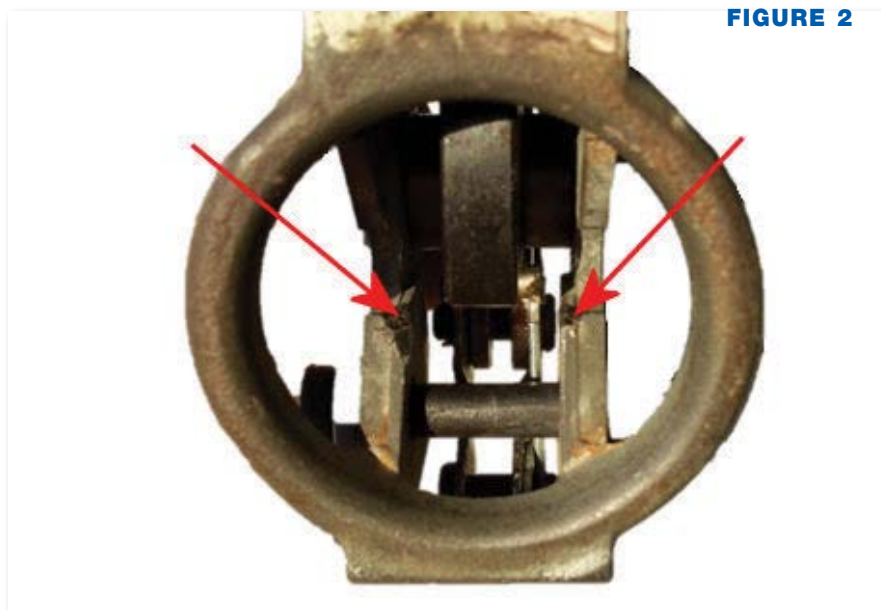


FIGURE 2

CLASSIFIED ADVERTISING

Classified Ads can be purchased from the Gliding Australia website at magazine.glidingaustralia.org Go to Classifieds then click on the link and complete the online form where you will need to provide the text for the ad and any photos, if required. The cost for the ad will be determined by the number of words and any photos you wish to add. You will then be taken to a secure payment area to process your payment. Your ad will be placed on the GFA website for a month from the date of payment. Ads that are financial at magazine deadline (1st of every second month) will appear in the GA Magazine. For any enquiries please contact the GFA office on 03 9359 1613.

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email padun3@gmail.com**



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Contact in Australia is Grant Nelson 0417843444



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Price 130,000 USD, contact **Mark Aldridge +64 274 508 505**

mda@308.kiwi.nz



VH NTT ASK21Mi 2006, 2080 Hrs, motor 74hrs, maintained by Roger Bond, same owners since new, factory PU finish, MH oxygen. excellent condition. No trailer but possibly can deliver along east coast. \$140,000 ono. **rob54059@gmail.com**



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Please do not submit articles regarding events that are the subject of a current official investigation. Submissions may be edited for clarity, length and reader focus.



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