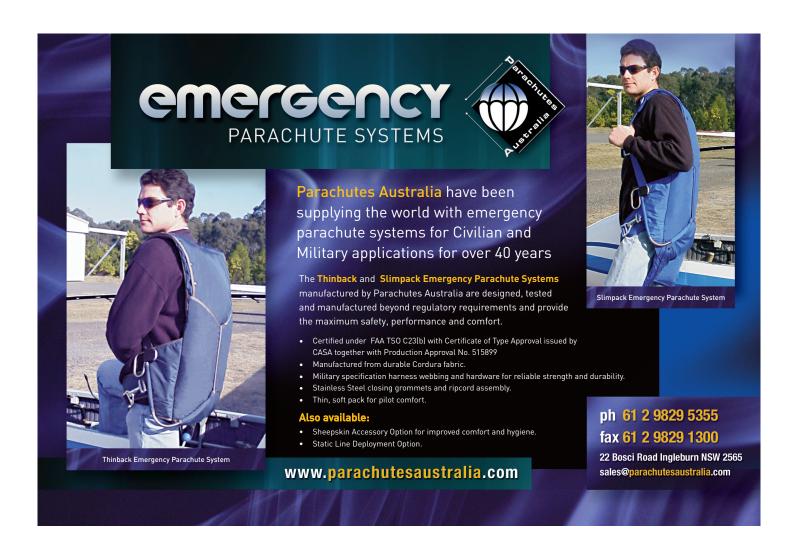


Issue 15 November - December 2013 www.glidingaustralia.org



MULTICLASS NATIONALS - COACHING: GLIDEFAST
OPERATIONS - VINTAGE GLIDING - THE GLIDING BUG







Providing experience, commitment and care when you need it most.



- · Australia's largest independent aviation insurance broker
- 20 years experience, specialising in all classes of aviation insurance including gliders
- Most AIA brokers are qualified and passionate pilots with 90 years of combined experience
- Committed to providing the best insurance package to suit you and your individual needs
- Always competitive, always comprehensive, always accessible – 24 hours a day, 7 days a week
- Proud to be the new broker for the Gliding Federation of Australia

Contact

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

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



No. 15 November - December 2013

COVER PHOTOGRAPH BY GRAEME SUMMERS OF PAM KURSTJENS FLYING THE MORNING GLORY

2 FROM THE PRESIDENT - SPORTS CHAIR FAI BADGE & RECORDS

What's happening in the Australian gliding airspace.

TING & DEVELOPMENT

The Junior World Championships in Narromine in 2015 are a chance to prepare our young pilots & international teams and promote our sport.

8 QUEENSLAND STATE COMPS - BUNYAN WAVEThe Queensland State Comp featured both AATs and racing tasks, some windy conditions and coaching by G Dale.

10 MULTICLASS NATIONALS GOONDIWINDIAt the Multiclass Nationals in Goondiwindi, the competition was fierce in all four classes with racing tasks set nearly every day.

Peter & Lisa Trotter's GlideFast helps pilots improve cross-country skills. This year their course focussed on competition flying.

18 BURKETOWN SAFARI - MORNING GLORYPam and Garritt Kurstjens flew to Burketown over the Gulf of Carpentaria to find the Morning Glory.

28 MOTORGLIDINGFor some pilots, the flexibility of motor gliding can be a path back to gliding and a way to discover new soaring opportunities.

32 OPERATIONS - A BLEEP MOMENT

A pilot's ability to handle dynamic situations and avoid the risks of extreme heat helps contribute to safe flying.

36 AIRWORTHINESS

The pros & cons of today's glider surface coatings are discussed, with reasons why gelcoat's poor reputation may be undeserved.

The British Gliding Heritage Centre has opened its doors, joining a growing trend to protect gliding heritage around the world.

Learn to avoid staying too long in a thermal that has lost its lift and wasting time on non-productive turns on your cross country flights.

43 CLUB LISTING

46 AB INITIO MICHAEL KELLER - EVENTS DIARY

Michael spent his 13th birthday on an ab-initio course at Narrogin Gliding Club - the best week of his life, he says, soaring with birds.

EDITORIAL SUBMISSIONS

www.glidingaustralia.org/ga

DISPLAY ADVERTISING &

sean@glidingaustralia.org

MAGAZINE ENQUIRIES

NSW 2027

can be uploaded at

email sean@glidingaustralia.org Other large files and photographs and

We invite editorial contributions. Please

48 CLASSIFIEDS

Sean Young

Editor sean@glidingaustralia.org

Adriene Hurst

Deputy Editor adriene@glidingaustralia.org







GLIDING AUSTRALIA www.glidingaustralia.org Tel 02 9332 2822 PO Box 246 Edgecliff

Design & Publishing Services info@westsunsetbooks.com

Official publication of the Gliding Federation of Australia Inc. ABN 82 433 264 489 (GFA). The GFA ia a member of the Féderation Aéronautique International (FAI) through the Australian Sport Aviation Confederation (ASAC)

Opinions expressed in Gliding Australia are not necessarily those of the publisher. All rights reserved and reproduction without permission is strictly forbidden without the permission of the publisher. © Gliding Australia Gliding Federation of Australia 2013 Print Post Publication Number PP 381712/02675

INSIDE THIS ISSUE













GLIDING FEDERATION OF AUSTRALIA

MEMBERSHIP Click menu - Membership Purchase www.glidingaustralia.org Or contact: Tanya Loriot Membership@glidingaustralia.org

SHOP The GFA Online shop has a range of useful products including a Form 2 kit, www.glidingaustralia.org/shop1

AIRCRAFT REGISTRATION & SALES, CLASSIFIED ADVERTISING,

Sharon Smith Registration@glidingaustralia.org

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 Firday Until 30 November Tel: 03 9303 7805

From 1 December 2013 New address and tel number

Tel: 03 9359 1613 Fax: 03 9359 9865

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

SUBSCRIPTIONS

Non GFA members are welcome to subscribe to Gliding Australia. 1 year is \$45 inc. GST. ww.glidingaustralia.org/shop1



FROM THE PRESIDENT

Hello again

I am sure you are all starting to enjoy the soaring season. The Queensland State Championships and Multiclass Nationals at Kingaroy were a great start to our competitions calendar.

Congratulations to all involved. I am compelled to remind you all to be vigilant in your soaring preparation whether you are heading out to the club for a day instructing, or continuing with your training. Maybe you are wanting a relaxing day of meandering, or striving for a serious goal:

- If you're not current, please spend some time going over your checks, doing a little mental rehearsal. Don't push yourself, or take short cuts.
- Ensure you are fit and healthy.
- Give your glider a thorough DI.
- Ensure those around you are spending time with their preparation too.
- Practice your lookout having your eyes open is quite different from a deliberate scan of the sky.
- The list goes on and on... but the message is consistent: take the time to be prepared.

I mention this, because as you know, our incidents and accidents are rarely the product of just one 'failure' – usually there many times in the weeks leading up to an event when the incident could have been averted. The holes in the cheese line up, as they say. If we are taking care with every 'slice' then the chances of a serious event are lessened.

Gliding is so much fun, but it has its risks. Take good care while striving for your goal.

I've had a few discussions with members about the GFA. They want to know, "What is the GFA and why do I need to be a member?"

The following is deliberately generalised and brief - to enable you to get an overview. If you have questions, please don't hesitate to speak with those around you - maybe your Club President, or Regional Technical Officers, or me, if you prefer.

The GFA is an incorporated association in the State of Victoria. It is an association of members, affiliated regional/state associations, gliding clubs and other affiliated bodies.

The Board is comprised of five regional representatives - Queensland, New South Wales & Canberra, Victoria &

Tasmania, South Australian & NT, and Western Australia - and the Executive - President, Vice-President, Treasurer and heads of department. In the event that a vote is required for Board decisions, regional representatives carry two votes each, and the Executive one vote.

Currently the Board is made up of:
President Anita Taylor
Vice-President John Summers
Treasurer Peter Carey
Chair of Operations Panel Peter Gray *
Chair of Airworthiness Dept Stuart Addinell
Chair Sports Committee Mandy Temple
Chair Marketing and Dev Terry Cubley
IT Group Convenor Richard Frawley
Queensland Dave Donald (Alternate:
Lindsay Mitchell)
New South Wales & Canberra Tim Carr

(Alternate: Dion Weston)
Victoria & Tasmania Geoff Wood
(Alternate: Reg Moore)
South Australia & NT John Switala
(Alternate: Ian Grant)
Western Australia Tom Holt (Alternate: Swain Johnson)

* Christopher Thorpe resigned to take up a paid contract position with the GFA as the Executive Manager of Operations.

The Board meets three times a year. The Executive meets additionally, but usually in other months by Skype.

You, the member, may vote at the Annual General Meeting on receiving the Financial Accounts, appointing the Auditor, and on changes to the Articles. The Regional Associations chose their representative member, which are appointed by the Board. The Board votes for the President, Vice-President and Treasurer. The Departments vote on their heads, which are appointed by the Roard

This system has pros and cons. For example, this model gives stability and corporate knowledge to the Board, but it is not an obviously transparent process to get on to the Board. I do note that I don't receive many expressions of interest in the Board positions when they are advertised.

That being said, of course, you are very welcome to nominate. Often we do what we can to facilitate involvement for those who want to join the Board or Executive. Now is also a good time to advise that several Board members have expressed the desire to move on, and would be delighted to mentor in new candidates. I encourage you to let myself or your regional representatives know if



you are interested!

The Regional Associations are very important, as they assist with the administration and oversight of our sport. For example, they are able to apply for and receive grants from State sporting departments, and conduct State events and competitions. If you don't know much about what your regional association does, I suggest you turn up for the next committee meeting!

What does the GFA do with the membership fees? Why is it worth it?

If you take the time to examine the GFA financial accounts you will see that the expenses broadly fall into the following categories: **Insurance 44** %

Coaching & International Teams 8% Administration incl. Ops & AW 42% IT 4 %

M&D 2%

Your GFA membership also includes a \$12 Regional association levy which is remitted to the Regional Associations.

You will also know that the gliding exemptions and delegations allowed by CASA relate to members of the GFA only. CASA allows the members of the GFA these privileges because of the oversight structure/framework we have in place - including our MOSPs and our club environment. You should also be aware that these privileges of GFA membership are largely subsidised by the work done by volunteers, from Board through to Club level.

I hope this information is of interest. Please feel free to email me, or the other Board members, if you have questions. Enjoy the summer!

ANITA TAYLOR

PRESIDENT

President@glidingaustralia.org



AIR LEAGUE CAMP



L to R: Simon Deane: Group Air Activities Officer (Asst) - QLD, Tim Rosen: Group Development Officer – QLD, Allan Burgess: Group Executive Commissioner – QLD, Dave Donald: President – Gliding Queensland, Lee Hamilton: Group Air Activities Officer – QLD, Cameron Shaw: Federal Air Activities Commissioner

The President of Gliding Queensland, Dave Donald, recently had the opportunity to meet with key representatives of the Australian Air League, while observing the next generation of gliding enthusiasts in action, at a structured air activities camp run in cooperation with Gympie Gliding Club. A national youth organisation, the Air League provides cadets, both boys and girls from 8 to 18 years, with leadership and life skills while encouraging interest and participation in aviation as a career or hobby.

The gliding camp, a Queensland Group event, had 53 members attending, 34 cadets and 19 officers, from Hervey Bay, the Gold Coast and Southport Squadrons from the Gold Coast, and Forest Lake. Other such camps and group events also attract members from Strathpine, Bundaberg and Rockhampton. A national organisation, the gliding camp was also joined by the Air League's Federal Air Activities Commissioner Cameron Shaw.

Over the weekend, 37 flights were conducted with an average uptime of 10 minutes off a winch launch.

Approximately 70 per cent of attendees also sat for and passed their respective

classes of the League's Air Activities
Gliding & Soaring Badge. In addition to
the core camp program of gliding theory
and airtime, attendees also participated
in hands-on exercises and challenges
designed to foster and test initiative,
leadership and teamwork.
Communication and skills development
were also integrated with a bit of fun.

A national GFA / Air League
Memorandum of Understanding was
finalised just prior to the camp. In
partnership with the Air League, it aims
to improve access, frequency and
affordability of youth gliding
opportunities. Both organisations, along
with state and regional clubs and
Squadrons, are working closely to
promote greater long term gliding
affiliation, membership and participation.

Background, current events, locations and general information on the Australian Air League can be found on their federal website www.airleague. com.au or via their Facebook page https://www.facebook.com/ AustralianAirLeague.

For more information, including other clubs interested in building a similar relationship with their local Air League Squadron, contact: info@airleague.com.au 1800 502 175

MEMBERSHIP RENEWAL

Renew your membership at www.glidingaustralia.org

Membership purchase and renewal is best done through the website. After filling in a membership form you will be taken directly to the shop to complete your purchase.

You can renew at any time, not only on the anniversary of joining,

and if you wish you can buy multiple years of membership.

Members who still prefer to deal directly with the office can do so, of course, just by ringing and talking to our friendly office staff.

membership@glidingaustralia.org or Tim at eo@glidingaustralia.org.

3RD PARTY Insurance

Following the successful introduction of the Bulk Hangarkeepers Insurance, the GFA facilitated considerable savings to the participating Clubs. The next step is to increase the BBL limit to \$1 million. This sum would provide a reasonable level of protection against third party claims. The scheme is work in progress but, if introduced, it would help to:

- Provide four times greater coverage than currently available under the BBL.
- Provide the ability to all to enter competitions
- Provide substantial savings to all who carry insurance.

The idea is full of pluses. Any clubs of individuals who only carry a minimum of \$1,000,000 liability cover at present will no longer need to maintain their own policy, providing significant savings. There is one proviso that ALL the gliders have to take part in the upgrade to an existing level of cover.

In order to take the matter further, we need some facts and figures and we ask that you give us an indication of whether you carry a Third Party policy or not.

Opinions, information and actual facts should be communicated to

PETER CAREY

secretary@glidingaustralia.org

FROM THE CHAIR SPORTS COMMITTEE



The Sports Committee (SC) met by Skype on 14 September.

The minutes of the meeting can be found at www.gligingaustralia.org by navigating to GFA Members Info - Administration – Minutes – Sport

HIGHLIGHTS OF THE MEETING

We confirmed the decision to use a two-year rule change process for major Nationals rule changes, in line with the IGC process. It is hoped that this will reduce the flip-flop nature of some recent rule changes, to give a more consistent set of rules.

Confirmation that the next cycle of competitions will be: Club Class and Sports Class will be at Goondiwindi in October 2014 with the Multiclass competition at Waikerie in January 2015.

We were all surprised to receive a bill

from ASAC for \$120 when Allan Barnes claimed Australia's first Continental record. It seems these records are being treated and charged as if they are World Records. Our IGC rep Terry Cubley is going to make representations at his next IGC meeting.

In the meantime a suggestion was made that perhaps State Associations may be prepared to subsidise the cost to encourage people to claim these new records. I plan to discuss this issue with the State Presidents.

Beryl and Terry are also working hard to lobby the IGC to simplify the new Sporting Code and separate the badge section from the record section.

INSURANCE

A recent incident has brought to light an insurance issue which needs to be addressed. If a coach flies in a two seater with a coachee and the glider does not have insurance, there is an uninsured liability equal to the excess of the BBL, about \$2,500. In the recent incident neither the coach nor coachee were aware of this fact.

SC is working through the issues to try and find a way around the problem that protects all parties, but until that is done, coaches who do not insure their two seater gliders will not be able to carry out coaching in these gliders at GFA sanctioned events unless they put in place some arrangement to cover this situation. Any coachee flying with a

coach at other times should check with the coach what the insurance situation is before flying.

There has been a lot of discussion recently about State Competition Rules.

The Sports Committee (SC) and NCC cannot compel any State to use a particular set of rules for their State competitions, although many have indicated that it would be a good idea to have standard rules and would save a huge duplication of effort.

The SC would like to submit the State competition results to the FAI for pilot ranking purposes and is prepared to fund this exercise.

SUGGESTION

The most up to date State rules currently are the recently published NSW State Rules. We could republish these with appropriate changes, make them generic and call them '2013 State Rules'.

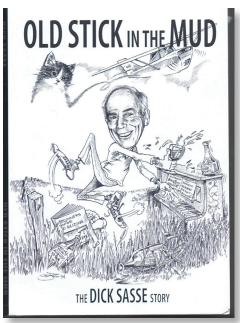
It would then up to pilots in each state to lobby their rule makers to use them.

There would be nothing to stop each state introducing amendments by way of local rules to suit their particular circumstances. In future years each State could nominate one person from each state to give input to the State Rules.

Please let me know if you support this idea.

MANDY TEMPLE
CHAIR SPORTS COMMITTEE
csc@glidingaustralia.org

OLD STICK IN THE MUD THE DICK SASSE STORY



At the age of 94, Dick Sasse is the oldest active gliding pilot in Australia. His first involvement with gliding dates back to 1937 when a two minute flight was considered an achievement! He also had experience as a 'Tuggie' in his RAAF days. He took up the sport of modern day gliding in 1978 and has flown continuously since then. He was instrumental in the establishment of the Morawa Gliding Cub, and until recently was their long term CFI. He has flown all over world and enjoyed much success at the WA Gliding Championships over the years. His story makes for a ripping read and will appeal to all would-be Biggles. More than that, Dick's story is unique, written as it is by a man in his 10th decade with a remarkable memory of not just what happened but how things looked, sounded and even smelled from the age of four. It encapsulates in so many ways the social mores, values and attitudes of his century written in his

own words and reflecting the times of which he writes.

His is a history of our country that is not recorded by classical history where facts and dates reign supreme and uncomfortable subjects such as labour relations, religion, class and personal tragedy are simply not mentioned. He sets the scene in few words and then takes his reader with him on a journey from early pioneering farming days in the northern wheat belt of Western Australia, the Great Depression, becoming a man and a pilot in the Air Force during WWII, returning to farming the land, dealing with tragedy, and finally finding the joy of life again with his passion and success as the oldest glider pilot in Australia. It is a gentle, humble tale of a wonderful life and a timely reminder of what truly is important to health and happiness. His book is may be ordered online at www.sasse.bigcartel.com



GFA AWARDS EVENING

The GFA Board was held at the Gliding Club of Victoria in Benalla on the weekend of 9-10 November, The GFA Awards Dinner was held on Saturday evening 9 November and was an occasion to celebrate achievements of the past year and to recognise some very deserving volunteers. Awards were presented as detailed below. The GFA would like to say thank you all members and volunteers for their efforts to support the gliding movement over the past year.

WALLY WOODS TROPHY

LONGEST CLAIMED X/C FLIGHT OF THE SEASON MATTHEW SCUTTER 11086KM - LS4, SA, JAN 2013

MARTIN WARNER TROPHY

GREATEST CLAIMED GAIN OF HEIGHT FOR THE SEASON GEOFF VINCENT 19660FT, 12/8/2012, ARARAT

ROGER WOODS TROPHY

BEST PLACE BY AN AUSTRALIAN AT WORLD CLUB CLASS TOBI GEIGER 2ND PLACE

RYAN AWARD

SERVICES TO AIRWORTHINESS
MIKE BURNS
A LIFETIME OF SERVICE, INDEPENDENTLY OF
THE TIME HE SPENT AS A GFA EMPLOYEEC

J R MULLER AWARD

PROMOTION AND MARKETING SEAN YOUNG JONATHON MCALIECE

WROBLEWSKI ANDRZEJ

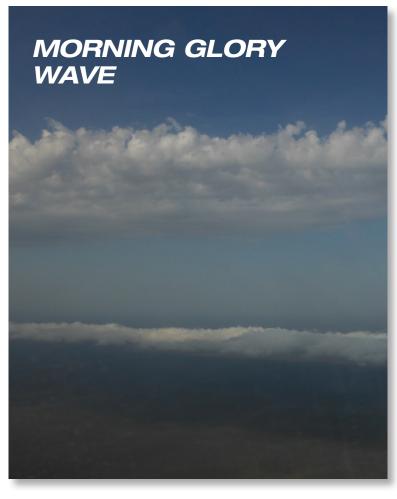
MCCLYMONT COOPER

WALLY WALLINGTON TROPHY

SERVICES TO THE SPORT OF GLIDING PETER AND LISA TROTTER

JACK IGGULDEN AWARD

SERVICES TO GLIDING IN GENERAL AS A VOLUNTEER DAVID BOULTER



In early October, Terry Kelly from the Central Queensland Gliding Club flew with John Spilsbury in his 1600cc Motor Falke in convoy with Ian McPhee in his 2000cc Motor Falke, accompanied by Terry Harrison up to

Burketown to fly the Morning Glory. On 2 October they encountered an amazing formation of five Morning Glories with five wave cloud formations above. Pictured above

FAI GLIDING BADGES TO 6 NOVEMBER 2013

A.BADGE SAARI LYDIA 11879 SOUTHERN CROSS GC GOULD PETER J SOUTHERN CROSS GC 11883 **BOUCHET TIMOTHY** 11888 NSW AIR TC A & B BADGE WILLIAMS TIMOTHY C 11881 CABOOLTURE GC NATHAN RAN 11884 **BEVERLEY SC B BADGE** MARCHINGTON TIMOTHY R 11619 BYRON GLIDING BALL DAVID L 11871 SOUTHERN CROSS GC PETERS CHRISTINA M 11792 SOUTHERN CROSS GC VENN MICHAEL C NARROGIN SC 11814 **C BADGE** CORREIA JASON D 11830 **BOONAH GC** MEGGS TONY G 11630 **BYRON GLIDING**

11834

11861

GEELONG GC

BOONAH GC

A. B. C. BADGE		
PILOTY ANDREAS	11880	CENTRAL COAST GC
PREIMONAS JOHN A	11882	BOONAH GC
BATES BRENDAN	11885	GYMPIE GC
MALOUF MITCHELL	11886	QLD AIR TC
RUSSELL MARK I	11887	LAKE KEEPIT SC
HEINTZE PHILIP M	11890	SOUTHERN RIVERINA GC
NUGENT JAMES J	11891	SUNRAYSIA GC
WHITE ANTHONY C	11889	LAKE KEEPIT SC
SILVER C		
BOURKE STEPHEN	4826	SOUTHERN CROSS GC
KLEIN KERRY C	4827	DARLING DOWNS SC
GUY CHRISTOPHER T	4828	DARLING DOWNS SC
DIAMOND GOAL	-	
BOURKE STEPHEN		SOUTHERN CROSS GC
DIAMOND HEIG	HT	
TRIDGELL PAUL K		RAAF RICHMOND GC
KHURANA ASHOK		ADELAIDE SC

AIRWORTHINESS DIRECTIVE DG-800A, DG-800B and DG-500MB powered sailplanes, all serial numbers

.Starting – Starter Motor Control Unit – Replacement

About 8% of the produced starter motor control units, as installed in DG-800 and DG-500MB powered sailplanes, have reportedly been sent in for repair with a defective starter motor control. Investigation results showed that a short circuit can activate the starter motor without pressing the starter button. This condition, if not corrected, could cause sudden rotation of the propeller, possibly resulting in injury to the pilot or other persons.

To address this potential unsafe condition, **DG-Flugzeugbau** issued Technical Note (TN) No. 800/42, 500/06 (single document).

For the reason described above, this AD requires identification and replacement of the affected control units.

Required as indicated, unless accomplished previously:

(1) Within 5 months after the effective date of this AD, inspect to determine whether an unmodified starter motor control unit is installed and, if this is the case, remove that control unit and replace it with a serviceable unit in accordance with the instructions of DG-Flugzeugbau TN No. 800/42, 500/06.

Note: The TN recommends to send the removed unit to DG-Flugzeugbau for modification. (2) From the effective date of this AD, do not install on any powered sailplane any starter motor control unit, unless it has been modified and labelled

with placard "MS".

Solo 2350 C engines

Solo Model 2350 C engines, all manufacturer serial numbers, equipped with a non-foldable propeller.

These engines are known to be installed on, but not limited to, DG-Flugzeugbau Model DG-1000T powered sailplanes.

During an occurrence of Solo 2350 C engine shaft failure and consequent propeller detachment was reported. The preliminary investigation revealed that the failed shaft was earlier modified in accordance with an approved method.

This condition, if not corrected, could lead to additional cases of release of the propeller from the engine, possibly resulting in damage to the sailplane, or injury to persons on the ground.

For the reasons described above, this AD prohibits operation of the engine.

This AD is considered to be a temporary measure and further AD action will follow. Effective Date:18 September 2013.

L-13 BLANÍK

Wings - Wing Spar Caps -Inspection / Repairs

Effective Date: 01 November 2013

A recent design review, based upon the sailplane accident preliminary EASA AD No.: 2013-0252 TE.CAP.00110-003 © European Aviation Safety Agency. All rights reserved ... established that L13 "BLANIK" sailplanes determined to be a "Reinforced" type, and L13A "BLANIK" sailplanes which are found to be in conformity with the certificated type

design in accordance with AI MB L13/112a, are not affected by reduced material characteristics of the wing spar. For the reasons described above, this AD requires a one-time inspection of wing spar material characteristics and the reporting of determined values to AI.

Required as indicated, unless accomplished previously:

- (1) Within 30 days after the effective date of this AD, inspect the wing spar upper and lower cap mechanical characteristics in accordance with instructions of Al MB L13/116a.
- (2) If, during the inspection as required by paragraph (1) of this AD, the measured material characteristic values are outside the permissible limits, as defined in the instructions of Al MB L13/116a, before next flight, replace the affected wing with a serviceable part.
- (3) If, during the inspection as required by paragraph (1) of this AD, the measured characteristic values are within the permissible limits, as defined in instructions of Al MB L13/116a, within 30 days after the inspection, report the inspection result to Al in accordance with instructions of Al MB L13/116a.
- (4) Any L13 "BLANIK" model sailplane, determined to be a "Reinforced" type sailplane, which has been verified to be in conformity with the certificated type design standard based on inspection results in accordance with AI MB

L13/112a, is not affected by the requirements of paragraph (1) of this AD, provided it can be demonstrated that no configuration change was accomplished on that sailplane since that verification.

GFA APPROVED MAINTENANCE ORGANISATIONS

Only the following workshops are permitted to conduct sailplane inspection or repair services commercially.

TOCUMWAL
TOCUMWAL
BOONAH
CAMDEN
BALLARAT
BENELLA
BOONAH
WAIKERIE
TEMORA
TEMORA
BOONAH
WA

AVIATION AND GENERAL ENGI AVIATION AND COMPOSITE ENG AVTEC AVIATION CAMDEN SAILPLANES COMPOSITE COMPONENTS GLIDING CLUB OF VICTORIA

SL COMPOSITES
T & J SAILPLANES
ULTIMATE AERO
UNIVERSAL PLASTICS

MADDOG COMPOSITES

MORGY'S GLIDER WORKS

MIKE BURNS 0438 742 914 PETER CORKERY 0439 842 255 0409 763 164 **ROGER BOND** 0418 681 145 MIKE DUGAN JOE LUCIANI 0428 399 001 GRAHAM CREED 0428 848 486 MIKE MADDOCKS 0408 195 337 0427 860 992 MARK MORGAN SCOTT LENNON 0438 773 717 TOM GILBERT 0427 557 079 0437 767 800 **NIGEL ARNOT** CHRIS RUNECKLES 08 9361 8316



mikeburns38@yahoo.com.au
corkerys@bigpond.com.au
Avtecaviation@virginbroadband.com.au
camdensailplanes@bigpond.com
comcom2@bigpond.net.au
gliding@benalla.net.au
mike@maddogcomposites.com.au
morgans@sctelco.net.au
scottl@internode.on.net
tnjgilbert@internode.on.net
nigel@ultimateaero.com.au
universalplastics@iinet.net.au

JUNIOR WORLD GLIDING CHAMPIONSHIPS 2015



to the town's culture and the local council and state government have both contributed to the development of the aero club building and aviation museum.

Narromine Gliding Club is only a small club, with as many international pilot members as it has Australian members. Narromine is also the home of Soar Narromine, a commercial gliding operation run by Shinzo Takizawa. Due to the small gliding population at Narromine, we will be relying on help from members across

the country.

WHAT IS JUNIOR WORLD CHAMPIONSHIPS?

Junior World Gliding Championships is a bi-annual event held for pilots who are younger than 26 years old at the start of the competition. Australia has been selected as the site for the 9th Junior World Championships, which will be held at Narromine in December 2015.

The standard of the top junior pilots is exceptional. Recent Junior Champions have followed up with podium finishes at the subsequent Flapped or Club Class World Championships. Sebastian Kawa's first World championship win was a Junior Worlds.

The entrants compete in two classes – Club Class and Standard class. At the Australian Worlds Comps we can expect something like 40 juniors in each of these two classes, from 25 to 30 nations.

NARROMINE

Narromine is in central NSW, close to Dubbo. One of the best known soaring sites in Australia, It is home to the Narromine Cup, a popular cross country soaring camp held every November with pilots from all states attending to develop their skills and achieve badges, certificates, records and personal best achievements. Narromine has also hosted numerous National and State championships, but this will be the first World championships at the site.

Narromine is a small country town, with a population of approximately 4,000. The town caters for a much larger population from surrounding districts with a number of hotels, motels, restaurants and service clubs. The airfield is central

A THREE YEAR PLAN

The World Championships will be the final event following a series of preparatory events. This provides opportunities for Australian organisers, Australian pilots and international teams to prepare for this world event in 2015.

- 7- 14 December 2013: Joeyglide Junior Nationals. A number of international pilots are expected to participate.
- 6 13 December 2014: Joeyglide Junior Nationals and official Pre-World Championships.

A significant number of international pilots are expected to participate, making a great opportunity for our organising team to get some valuable practice before the main event. This will be a crucial selection event for the final six pilots to form the Australian world team.

• 27 November - 12 December 2015. Junior World Gliding Championships

AUSTRALIAN GLIDING TEAM

Australia has a structured development program for our young pilots with an annual national event called Joeyglide, which provides cross country coaching for aspiring pilots, and a national level competition that accommodates a mix of flying experience.

The Australian team preparation commenced this year with three pilots competing in the Junior World Championships in Poland. Matthew Scutter, Eric Stauss and Ailsa McMillan all competed well and learned many skills and techniques to support future success.

TERRY CUBLEY
CHAIR, DEVELOPMENT PANEL
cmd@glidingaustralia.org

These three are well prepared to form the nucleus of our team for 2015, but the pace of development of our youth could mean that there are still pilots who have not flown at Joeyglide yet who could be challenging for a team position in 15 months time.

We are allowed three pilots per class, or a team of six pilots. The coaching group are already preparing a coaching program to enable young pilots to achieve excellence over the next two years.

WE NEED YOUR HELP

Running a world level event is a major undertaking. To get it right, we need the help of many other Australian glider pilots, young or old. We have created an organising committee comprising GFA members and Narromine Council and community members. In the near term we will be creating operational comittees and so are keenly seeking people with experience in Operations, gliding importation, sponsorship, events management, web development, scoring and more. Closer to the 2014 Pre-Worlds, we will then need many people to actually run the event, taking on roles as tug pilots, marshalls, caterers, promotions, scrutineering and so on.

If you are able to help, please send your details and expereince or interest in any positions related to the event to terrycubley@bigpond.com

WE NEED YOUR GLIDERS

Some teams will import gliders for the two events, others will want to hire Australian gliders for the competitions. If you have a Club class or Standard class glider that you are prepared to hire to international teams, please send details to me at terrycubley@bigpond.com

Some teams are keen to swap a glider in Europe for a glider in Aiustrlaiam so if you have ambition of flying in Europe or USA etc then this may be a great way to arrange a mutually beneficial solution.

BENEFITS

We plan to use the Junior Worlds and the Benalla Worlds to promote our sport to the media, which can help us grow our membership base and is important for all of us wanting to enjoy the freedoms of gliding in Australia. Ideas for promotion would be also welcome.



The 2013 Queensland State Gliding Competition, hosted by the Warwick Gliding Club from 28 September to 5 October at Warwick Aerodrome, attracted entrants from as far afield as WA and Victoria for this prestigious event.

The 25 eager competitors at the event, which consisted of combined Club/Two-Seater, combined 15 Metre/Standard and Open/18 Metre Classes, flew seven out of eight possible days with one day cancelled due to strong northerly winds. A combination of AATs, or Assigned Area Tasks, and racing tasks were used throughout the competition for the 15 Metre/Standard and Open/18 metre Classes, while the Club/Two-Seater Class flew AATs exclusively.

Challenging tasks were set and all days seemed well-tasked considering the conditions. The weather during the

competition ranged from a day that had top of 6,000ft and strong winds to a 10,000ft day. As in most competitions, a few competitors found some days more challenging than most, resulting in a notable quote on a particularly challenging day from a well educated, articulate competitor following a near outlanding. When asked how he had handled the decaying conditions as the day died during the afternoon, the competitor said, "A day can not ***ing die when it never ***ing lived !!" Ah yes, gliding comps bring out the very, very best in people.

5336

The Competition Director was Phil Southgate with Erich 'Captain Safety' Whittstock Scarlet as Tony and competition safety officers, and Dan Atkinson presented the weather under the watchful eye of Jenny Thompson from DDSC. Many thanks go to Val Wilkinson, Peter Summerfeldt, Nigel Andrews, Jeremy Thompson, Pam Kutjsens and Lex McQueen as our trusty reliable band of Tuggies who provided the means to the end game.

The competition had the good fortune to have G Dale from the UK providing valuable coaching from the back seat of the Kingaroy Duo Discus, as well as actively competing.

Jenny Thompson was awarded the Val Wilkinson Perpetual Trophy award for highest placing female pilot.

BELOW: G Dale and Dan with the Kingaroy Duo Discus. BOTTOM: Phil Southgate with 18 Metre Class winner Tom Claffey.



QLD STATE GLIDING COMP 2013 CLUB CLASS

STANDARD CLA	SS	
3. FRANCES NING	DARLING DOWNS SC	2876
2. ALAIN POTIER	DARLING DOWNS SC	3324
1. G DALE	LASHAM (UK)	4524

BEVERLY SS

2. KERRIE CLAFFEYSOAR NARROMINE35413. BILL WILKINSONWARWICK GC3254

15-METER CLASS

1. GREG BEECROFT

1. GREG BEECROFT	BEVERLY SS	5133
2. PETER TROTTER	KINGAROY SC	5002
3. CRAIG COLLINGS	MOUNT BEAUTY GC	4113

18-METER CLASS

1. TOM CLAFFEY	SOAR NARROMINE	5094
2. JENNY THOMPSON	DARLING DOWNS SC	3908
3. BRIAN DU RIEU	KINGAROY SC	3773





Members of the Adelaide Soaring Club have been attending Bunyan Wave Camp for many years due to the enthusiastic drive from Frank Johann, and this year was no exception. Pam Richards and husband Jim towed the ASC Discus, whereas I towed the ASC DG1000. Frank towed his private glider and his wife Julie-Anne joined us after flying over. Brothers Graham and Brian Rau also drove over and made up the Adelaide contingent.

We arrived at Bunyan in the early afternoon with plenty of time to rig up the gliders, all ready for action. Sunday turned out to be drizzly so we did not fly. Monday and Tuesday were good thermal days with relatively easy usable lift up to about 9,000ft. I had some very relaxing flights of between one and three hours in the Discus, enjoying the views of the countryside. Frank had wave flights thermalling in rotor into wave to FL120 and just under FL210 on respective days. He still had 3 to 4kts but called it quits there as it was 5pm. Diamond Height gain was possible on Tuesday.

On Wednesday we had a wonderful wave day when Brian and Graham flew the DG1000, Frank flew his own glider and I again went up in the Discus for a four and a half hour flight. I released the tug at about 6,000ft, worked the thermals to about 9,000ft and then found wave. After searching for about half an hour I found the strongest part of the wave, getting between 2 and 4 knots of lift, which took me up to 17,600ft. This flight was a real beginner's fluke, as everyone else I spoke to could only manage about

13,000ft. As one of my friends used to say to me, "I would rather be lucky than clever." But then Thomas Jefferson said, "I'm a great believer in luck, and I find the harder I work the more I have of it."

Thursday was a very strong wind day and we did not fly at all. Friday was another modest thermal day, giving me the opportunity for another one hour Discus flight.

DIAMOND HEIGHT

The most exciting day of the camp was Saturday, which was also the last day of the camp, with very strong wave conditions. The rotors were extremely turbulent when both my take-off and landing were the most exciting of my flying career. On take-off I found myself going faster than the tug many times, and had to slow myself down using air brakes. To use one of Frank's expressions, in the rotor it felt like the glider was a cork in a washing machine. Nevertheless. when Ion Blacklock towed me into wave. I released at about 8.500ft, notched down to 7,800ft, and then steadily climbed to flight level 245. This gave me a Diamond Height gain on only my third wave flight. How lucky can one get?

DON'T STOP MOVING!

But life is never so simple. I had borrowed Graham Rau's Nano Logger because I did not have one of my own. Unbeknown to me, he had it set to turn off if the ground speed decreased below 4kms per hour. Flying in wave, having found what I thought was the best spot

over the ground, I was of course trying my hardest to stay stationary relative to the ground! Fortunately, my flying skills are not good enough and I could only achieve a stationary location for about three seconds. This meant that my flight trace was interrupted by three seconds, which FAI Certificates Officer, Beryl Hartley, assures me is not an issue, particularly as it is supported by a Flarm Trace showing that it was a single flight. Lady luck was still with me.

Overall, the camp lasted six days. We flew on six of those days and I had eight launches totalling about 16 hours, about half in thermals and half in wave. Oh – what a week!

I extend my grateful thanks to Frank for his encouragement and coaching, and to Brian Rau, my Official Observer, for downloading the traces and certifying my flight. Hopefully my Gold and Diamond Height Certificates will be in the mail soon.

My thanks are also due to the Canberra Gliding Club members who put on a wonderful, safe and enjoyable Wave Camp. Everyone was very friendly and helpful. Special thanks also to Don Palmer and to Jon Blacklock for their safe tugging efforts, sometimes in fairly difficult conditions.

In particular special thanks to Stuart Ferguson, who worked tirelessly all week to keep us all in the air and did not even get to fly the tug!

Ashok holds down the wing of his glider against the strong wind after landing from his Diamond Height flight.



MULTICLASS NATIONALS



I lay under the wing of my trusty ASW20B, mind in neutral, gazing up at the clouds in the company of Lisa Trotter. It was the last day of the 52nd Australian Multiclass National gliding championships and I was at the back of the grid with plenty of time to contemplate the wonderful competition it had been. A series of flashbacks came to mind.

First, of course, there was the flying, which had been nothing short of superb. The conditions had been excellent throughout the two week competition. Even on the compulsory lay day after Day 3, it had been flyable.

The daily briefings were always entertaining. Our revered Competition Director, Neil Dunn, maintained a low key but thoroughly organised presence throughout. His dry humour and good natured approach set the scene for a very enjoyable, well-run event. No job was too big or too small. He even moved my car one day, after I had had

an aerotow retrieve, to make it more convenient for me on my arrival. Thanks Neil!

The task setter, Jim Crowhurst, aided by a series of helpers, set a series of challenging tasks - eight out of 10 competition days were racing days, with only two AATs set. The task setters job is a thankless one. If you get it wrong, either under or over set, you are beset with 'I told you so', and if you get it just right - "Well, that's your job isn't it?!" Jim got it right nearly all the time.

The weather is another difficult one to get exactly right. Rather like the story of Goldilocks and the three bears, the presentation has to be not too long, not too short, but with just the right amount of detail. Adam Woolley hit the right spot. His morning presentations were slick, accurate and gave just the right amount of detail in order to make valid decisions concerning start time and routes on the two AATs that we flew.

CUNNING PLAN

As an example, on Day 9 we were all sent north on a short AAT. We were warned about the approaching trough, but I knew better. I mean, a bit of cloud and a spot of drizzle - so what? How bad could it be? So I started late meaning to get the jump on my competitors in the better, later conditions.

My cunning plan worked right up until I hit the wall of cloud and lines of rain showers that swept across the Kingaroy valley, right about the time I found myself over unlandable territory near Proston - and at about the time Adam had said that this would happen. This led to a very depressing trickle in 1 knot climbs, finally ending at the airfield in Wondai. I made a note to myself - when 15 out of 16 nationals pilots start early, it may be wise to reconsider one's original plan to start late!

Kingaroy Soaring Club, with its array of excellent facilities, was as hospitable as always. In particular, the club house was a buzz of conversations and laughter at the bar in the evenings as pilots and their family and crew prepared for the evening dinner, ably presented by the Kingaroy ladies and, of course, Johnny McGrath and Robbie Butler. The new pizza oven was put to good use on one night, when production from the oven took a long time to finally outweigh consumption.

START LINES AND GAGGLES

At the pilots' meeting on the lay day, there was much discussion about starts and finishes. Start lines were placed in the spotlight, prompting a further discussion about gaggles before the start and how they can be prevented. I remember one day counting 13 out a of a possible 16 of the 15m gliders in a pre-start gaggle!

The unfair advantage given to early launchers on a wave day was also highlighted. Terry Cubley suggested an ingenious solution, which was that in order to make a valid start, pilots must descend under a predetermined height for two minutes after the start gate had opened, but prior to starting. This would allow those pilots skilled enough to get into the wave or high thermals to start, but on a level playing field with other competitors. This suggestion received a positive response from many pilots present.

Allan Barnes neatly put forward the case for a 10km finish ring. While this did appear to have some merit, after some heated debate, the general feeling appeared to be that there was nothing much wrong with the existing 3km finish ring arrangement.

FIERCE COMPETITION

The competition was fierce in all four Classes - Open and 18 Metre had been placed together, which essentially made it three, but perhaps particularly in the 15 Metre Class, where a number of pilots entered flying their standard class gliders in order to challenge for selection for the Worlds in Poland. In fact, nine of the 16 entered into 15 Metre Class were World Comp team pilots! Speeds throughout the competition were nothing short of blistering. On the last day, Tom Claffey did 158.9kph in his ASG29 over a 339km racing task! Overseas competitors were well represented and included Arne Boye-Moller from Denmark, Annemiek Koers from the Netherlands and Steven Wallace, Alan Belworthy, Brett Hunter and John and Sandy Griffin, all from NZ.

continued over page

TOP: Craig Collings in his ASW 20B. BOTTOM: Kingaroy Airfield.

OPPOSITE TOP: The flght line at Kingaroy.











So who else was there? Well, many of the usual suspects - Tom and Kerrie Claffey, the ever cool Matt Scutter from SA, winner of the 15 Metre Class in his Discus 2 with three day wins to his credit. David Jansen roared around at break neck speed but unfortunately had an close encounter with Shinzo Takizawa on the first day of the competition, leaving Shinzo with a rather abbreviated wing. This put Shinzo out of the competition and David with a distance score only. After a valiant comeback with four subsequent day wins, David placed 8th overall.

Then in the standard class, flying his LS8, the ever consistent Greg Beecroft from WA won six out of the 10 contest days and came 2nd on three of the other four. Fantastic performance! I sat next to him once at briefing, but that did not appear to improve my performance.

Still in the standard class and both flying Discuses were the Tasman Trophy protagonists Alan Belworthy from NZ and Ray Stewart from QLD. It was a hard fought contest, with Alan pipping Ray at the post to end in 6th and 7th places respectively.

Lower down the rankings and sharing one of the excellent Kingaroy Soaring Club Discuses were John and Sandy Griffin, 'Team Griffin' from NZ. The full and frank exchange of views between them as they watered and prepared the glider in perfect harmony in the hanger each morning was a joy to hear.

THE HOTLY CONTESTED 15 METRE CLASS

To give you an idea of just how hotly contested it was, on Day 5 I put in my best performance yet at 127.4 kph over 398 kms and ... came 11th! I mean, what does a guy have to do? Matthew Scutter appeared unstoppable in his inexorable progression to the head of the leader board. With three wins and two 2nds, he overhauled Mak Ichikawa from NSW, who 'only' had three wins and one second, by around 100 points. Only 18 points behind Mak with two days wins and two 4ths to his credit was Peter Trotter, who had been enigmatically, surreptitiously and unassumingly climbing the rankings steadily throughout the competition. Interestingly, for those who like statistics, the top five pilots overall

ABOVE: Excellent Kingaroy weather for the Multiclass Nationals.

RIGHT: Steve Hedley in his Nimbus 3DM.

OPPOSITE TOP: THe Kingroy sky full of gliders.

MIDDLE: BIII Hatfield in his Lak 17.



accounted for over half of all the available podium positions, that is, 1st, 2nd or 3rd.

In summary, it was a great, friendly competition at the highest level. We were blessed with wonderful weather, the organisation was excellent and Kingaroy Soaring Club put on its usual terrific hospitality.

A big thank you to all involved, particularly the tuggies who lost a tug early in the piece, but still seemed able to launch the whole fleet within 45 minutes! Thanks also to the line runners, coerced from a local school, I think, Gary and Aspro at the weighing station, Johny McGrath at gridding and all the ladies in the kitchen, including Gaby O'Donnell who turned 11 during the comp and informed us of how many days - several thousand - she had left before going solo! While on the subject of birthdays, Robbie Butler turned a certain age as well, and was given a beautiful rendition of the Beatles 'When I'm 64' by the kitchen ladies and Gaby.

An hour after lying under my wing on the grid on the last day, I was again lying on my back under the same wing and gazing at the same clouds - but this time at Rosevale strip 50 km down track, having had a straight glide down from 8,300 ft at the start and found no lift whatever all the way to the ground.

VITAL STATISTICS

All Classes

Total Distance Flown: 170,692km AVG Task Distance: 364km AVG Day Speed: 111.42kph AVG Top 3 Speed: 121.7kph AVG Day Winner Speed: 124.26kph

AVG Overall Day Winner Speed: 121.27kph

15m Class (16 Finishers - biggest class)

Total Distance Flown: 57,002km
AVG Task Distance: 361km
AVG Day Speed: 112.83kph
AVG Top 3 Speed: 121.05kph
AVG Day Winner Speed: 123.64kph
AVG Overall Winners Speed: 119.06kph

OPEN Class (15 finishers)
Total Distance Flown: 69,657km
AVG Task Distance: 393km
AVG Day Speed: 119.43kph
AVG Top 3 Speed: 131kph

AVG Day Winner Speed: 133.56kph AVG Overall Winner Speed: 129.91kph

STD Class (13 finishers)

Total Distance Flown: 44,032km AVG Task Distance: 339km AVG Day Speed: 102kph AVG Top 3 Speed: 113kph

AVG Day Winner Speed: 115.59kph AVG Overall Winners Speed: 114.83kph

Winners percentage points of all available

M. Scutter (15m) = 92.67%

T. Claffey (open and 18m) = 94.58%

G. Beecroft (standard) = 98.83%

Statistics courtesy and by kind permission of Adam Woolley







+

52ND AUSTRALIAN MULTICLASS NATIONALS KINGAROY

OPEN

1. 8566	TOM CLAFFEY	NSW	ASG29
2. 8430	JOHN BUCHANAN	QLD	ASG29
3. 8253	ARNE BOYE-MOLLER	DENMAI	RK ASG29E
4. 8241	IAN CRAIGIE	QLD	JS1C-JET
5. 8241	ANDREW GEORGESON	QLD	VENTUS 2C>

STANDARD

1. 8783	GREG BEECROFT	WA	LS8
2.8028	MATT GAGE	VIC	LS8
3. 7841	TIM WILSON	VIC	LS8
4.7546	MATTHEW ATKINSON	NSW	DISCUS 2E
5. 7133	STEVEN WALLACE	NZ	DISCUS 2B

18 METER

1. 8563	TOM CLAFFEY	NSW	ASG29
2.8420	JOHN BUCHANAN	QLD	ASG29
3. 8276	ARNE BOYE-MOLLER	DEN	ASG29E
4.8230	IAN CRAIGIE	QLD	JS1C-JET
5.7972	ANDREW GEORGESON	QLD	VENTUS 2CX

15 METER

1. 8084	MATTHEW SCUTTER	SA	DISCUS 2
2.7943	MAK ICHIKAWA	NSW	LS8
3.7925	PETER TROTTER	QLD	LS8
4. 7866	DON WOODWARD	ACT	ASW20C
5. 7824	PETE TEMPLE	SA	LS8



MIDDLE: Mak Ichikawa came second in 15 Meter Class.

BOTTOM: Steve Wallace from New Zealand came 5th in Standard Class.

BELOW: Tim Wilson came 3rd in Standard Class in his LS8.



ABOVE: Matthew Atkinson received the Sir Donald Anderson award for novice pilots and avhieved 4th place in Standard Class.











AERO-WORKS



V- Towing Bar, Auto- Reverse, 100km/h Certificate, Spare Wheel, long retractable Jockey Wheel, lockable one - hand central Latch on Back of Clamshell, large Hatch in front, Vent Grill on back, Solar Vent in centre - all standard

Bed made from 25mm GFRP Panels, Clamshell constructed from cnc - cut and bent aluminium sheet parts Clamshell is structural when latched giving torsional stiffness to the bed for speeds tested in excess of 100mph.

Approx Cost: Starting from 6,500 – 7,000 Euro ex. Factory + Shipping & GST.





Build it yourself Glider Trailer Kit

- Light weight Aluminium Clamshell Trailer
- Tail / Wing and Belly Dollies included







Register your interest now so you don't miss out. Costs on shipping will be kept to a minimum, as a number of flat packs will easily fit into our shipping container

For more information ANZ Agent - Swain Johnson: 0412827252 or email swaino@hotmail.com.au or http://aero-works.de

GLIDEFAST 2013

BY BAY STEWART

For more than 10 years, Peter and Lisa Trotter have been running GlideFast to assist pilots to improve cross-country skills. The course is generally set for a group of pilots with similar goals, to either improve early cross-country skills, assist with flying longer distances or improve cross-country speeds for competitions. At this year's course in Kingaroy, most pilots wanted to improve their competition flying.



Almost every gliding club in Queensland was represented. Sandy Griffin travelled all the way from New Zealand, while Scott Percival travelled even further. He spent four days driving from Western Australia with his SZD 56 in tow. Scott represented Australia at the WGC in Austria, back in 1989. He has recently returned to the sport, and found many aspects of competition flying had changed.

Most of us attending Glidefast 2013 arrived on Wednesday afternoon. During the drive up, we witnessed some spectacular weather, with high bases and obviously good conditions until late in the day around 4pm. Kingaroy is in Queensland and September is still early spring, after all. While starting to rig some of the gliders, an LS10 blasted overhead in a competition finish. This was Brian Du Rieu, who had arrived early and done a 500km just to warm up before learning a few more tricks!

We had my Discus, Steve McMahon's Mosquito, Ray Parker's Ventus 2CX and Andres Miramontes' LS1 rigged before settling in for a beer. Peter Trotter had arrived earlier in the day with Sandy Griffin and we were joined later that evening by Lisa Trotter and Nev Donald the next morning.

11-KNOT THERMALS TO 10,500FT

The next day, Day 1, started with some theory on thermalling. The day was forecast to be another cracker so we headed out to fly, the objective being to achieve the longest glide between thermals and achieve the highest average climb rate. The more adventurous were to do two laps of a 150k course, while others were to do a single lap. The day delivered in spectacular fashion with 11kt thermals to 10,500ft! We whistled around the short course and all came back beaming. That evening we got to look at the traces, going through each flight. There is nowhere to hide in this, and it became evident that Peter had done significantly better than any of us plebs. His average speed of 127.5 kph was significantly higher than Brian's 120 kph and my own 115 kph. The rest had various glitches, mostly due to new or unfamiliar

navigation equipment. While they had all got round perfectly fine, the distractions had affected statistics. Even without statistics, everyone had enjoyed a great day's gliding, which was a lot more fun than working on a typical Thursday afternoon!

FEEL OF THE AIR

Day 2 began with some more theory on Feel of the Air and Looking at Clouds. The objectives were to hone finding, centring and leaving thermals. Each day was to have a weather forecast prepared by one of the students on the course. Day 2 was my turn. XC skies and RASP both indicated reasonable conditions, though it became evident the cloud associated with the trough had not cleared as early as expected. By the time we gridded, the cloud had cleared and some high-level cu was forming.

Peter and I launched in the Duo as the 'sniffer' and struggled until we finally found a climb to just short of 3,000ft AGL. The rest of the class duly launched, and we followed each other around for the next 90 minutes, each hoping someone could find a climb to the development that was taking place way above our heads. By 2pm it was evident the day was not going to improve, so we landed and had more discussions on gliding theory through the afternoon.

Day 3 theory was on Competition Flying and Height Bands/Speed to Fly. The objectives set for the day were to establish height bands and adjust speeds accordingly. The task was a short 100km triangle to Wondai and Kumbia, turnpoints that would become very familiar! The day was blue and convection was working to 7,500ft. On task, some of us managed to find some incredible streets of sink and fly in them for miles. Fortunately there were enough good thermals around and Peter once again demonstrated how fast the day could be flown, at 108 kph.

On Day 4, the theory was a little shorter, since the day was forecast to be good. The task was a reverse of the little 100km task from Day 3. The day started quite low, convection only working to just over 5,000ft. Around 2pm, convection suddenly lifted, with climbs to 8,000ft and then over 10,000ft.

For those going around twice, this provided an interesting mix. The first run was lower and slower, and second time around it was almost possible to final glide all the way around the 100km course! An example of this was the Duo pairings. Sandy and Peter flew the first circuit at a modest speed, based on the weaker conditions earlier in the day. Brian then climbed into the Duo with Peter, climbed high for a start and blasted around at 133kph! This was the highest speed achieved for the course and Brian had firmly established himself as the 'A' student. We all donned our new crisp white 'GlideFast' shirts and headed to the local Chinese restaurant for a 'final glide' dinner. We had some great gliding and we could relax a little, since it was evident we would not be flying the next day.

SPORTS PSYCHOLOGY

Day 5 involved ground theory only, with a later and more relaxed start. Lisa presented some sports psychology theory. There was particular interest in the thoughts and attitudes of successful glider pilots. On the other hand, some people have 'running commentary' of their flight, which can distract. Various ways to remove distractions and enhance focus were discussed. Peter followed with a presentation on decision-making. This also proved to be very interesting, and brought up simple solutions for improving cross-country speed that are obvious once pointed out, but don't necessarily spring to mind when intently focussed on other stuff in the air. We had a relaxing afternoon with no flying. Brian departed to pick up his wife Kim from Brisbane, but kindly left us with the proceeds of a meat raffle he won at the local RSL. Sandy coordinated a BBQ for a very grateful troop. Just as we were enjoying dessert and washing up, a discussion started over the lightning in the distance. We casually checked the BOM and, to my alarm, noted there was a severe weather warning, with the storm due to hit in 45 minutes.

We quickly checked whether there was hangar space available, and dashed out to get the gliders. Fortunately Steve and Andres had de-rigged as their solo flying for the course was over. This left just four gliders out in the open. As we untied, the rain started sprinkling. As we arrived at the hangars, the downpour and howling winds announced the arrival of the storm, some 20 minutes early. We managed to get three gliders into various hangars. So a very lazy day had ended in dramatic fashion. We were all soaked

RAIN AND WIND

Day 6 started with rain and lingering cloud. The first breaks in the cloud appeared around 11am, and the forecasts were surprisingly optimistic. XC skies forecasted a totally blue day, which was interesting considering the early 8/8 cover we could see out the window! However, we gridded and duly launched, like a real competition.

The conditions turned out to be flyable, though the wind aloft was very strong. We had an AAT task for the day, following the presentation on flying AATs given by Peter. The first leg was into wind and was hard work. Sandy was keen to get going and was followed by Steve and Peter in the Duo, Ray Parker in his Ventus, and Nev and myself in Discuses. People got low at various times in trying conditions and some gave up on the whole crazy idea. Some of us had better luck and got around OK, including a great plucky effort by Sandy. I had an interesting final glide into a 32kt headwind,

Brian had set about maximising distance in the 90 minutes available. He was dark on himself, falling 16km short of maximum available distance while coming home four minutes early. He had once again set the benchmark with an average speed of 103kph – very impressive for the difficult conditions. After getting back, we heard Lisa had outlanded on the third leg in a soaked paddock. This demonstrated that even for the experts, sometimes Mother Nature has the last word. We all had lucky low saves during the course of the week, but with sodden ground and high winds, this last day provided little margin.

We had a final wrap-up discussion of the day's flying, including lessons learned. That was the end of a highly

AIS COACHING CAMPS

PETER TROTTER
NATIONAL COACHING
COORDINATOR
peter.trotter6@bigpond.com

During 2014 there will be a number of coaching camps run for glider pilots at the Australian Institute of Sport (AIS) so I am interested in hearing from pilots who may



be interested in attending. If you want to improve your soaring performance so that you can go faster or further in your distance flying or competition then you need to know what the experts have to say.

The AIS is Australia's prestigious coaching facility. GFA is a National Sporting Organisation with the AIS which gives us good access to their facilities. The GFA Coaching Panel have in the last twelve months organised two camps at the AIS for the juniors and for the coaches and both have been well attended and of value.

The AIS have professional presenters who cover a range of topics such as:

- Sports nutrition and hydration
- Sports psychology
- Strength and condition
- Recovery

GFA covers the cost of the lectures. You just need to get yourself to Canberra. Food and accommodation at AIS is very reasonable at about \$100 / day.

Why not get a group of friends or club members together to travel to Canberra for a long weekend? When I have an idea of numbers I can confirm specific dates with the AIS. The camps run for two days and can be any day of the week, though Friday and Saturday work well.

If you are interested please contact me at peter. trotter6@bigpond.com or **0417888040** by about the end of January. Let me know your preferred date for a camp.

successful course. The only grumbling came from Steve's tummy. He didn't have time to shop for breakfast or lunch before the course and ended up buying a mystery-meat sausage at the nearby vintage tractor show on a couple of days. Apparently the thermals overhead the tractor show also smelled pretty darn good.

For all of us who participated in the course, we have to pass on a huge 'thank you' to Peter and Lisa. They gladly give up their time to run these courses, asking nothing more than a very modest fee to cover expenses. Also a big thanks to Neil Dunn for being the designated L3 instructor, and also doing some tows. The bulk of the tows were done by Bill Hatfield, who provided some great entertainment, too.

Peter and Lisa plan to expand the scope of their courses. One option is to provide cross-country training to club instructors. Instructors are the heart and soul of a club operation and the intention is to provide new tricks and skills that will, in turn, be passed on to newly solo pilots. Ultimately this could help retain membership and promote wider interest in our amazing sport.



Like many glider pilots, we have heard the call of the Morning Glory for years. I used to think that flying to Burketown to fly the relatively unknown phenomenon of this mysterious wave of energy that would carry you out over the crocodile infested waters of the Gulf of Carpentaria, was an adventure far beyond anything I could ever contemplate. I would actively avoid the subject when it came up, preferring to stay safely in the familiar south.

ABOVE: After four days of travelling and a week of waiting, the Morning Glory cloud is developing. So what changed? We flew from DDSC to Burketown in four days with never a worrying moment. Good weather helped, of course. Good planning helped, too. Others have flown the route in recent years, and the Morning Glory has been explored especially by Geoff Pratt, whose advice was eagerly sought. But the key factor was that we have two very good self-launching gliders, the ASH31mi and Quintus M

I feelmy ASH31 mi gives me more confidence to fly over the remote regions of Australia where the outlanding options are few and far between. After launch, I have potentially 12 litres of fuel remaining, and that should be enough to cover 150 to 200 km in a climb and glide profile. Flying over the remote country has never been such a worry for Gerrit. I'm the nervous one!

Our Port Augusta safari in Feb 2013 was a dry run and learning experience for this Burketown trip. We got there and back in eight days with no crew and no ground support. Taxying out with a steerable tail wheel, you don't need a tail dolly and all that paraphernalia. The Burketown safari was different. Graeme Summers volunteered to drive the car and trailer. John Buchanan flew up to join us a week

later in our Diamond Star. Graeme once drove across the Nullarbor in pursuit of Gerrit on a safari about 18 years ago.

DARLING DOWNS TO MITCHELL

We departed on Saturday 31 August. and covered the 365 km to Mitchell in four hours. It was a blue day, a bit scratchy at first. As soon as we left DDSC, we were both down to 600ft agl and dumping water. Not an auspicious start! It was slow going for an hour, and then we had a good run, sampling some really good climbs north of Roma before landing at Mitchell. You can fly to Mitchell over good farm country with endless landing options, and the airfield is fine for gliders with no security fences, a small building with facilities, and access to power and water. Before landing, I took a good look in the direction of Longreach, forested low ridges, as far as the eye could see in a slight haze. Ummm.

Graeme had a radio in the car, so we could sometimes let him know how we were doing, but I was amazed at the Telstra coverage at altitude, and SMS was often the best way to communicate. I had sent him an SMS saying we would make it to Mitchell, he had booked rooms, and the motel manager picked us up from the airfield. Graeme arrived a couple of hours later. We found out the next morning that there is a splendid hot artesian spa in Mitchell.

Day 2, Mitchell to Longreach 504 km, 4hr 10 mins. We took off about 12:30 as we wanted to be sure the conditions had really got going before we set off across the first stretch of tiger country. In the event of poor conditions, we would follow the road, with airfields at Morven, Augathella, Tambo and Blackall, as well as several airstrips on properties. We launched at 12.30pm into good blue thermals. It wasn't long before the first cumulus appeared, and we were soon cruising along at 10,000ft. Too easy! It was blue to the west, so we stayed a little north and east of the direct track, leaving the cu to fly the last 150 km in the blue. It was winter, and the days were short, with sunset at Longreach at 6pm. The day began with super conditions, and ended with rather cautious tip-toeing. In this 150 km run in the blue, there was just one airstrip on a property south of track and about half way along. The rest was rough cattle country.

We walked to a motel across the road from the airport, and were relaxed and refreshed by the time Graeme arrived with the trailer a couple of hours later.

LONG REACH TO BURKETOWN

On **Day 3** we flew 496km from Longreach to Cloncurry in just 3 hrs 40. When it is blue in the morning, you never know what to expect, but there was a patch of moisture in the middle levels to the north, and sure enough after a blue start, the cu got going again and we had another good run. The cu were wispier and thinner, but the lift was excellent. We landed while the day was still good.

The next day we covered the 340 km from Cloncurry to Burketown, in 3 hrs 40mins. There are no towns on this leg, but perhaps because of that there are three excellent dirt runways at Kamileroi Station, Lorraine Station, and Augustus Downs. It was blue, but good enough for a very pleasant run to Burketown, between 5,500 and 7,500ft. We could hardly spot the small township at first, among the mangrove-lined rivers that meander across the salt flats. A local power pilot explained to us where to park the gliders, and we walked into town and found the caravan park, where we had a very nice self-contained cabin booked for the first six days, moving into a more basic cabin after that. These basic cabins are actually 20ft shipping containers, suitably modified, with air conditioning and a sink. With everything else booked out, Graeme had to make do in one for the whole of our stay.

LOOKING FOR CROCODILES

Days 5 to 9, we explored, driving over the salt flats, and looking for Crocs at the boat ramp. We didn't see a single croc in the whole time we were there, but nobody wanted to go swimming all the same! With strong easterly cross winds at the airfield, I was eyeing up the salt flats for a landing area. They are dead flat, mainly hard and offer several kilometres of 'runway', but it is wise to get to know what the variations in the surface colours mean. There was a hang glider pilot launching on the salt flats with a cable towed by his car, driven by his wife. People have been known to go on gliding safaris in the old days with a roll of fencing wire in their car boot, launching the same way. With the weather conditions unlikely for a Morning Glory for the next few days, we decided to find out what it is like to self-launch from Burketown at the







TOP: Gerrit and Pam by the mural at the Morning Glory Restaurant, Burketown.

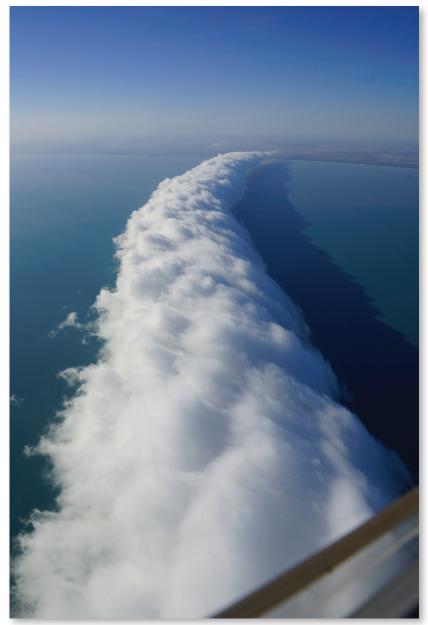
MIDDLE: All the airfields they landed at, except Mitchell, are Security Controlled, and they were asked for details of ASIC cards before being given the code for the personal access gates.

BOTTOM: Gerrit in the Quintus between Cloncurry and Burketown.

crack of dawn. We learned a few things, such as covering up the bright LEDs on the engine control panel, as they produce so much glare you can't read the instrument. It was fun to watch the sun come up over the salt flats.

At Burketown, with the parking area at the northern end of the strip, it is ideal if you can take off to the south, and

continued over page









ABOVE LEFT: The Morning Gllory over the Gulf of Carpentaria.

ABOVE RIGHT: Dawn flight from Burketown.

land to the north, rolling off into the grass where the gliders park. There were no other gliders there, as we were a bit early in the season. We had access to power by running a long cable through the fence from the public toilet block, and access to water so we could fly with ballast in the good afternoon conditions over the next few days. When parking, you must not block the apron as there are plenty of light twins in and out all day and a regular Skytrans Dash 8 passenger service. I noticed there is a fine for parking in a 'no standing' area.

We set the alarm for 5am each day. I would look outside, phone the AWIS at the airfield, and log into NAIPS to get the aviation weather forecast. We were looking for high humidity. People said that conditions are dripping wet on the morning when the Glory happens. There had been a persistent, strong easterly flow and we knew this was not Morning Glory weather.

We flew some good distances in the afternoons, in



RIGHT: Pam in her ASH31mi VH-XPM over the Morning Glory.

excellent conditions, and on two days we flew over Adel's Grove in the Lawn Hill National Park. Sea air from the Gulf made for some interesting glides home.

MORNING GLORY DAY!

Day 10, 10 September. I was up at 5am and the weather was dripping wet! There was a thin layer of fog. The gliders were so wet you could hear the water pouring off the wings! The AWIS gave the temperature and dewpoint both 18°C. Gerrit and I got ready before sun-up, with Graeme and John trying to get the water off the gliders. They just wouldn't dry out. The canopies were worst, and remained opaque despite our best efforts. We could see a long straight cloud way to the north. We took off, climbing high, realising the cloud was too far away. The canopies cleared as soon as we got moving, but thank heavens for clear view panels!

We had just shut down the engines at around 5,000 ft, when Graeme and John reported that a Morning Glory was forming south of the airfield, moving north. It was just a long thin streak of transparent misty cloud, but definitely the real thing! We opened our airbrakes and descended, down, down, to soar along the northern side of the cloud at 1,000ft agl. The cloudbase was 500 ft, and the cloud top 1500 ft, and the lift was strong! John and Graeme raced into the air in the Diamond Star, and Graeme put his Digital SLR camera to work getting some air to air photos of the gliders, against the now more defined and impressive cloud. We could just run and run at speed, or







TOP: First sight of the Morning Glory between the town and the airfield.

ABOVE: The zig-zag track flown can be seen on the LX display, and Pam is reflected in the small mirror

RIGHT: Pam in the ASH, with John Buchanan, before launch, note the misted canopy slow down and climb to 4,000ft or more. This was like ridge soaring, but on a ridge that was moving north at about 35 kph, so the resultant trace shows a zig-zag flight path over the ground. John and Graeme flew out over the Gulf to a much bigger cloud, several thousand feet deep and hundreds of kilometres long, lying east west across the gulf, and moving south slowly. The two Morning Glories were moving towards each other!

As the cloud began to carry us out to sea, we reluctantly turned for home. I didn't want to go! I was a bit mesmerised by the whole thing, and happily being carried

away felt just fine! It was a true sense of euphoria. Maybe hypoxia feels the same.

When explaining to people what it is that keeps us interested in gliding year upon year, I like to say that no two flights are the same. There is always a new experience to be had, so many different types of soaring, all around the world in so many different types of terrain and scenery. This flight was the perfect example of that - something completely new for me after 42 years of soaring.

In the afternoon, we all flew out to Sweers Island in the Diamond, where the owners of the exclusive fishing resort, Tex and Lyn Battle, see many Morning Glories every year. Tex flies the glories in his Pelican ultralight aircraft, and helped us with phone calls in the mornings reporting any likely developments. He has also been helping to get reports into the newspapers and TV weather programs.

The next day brought no Morning Glories, so we made a long drive out on the salt flats and saw a magnificent sea eagle. Still no crocs! We prepared to leave the next day.

Day 12 was another hopeful morning, but the air seemed too dry, but we found out that Morning Glories happen in dry air, too! John and I launched and worked areas of lift, sometimes marked by dust lifted off the ground and indicating a north-south orientation of lift, moving to the west. John managed to stay up for two hours. In the afternoon, we set off to fly back to DDSC. John and Gerrit flew to Cloncurry in blue thermals

to 9,000ft, and John got a climb south of Cloncurry to 14,000ft! In the blue!

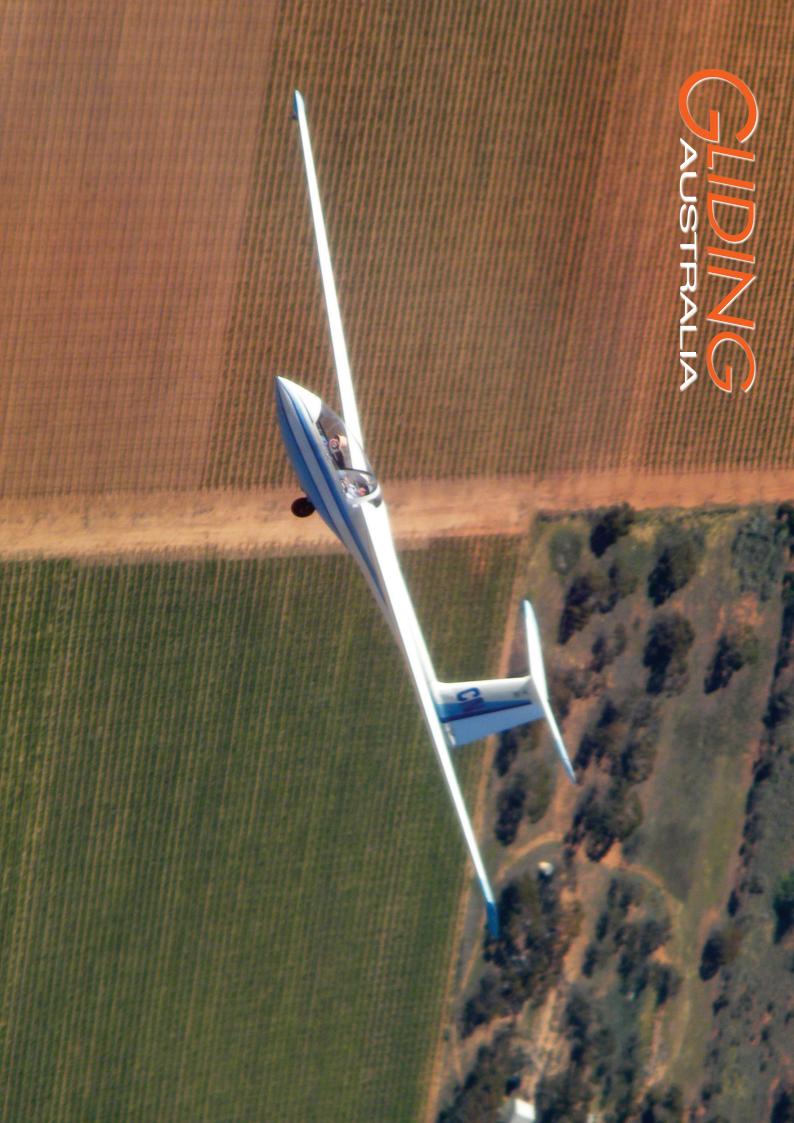
The following day Gerrit and I flew to Longreach. A front was coming through, and we had some interesting times getting further and further east of track, eventually making a 130km final glide under layered cloud in dead air.

Day 14. John and Gerrit flew to Roma, with the remains of the front pushing them so far east of track they ended up flying not far from Carnarvon Gorge. Please note that all the airfields we landed at, except Mitchell, are Security Controlled, and we were asked for details of our ASIC cards before being given the code for the personal access gates. At Roma, the operations man had to see my card before doing so, even though this meant he had to come out to the airfield late on a Saturday afternoon. We did not take the car onto any airfields.

Day 15. Sunday, 15 September. John and Gerrit flew the final leg in difficult blue conditions to McCaffrey Field, the home of Darling Downs Soaring Club.

Burketown and back in two weeks! A very successful trip. Log files are on the OLC. $\textbf{\textit{G}} A$







	SATURDAY	Junior Nationals Narromine 7 - 14 December 2013	14	<u>2</u>	28	4
NS FLYING	FRIDAYDAY	O	13	20	27	M
PHOTOGRAPH: PAM KURSTJENS, BURKETOWN, SEPTMEBER 2013. GERRIT KURSTJENS FLYING THE MORNING GLORY IN HIS QUINTUS M.	THURSDAY	Q	5	19	26 SA State Championships Gawler 26 - 31 December 2013	Q
RSTJENS, BURKETOWN, SEPTIN N HIS QUINTUS M.	WEDNESDAY	4	11	18	25	1 january 2014
	TUESDAY	m	10	17	24	<u>.</u>
DECEMBER 2013	MONDAY	N	o	16	23	O E
DECEME	SUNDAY	dirls just want to have fun week Bathurst Soaring Club 1-7 DECEMBER	00	2	22	29

JANUARY 2014

PHOTOGRAPH:BY JAYDEN BASHFORD, SUNRAYSIA GLIDING CLUB IS28 THE 28TH OF SEPTEMBER 2013

					_
27	20	13	0	30	MONDAY
N	21	14	7	31	TUESDAY
Ng	22	Ċī	00	1 January 2014 Club and Sports Class Nationals Waikerie 1 - 11 January 2014	WEDNESDAY
30	23	16	O	ע	SDAY THURSDAY FRIDAY SATURDAY
31	24	17	10	3	FRIDAY
1 February	25	Ö	=======================================	4	SATURDAY
N	26	SA coaching week Stonefield Jan 19 – 27	VSA State Championships Bacchus Marsh 12 - 18 January 2014	U I	SUNDAY









The newest gliding magazine on the grid is packed full of great stuff about gliders, gliding and the pilots who fly them.

NOTE If you want to buy or sell a glider, the classified section is now online.

Go to

www.glidingaustralia.org



and click the classified link on the menu bar





SOMETHING TO SELL TO GLIDER PILOTS?

ADVERTISE to the biggest geographical gliding community in the universe

For Display Advertising Call 02 9332 2822 or email sean@glidingaustralia.org.

MOTOR GLIDING



I have recently returned to the gliding fraternity after a break of nearly 30 years. I have been interested but not surprised to read about the challenges of attracting and maintaining membership and the associated aging of the existing membership. My path back into gliding has been a little unconventional, but I think my position and motivation is not unique and possibly represents a significant but hindered pool of potential glider pilots. I know my thoughts here may seem a bit radical, but I thought this might be an interesting perspective.

I was lucky to be introduced to gliding by my father when I was 13 years old with a few visits to Tocumwal and Benalla. By the time I was 14 my instructor said I was ready to solo, but I obviously was not old enough. So, two weeks after my 15th birthday and needing help to carry my ballast out to the Blanik, I went for my first solo. The next day, I reached 8,000ft and flew for over an hour. Mum was not that excited, but I loved it and I was hooked for life.

My luck continued when a few years later Dad bought an Astir CS. I was now able to spend my university summer holiday camping by the river at Tocumwal, getting in nine holes of golf before the pro shop opened, and turning up at briefing ready for a day's flying. My only cost was an aero tow.

Unfortunately, Dad had a small scare in the Astir and never really fell in love with it so it only lasted a few summers. With the consequent higher costs, my interest in girlfriends, work and then a family, gliding was sidelined, but the passion always simmered.

A few years ago, the kids were all teenagers and family demands slowly reduced. With a little more disposable income to play with, I began looking at getting back in the air. While gliding was my preference, getting into the club scene and spending at least days, if not weekends tied up at a club was simply not an option. I still have Saturday morning sport to help get the kids to, basketball in the arvo, and so on. The best option for me was to start RA-Aus training at my local flying school in their Jabiru. I

had a regular Sunday morning booking and I knew I would be home in time for the afternoon soccer game for my son. The new generation of ultralight aircraft are pretty diverse and attractive. The convenience of a commercial flying school was something I cannot get from the gliding operations. Flying in the Jabiru was fun and challenging and I was back in the air. I knew, however, that once I flew solo and was certified, it was going to get pretty boring. My dream was really to be able to hop in an aircraft, head out of town, turn the engine off and enjoy an hour or two soaring.

LIGHT SPORT AIRCRAFT

I started exploring some of the very interesting LSA, or light sport aircraft – the more attractive term for ultralights, under 600kg and max two seats, motor glider options. No, not the world's greatest soarers, but capable, comfortable, affordable and fun ways to quickly and easily head out and chase the chance of some engine-off flying. If you are not familiar with some of these, Google 'LSA motor glider' and take a look.

I was getting pretty excited at the prospect of an RA-Aus operated LSA motor glider, flying out of my local GA/RA-Aus field allowing me to get a few hours soaring at short notice with the limited time I had available. However, while the interest was growing my research soon threw up a road block. Under RA-Aus operations you are not allowed to turn the motor off and soar. You are only allowed to soar under GFA operations. While there are

numerous 'motor glider' LSA and ultralight aircraft on the RA-Aus register and even more types available around the world, and I suspect many of them have more airframe hours than engine hours clocked up, the final word from the RA-Aus was 'No – the engine must stay on'.

There was also no shortage of opinion about how difficult and restrictive the GFA was for independent, private pilots. Even if I was to drive across town to my closest GFA club the regulatory path looked pretty challenging. Getting to Level 2 Independent Operations status so I could fly from my local field in my aircraft looked like a long and cumbersome process I did not feel I could get through. The requirement for 100 hours of glider flying seemed very demanding, and I was lucky I had the Silver C from my past gliding. The RA-Aus would allow me to operate my own aircraft independently, but the GFA place a requirement for 100 gliding hours and a Silver C, all only accessible under the operations of a gliding club. It is not a very attractive proposition to a prospective pilot wanting to get into gliding via this path.

THE MELBOURNE MOTOR GLIDER CLUB

And then I met Phil. The Melbourne Motor Glider Club is based at Moorabbin and has a beautiful Super Dimona HK36R. Phil Henderson is the President, CFI, Treasurer and Operations Manager and the owner of the club's only aircraft, with Steve Hobby serving as technical and maintenance guy, 2IC and instructor. When I joined the club, membership soared to three! My first flight in the Dimona was with Steve. We flew up north into the mountains, turned the motor off and soared. The fact that we hardly found any lift did not seem to matter - I had found my dream. The next Sunday I told my RA-Aus instructor I had been unfaithful. I had fallen in love and was going to turn my attention to flying the Dimona.

Flying the motor glider is far closer to LSA flying than flying a Blanik. With a Rotax engine, air traffic control at Moorabbin, fuel and engine management, my RA-Aus training put me in very good shape to move into the Dimona. And of course I had my gliding background to

refresh when we did turn the motor off. However, plenty of challenges arose and learning to tame the Dimona took a while, but I have now made it to Level 1 Independent, controlled airspace endorsed and passenger endorsed, and have been loving the flying.

I have had some fantastic flights in the Dimona. June last year I had a flight one Sunday afternoon up to the Yarra Valley with my 16 year old son where we found some lee wave from the north wind blowing. It wasn't record setting wave by any measure, but we had an hour with the engine off holding between 6,000 and 7,000ft over Warburton. When we had had enough, we started the engine and headed back to Moorabbin. We had accessed some challenging and interesting soaring, and were only out for an afternoon from the home duties. Two hours flight time, one hour engine time. I have also slope soared on Mount Oberon on Wilsons Prom, and found a beautiful lonesome lenticular sitting at about 8,000ft over Lake Eildon one day for my first taste of real wave. The Dimona will never set any cross country records but the ability to sniff out soaring opportunities in unusual places is fantastic. More than anything, the convenience and flexibility is perfect for me.

Phil Henderson has established a very interesting operation through the Melbourne Motor Glider Club. I am not sure it was an operation envisaged when the all regulations were assembled, but it has used the available rules to offer a unique operation - flying a GFA registered aircraft under GFA regulations out of a major air-traffic-controlled airport in suburban Melbourne, 30 minutes from my home and five minutes from Phil's. Most of Phil's marketing has been towards offering AEFs and it is pretty effective at this, but what it is not set up well for is to offer a complete program to take a newcomer through the training program up to solo, independent operations. I was very lucky because I had the gliding background - Silver C, Gold distance, passenger rated. But even then, finding the time with Phil or Steve plus the challenges of controlled airspace - it is not that easy to just fly circuits at Moorabbin made it a pretty long path. continued over page



MOTOR GLIDING



If a commercial flying school was able to offer training in the Dimona or similar, I believe there would be significant demand and a lot more pilots would find a path to GFA membership and gliding.

TRAINING INFRASTRUCTURE

I cannot make any judgement on the modern GFA training processes as I know they have developed significantly since my ab-initio training over 30 years ago. What I can say is that the RA-Aus training I have done has been thorough, detailed, formal and professional. The RA-Aus is equipped with a significant infrastructure of facilities, flying schools, professional instructors and fleets of aircraft, operating as commercial businesses meeting the flight training needs of prospective pilots. Getting into flying with the RA-Aus is a very clear and attractive proposition. The GFA club-based structure cannot match this and I think this is the main reason the RA-Aus membership is growing while the GFA is struggling. I have no doubt that, with the appropriate endorsements and training, the RA-Aus instructors I have flown with have the skills to teach students how to fly a motor glider safely.

Why can't the RA-Aus offer an 'engine off' endorsement? They most likely have hundreds of professional instructors who can teach endorsement for low level, formation, controlled airspace and, of course, all the ab-initio training. I know they can teach emergency landings , that is, an outlanding in a motor glider if the engine doesn't start. I believe they could very safely and capably teach engine shut-down, engine off flying and in-flight restart.

If they could be used as intended, I believe we would see numerous LSA motor gliders available 'on the line' at the RA-Aus flying schools, available to the weekend pilots with a few hours to spare to enjoy flying.

I think at this point the traditional GFA administrators will be screaming, "Sacrilege! Only GFA instructors can teach you how to glide." Perhaps they are the most

experienced at 'real' gliding instructing, but flying a motor glider, as I said, requires more or as many RA-Aus skills than gliding skills. I can tell you a glide approach in a Jabiru is far more challenging than in a Dimona or IS28! And it is taught and practiced extensively in the RA-Aus syllabus.

So what would this do for the GFA? I believe it would begin building a pool of pilots that have had the fun and challenge of gliding instilled in them and could follow into 'real' gliding. RA-Aus have nearly 10,000 flying members compared to the GFA 2,200. I know my local RA-Aus/GFA operations would like to offer a gliding experience that might bring new pilots into their operations. I am sure that lots of RA-Aus pilots getting bored with their flying would love to expand their capabilities and take up the opportunity. There have been a few articles in the RA-Aus magazine about this. They would then be introduced to the thrill of soaring and perhaps spend some Sundays like me enjoying the challenge and the new motivation to 'just go for a fly'. Then, next summer when they have a week annual leave available they could book themselves into a 'real' GFA gliding club and make a relatively guick transition through a new, dedicated GFA conversion syllabus and be up and running in a high performance glider. You would certainly need aero-tow, flying in a gaggle, spin and other glider-specific training, but the path from arrival to flying a single seater would be much faster for a pilot that arrives at the GFA club with this RA-Aus engine-off motor glider experience.

CREATING OPPORTUNITES

A rookie wanting to get into gliding but not able to commit the time to a GFA club's weekend operation could go to a local RA-Aus operation and book their regular weekend lesson, just like I did, progressing to RA-Aus certified and then motor glider endorsed. They can then join a GFA club and can be off enjoying cross country

gliding via a path not available to them today. I believe the door would be opened to many new glider pilots from this path.

I might hear you saying that this is possible today under GFA regulations. Yes, technically, and Phil is demonstrating this, but not in a sustainable or fully 'professional' operation. Not taking anything from Phil's and Steve's capability, but they both have real jobs and families. A student can't ring an office and book a specific time, for example. The Byron Bay Gliding Club appears to have developed the concept very well, too. There are also a few commercial-style GFA operations, but not many, and not close to home. My local RA-Aus/GA flying school is not equipped to face the challenges of establishing a GFA club, or find instructors who are both RA-Aus and GFA certified, maintaining all the additional certifications and operating separately registered aircraft plus running a different syllabus for the GFA students. They have the interest, I believe they have the skills, but they don't have the opportunity or defined process to offer access to gliding.

I have been well trained by the RA-Aus to safely fly in a Rotax-powered, two-seat, fibreglass, low wing tail dragging aircraft. I have been well trained in glide approach landing and what to do if the engine stopped or did not restart. If I bought an LSA aircraft I would be able to go flying independently. But if I want to turn the engine off and soar I am suddenly faced with a very different and apparently difficult process. Why is it so difficult for me to convert to fly a GFA registered Dimona, Pipistrel or Phoenix and be allowed to turn the motor off when I deem it safe?

Perhaps members could have a host club, but more conveniently why not just offer GFA as an extension to the RA-Aus membership? The RA-Aus lets me join without the club structure, why can't the GFA? Perhaps I would need auxiliary GFA membership and then be allowed to soar in an LSA aircraft, with the appropriate RA-Aus endorsements, of course.

RADICAL CHANGE

I don't think I am alone in having a desire to fly, available funds, but limited time. I appreciate it is a pretty radical departure from the historical GFA model, but if those doors, could be opened then both the existing RA-Aus membership could be tapped into, and prospective glider pilots with limited time could find a viable path to get into gliding.

The GFA mission statement is: "Develop, promote and administer the sport of gliding and foster excellence in safe, accessible and enjoyable soaring". If you want to achieve this, I suggest tapping into the infrastructure, regulations, operations and membership of the RA-Aus and making the opportunity to enjoy gliding in LSA motor gliders as easy as it is to fly other LSA aircraft. It would not take many of the RA-Aus members to take the path of enlightenment and conversion to see the GFA membership growing.

It might require some radical constitutional and organisational change. It would take a close relationship or merger with the RA-Aus. It would need the negotiated support of CASA. It would take some commitment to a very different way to operate. But if RA-Aus membership is growing strongly while GFA declines, it might be time to

make these radical changes to see a strong and viable future.

After a number of years committed to the development and operation of the Melbourne Motor Glider Club, Phil is starting to lose the passion and drive required to maintain the operations. I am now facing the real prospect of losing access to a motor glider and so the only gliding I can realistically enjoy. I would be interested to own a motor glider with a syndicate but how could we operate from our local RA-Aus/GA field unless we can find a GFA CFI to operate under, or all achieve Level 2 Independent? I could market the concept of owning and flying a motor glider to the RA-Aus community, but I think I would lose them when I explain what they have to do to be able to fly a Dimona and the constraints of the GFA model.

I would be interested to hear from any Melbourne based pilots interested in helping us build the critical mass of the Melbourne Motor Club and perhaps join a syndicate to support the Dimona. There is some great soaring to be had within a few hours from home!

FROM THE OPERATIONS PANEL

Barry's comments about the limitations of our club-based system and the time commitment to go gliding are relevant. Indeed, our motor gliding clubs report that many AEF and ab-initio students find moving from the independence and convenience of the MG operation to conventional gliding to be somewhat off-putting. This is perhaps the most significant difference between the two disciplines and one of the challenges facing gliding today.

One of the primary reasons for this is that motor gliders are not powered aircraft that happen to be able to conduct an inflight engine shutdown and restart. They are first and foremost gliders with a self-launching capability, and the gliding skills required to soar go well beyond mere power-off landing techniques taught in RAA. It is in the area of soaring that GFA Instructor scomes into their own.

Nevertheless, there is already in place a level of crossover between GFA and RAA where each other's skill sets are recognised. Canberra Gliding Club, for example, provides spin recognition and recovery experience for RAA pilots, as short-term GFA members, because spins are not permitted in RAA aircraft, although many will readily spin if provoked Indeed, we understand that RAA is looking to develop this concept further.

Our own motorglider syllabus also allows GFA members to be trained in a suitable GA or RAA registered aircraft by appropriately qualified non-GFA Instructors who can also sign-off the training stages contained in the 'Powered Sailplane Training and Endorsement' syllabus (refer MOSP 2, Subparagraph 20.4). Similarly, we also have a mechanism in place to recognise previous power flying training by RAA and GA pilots (refer MOSP 2, Subparagraphs 20.1.1, 20.2.1 and 20.3.1).

So while an RAA pilot crossing over to gliding may feel the additional soaring training to be 'over the top', It is worth remembering that no matter how much training and prior experience a person has, in the end they will be judged on their demonstrated skills and airmanship before being granted command pilot privileges.

CHRISTOPHER THORPE
EXECUTIVE MANAGER, OPERATIONS
EMO@qlidingaustralia.org

A BLEEP MOMENT

BY DREW MCKINNIE CANBERRA GLIDING CLUB, REGIONAL MANAGER OPERATIONS NSW

PRACTICE BECOMES REALITY

I sat in the glider, still in the long grass and weeds, stopped safely in the undergrowth. For a minute I just sat there with the canopy closed, hands in a prayer-like position in front of my face, as I tried to calm down, slow my deep, fast breathing, slow my racing heart and the surge of adrenalin. I was safe, intact, and grateful to be sitting there uninjured. Scott came over the hill in my vehicle, down the side of the runway, and stopped nearby. "Are you OK, mate?" he called as I climbed out of the ASW20 and checked the glider's structure. With huge relief and a wry smile, I replied, "Yes, I'm OK. Wow, that was scary! And close!"

About two minutes previously I had lined up in my ASW20L VH-GVN on Bunyan Runway 33 on a pleasant sunny Monday, 23 September 2013, during our wave soaring camp. I was looking forward to a gentle spring thermal flight. Frank Johann had taken off in his ASG28 behind the Southern Cross tug CPU, and I was about to have first launch of the day behind the Canberra Pawnee MLS, with Jon (Blok) Blacklock at the controls. ABCD-CHAOTIC checks were completed. 'O' in the check had wind N at 12 kts, slightly right of centreline, landing speed 60kts. Options ahead on runway, then ahead and left of the orchard, downhill towards the hangar strip Runway 16 or the corner paddocks N and NW of the field, or Runway 12 or 09 if higher. No obstructions, competent crew.

ROCKS, FENCES, POWERLINES, STOCK AND TREES

Bunyan's runways are all grass, none of them are level, all have down or up slope, with cross slope in some areas. Runway 33 sloped gently downhill. The airfield paddock is full of rocks in many places, with heavy tussock grass and weeds off the runways. Because many neighbouring paddocks are also full of rocks, fences and powerlines, stock and trees, off-field options were very limited. My options were therefore focussed, as is usual, on known clear paddocks and other runways. These options all pre-supposed sufficient altitude and energy to reach them safely and execute a turn if required.

Takeoff in GVN was normal. As the glider accelerated, I went from flaps negative to neutral, setting 3, took off and followed the Pawnee as it separated and climbed. Everything seemed normal. Well down the runway the tug began a gradual left turn, and I no longer had the option to land ahead on the runway. As it approached the boundary road north of the airfield in a climbing left-hand turn, the tug suddenly seemed to stop climbing and decelerated – then rocked its wings vigorously in the emergency release signal. We were no higher than 200ft, probably 150-180ft above the downward sloping ground, as I pulled the release. I had an "oh bleep" moment as I released, still in a left turn, banking steeper left with the decelerating Pawnee's left wingtip growing closer.

It was an extremely dynamic situation – there was no thought of rolling into a right turn, as my immediate priority was remaining clear of the decelerating Pawnee and I judged I could not risk a climbing right turn. The options of reaching the paddocks north of the airfield, or Runway 16, disappeared as I tightened the turn hard left. At the same time I glanced at the ASI and saw the decreasing airspeed trend, dropping towards 50 knots, and I knew I had to gain airspeed fast – so I pitched the nose forward to regain safe speed near the ground. I remember calling out loud, "No! No way! Safe speed near the ground all the way into the flare!" No way was I going to allow a stall-spin to develop, even though I was really low over rising ground as I turned left.

As I rolled straight and level, heading roughly southwards, I saw that I was much too low to turn back and uphill to runway 15 reciprocal and complete a safe turn – and there were fences to avoid. I looked ahead and right, uphill towards the end of Runway 12, again way, way too low to reach safely. My next thought was that I would have to land ahead on the airfield paddock near the windsock, among the numerous rocks and holes in the long grass. I felt a stab of apprehension, as I envisaged probable damage to the glider – but at least I had airspeed and would be safe into the flare. That option would also require avoiding fences near the runways.

OPTIONS

I looked desperately for an alternate option, and saw that the vertical angle to the fence north of runway 12/30 was improving, steepening! I headed slightly right, following the downslope of the ground towards the fence and runway 12/30, and decided to pass up the landing option near the windsock and land across runway 12/30, over the fence, with a 12kt tailwind. On the far

side of runway 12/30 was an area of long tussock grass and weeds, then the main runway 09/27, then the south boundary fence. I was far too low to attempt a turn to align with runway 12, but I also resolved to try to aim and steer slightly uphill, to assist in slowing down as quickly as possible. When I was sure I would clear the near fence I turned slightly left, and approaching the fence I opened airbrakes and aimed as close as possible to the edge of runway 12.

Moments later I flared and touched down on runway 12 with full airbrake, and plunged ahead into the long tussock grass and weeds, feeding in progressive left rudder to steer more uphill. To my surprise I did not reach runway 09/27, instead slowing very



rapidly in the long grass and weeds. There were no rocks, no holes, no bangs, just the whipping sounds of long woody stalks hitting the wings. I was down safely! Glider inspections back at the launch point confirmed no damage.

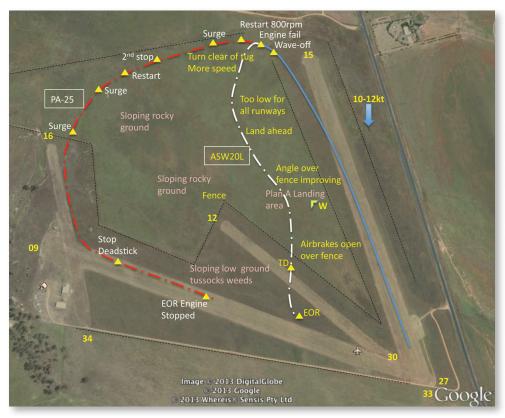
Blok, the Pawnee tug pilot, had a rotten time with engine power loss, an engine failure as I released, restarted in flight, and max 800rpm in engine power surges. He limped back with irregular and partial power to runway 09, and landed dead-stick. I understand that subsequent investigations by our LAME showed that the Pawnee had suffered a mechanical failure in the distributor, with the top bearing overheating and melting the plastic, causing the ignition timing to jump and left magneto to fail, hence severe loss of power. To his great credit, Blok also landed safely, with no further damage. We shared a few relieved smiles and refreshments later.

As a Level 3 instructor, I have initiated dozens of launch failure and rope break emergencies as training scenarios for students and trainee instructors, as well as for instructor revalidations. Many times I have arranged for tug pilots to give wave-off signals as part of emergency training. These scenarios require care to plan and execute, but they did not cause much anxiety, as I was always sure of reaching a safe runway option. I learned to fly gliders at Woomera SA on the auto tow wire, so cable breaks there were frequent, and handled properly, were safe to recover from.

On 25 August 1987 I had a launch power failure in a Schweitzer S2-22 at Bunyan, due to Pawnee carburettor icing after a high launch, and I landed ahead on runway 09. As a Pawnee tug pilot, I once aborted a launch in September 2012 due to power loss and landed ahead on runway 27. So I knew power failures were possible, and planned accordingly. As this actual emergency showed, the best plans might never be practicable.

GOOD LESSONS LEARNED FROM THIS INCIDENT

- The training works! After an initial unpleasant surprise "oh bleep" reaction, the essential actions kicked in get off tow NOW, keep clear of the Pawnee also turning left, manage safe speed near the ground at all costs all the way into the flare, plan the emergency outlanding, keep concentrating on flying to the safest possible land ahead option.
- We normally turn right after releasing the tow. In a launch emergency you cannot assume you will be able to turn right after release - particularly if you are already in a left turn.
- If you are flying a fast slippery glider behind a draggy towplane, and the power fails, the towplane will decelerate and you will need to manoeuvre quickly to avoid it. You cannot underestimate how quickly bits of towplane airframe will grow in your field of view.
- The situation was very dynamic, rapidly changing, and the preconceived notions about outlanding options on other runways



or adjoining paddocks were quickly gone.

- Planning 'O' for Outside / Options includes safe speed near the ground for the conditions on the day, as well as launch failure options. That is an essential discipline, for all pilots, every launch. I couldn't use the planned options, and I sure needed the airspeed!
- While we might plan for launch failure options, the fact is we normally expect a benign launch, given the reliability of our towplanes and the rarity of engine failure events. Launch emergencies are by definition an unexpected event, and disbelief, fear and stress will occur. Murphy's Law may well conspire, as it did in this case, to have the emergency occur in the worst possible position.
- There was no way I was going to allow a stall-spin scenario so I was very focussed on safe speed near the ground above all else. That meant trading altitude with not much available for airspeed, decreasing in a steepening turn to avoid the Pawnee, and then maintaining a safe attitude all the way into the flare.
- I had a safe paddock option near the windsock Plan A, and I would have used it if there was any doubt about avoiding fences. If I had been in the lower-performance two-seater Puchacz, rather than the ASW20, I think I would have had to land ahead near the windsock.
- Monitoring changing vertical angles to fences and obstacles allowed me to find a safe alternative landing area.
- I judged that I was too low to even contemplate turning near the ground to align myself with a runway. Landing ahead on the airfield paddock across a runway was far safer than risking cartwheeling the glider in a low turn.
- Put another way, even if you can reach a runway, you might not be able to land along it but perhaps across it.
- No matter how experienced or inexperienced you are, after a fright like that you will experience strong fear responses and adrenalin letdown symptoms. The other instructors agreed I should relax and calm down for a couple of hours before flying again! Getting back on the horse later, for a fun soaring flight, was a good way to relax and recover.

A BLEEP MOMENT

BY DREW MCKINNIE CANBERRA GLIDING CLUB, REGIONAL MANAGER OPERATIONS NSW

PRACTICE BECOMES REALITY

I sat in the glider, still in the long grass and weeds, stopped safely in the undergrowth. For a minute I just sat there with the canopy closed, hands in a prayer-like position in front of my face, as I tried to calm down, slow my deep, fast breathing, slow my racing heart and the surge of adrenalin. I was safe, intact, and grateful to be sitting there uninjured. Scott came over the hill in my vehicle, down the side of the runway, and stopped nearby. "Are you OK, mate?" he called as I climbed out of the ASW20 and checked the glider's structure. With huge relief and a wry smile, I replied, "Yes, I'm OK. Wow, that was scary! And close!"

About two minutes previously I had lined up in my ASW20L VH-GVN on Bunyan Runway 33 on a pleasant sunny Monday, 23 September 2013, during our wave soaring camp. I was looking forward to a gentle spring thermal flight. Frank Johann had taken off in his ASG28 behind the Southern Cross tug CPU, and I was about to have first launch of the day behind the Canberra Pawnee MLS, with Jon (Blok) Blacklock at the controls. ABCD-CHAOTIC checks were completed. 'O' in the check had wind N at 12 kts, slightly right of centreline, landing speed 60kts. Options ahead on runway, then ahead and left of the orchard, downhill towards the hangar strip Runway 16 or the corner paddocks N and NW of the field, or Runway 12 or 09 if higher. No obstructions, competent crew.

ROCKS, FENCES, POWERLINES, STOCK AND TREES

Bunyan's runways are all grass, none of them are level, all have down or up slope, with cross slope in some areas. Runway 33 sloped gently downhill. The airfield paddock is full of rocks in many places, with heavy tussock grass and weeds off the runways. Because many neighbouring paddocks are also full of rocks, fences and powerlines, stock and trees, off-field options were very limited. My options were therefore focussed, as is usual, on known clear paddocks and other runways. These options all pre-supposed sufficient altitude and energy to reach them safely and execute a turn if required.

Takeoff in GVN was normal. As the glider accelerated, I went from flaps negative to neutral, setting 3, took off and followed the Pawnee as it separated and climbed. Everything seemed normal. Well down the runway the tug began a gradual left turn, and I no longer had the option to land ahead on the runway. As it approached the boundary road north of the airfield in a climbing left-hand turn, the tug suddenly seemed to stop climbing and decelerated – then rocked its wings vigorously in the emergency release signal. We were no higher than 200ft, probably 150-180ft above the downward sloping ground, as I pulled the release. I had an "oh bleep" moment as I released, still in a left turn, banking steeper left with the decelerating Pawnee's left wingtip growing closer.

It was an extremely dynamic situation – there was no thought of rolling into a right turn, as my immediate priority was remaining clear of the decelerating Pawnee and I judged I could not risk a climbing right turn. The options of reaching the paddocks north of the airfield, or Runway 16, disappeared as I tightened the turn hard left. At the same time I glanced at the ASI and saw the decreasing airspeed trend, dropping towards 50 knots, and I knew I had to gain airspeed fast – so I pitched the nose forward to regain safe speed near the ground. I remember calling out loud, "No! No way! Safe speed near the ground all the way into the flare!" No way was I going to allow a stall-spin to develop, even though I was really low over rising ground as I turned left.

As I rolled straight and level, heading roughly southwards, I saw that I was much too low to turn back and uphill to runway 15 reciprocal and complete a safe turn – and there were fences to avoid. I looked ahead and right, uphill towards the end of Runway 12, again way, way too low to reach safely. My next thought was that I would have to land ahead on the airfield paddock near the windsock, among the numerous rocks and holes in the long grass. I felt a stab of apprehension, as I envisaged probable damage to the glider – but at least I had airspeed and would be safe into the flare. That option would also require avoiding fences near the runways.

OPTIONS

I looked desperately for an alternate option, and saw that the vertical angle to the fence north of runway 12/30 was improving, steepening! I headed slightly right, following the downslope of the ground towards the fence and runway 12/30, and decided to pass up the landing option near the windsock and land across runway 12/30, over the fence, with a 12kt tailwind. On the far

side of runway 12/30 was an area of long tussock grass and weeds, then the main runway 09/27, then the south boundary fence. I was far too low to attempt a turn to align with runway 12, but I also resolved to try to aim and steer slightly uphill, to assist in slowing down as quickly as possible. When I was sure I would clear the near fence I turned slightly left, and approaching the fence I opened airbrakes and aimed as close as possible to the edge of runway 12.

Moments later I flared and touched down on runway 12 with full airbrake, and plunged ahead into the long tussock grass and weeds, feeding in progressive left rudder to steer more uphill. To my surprise I did not reach runway 09/27, instead slowing very



rapidly in the long grass and weeds. There were no rocks, no holes, no bangs, just the whipping sounds of long woody stalks hitting the wings. I was down safely! Glider inspections back at the launch point confirmed no damage.

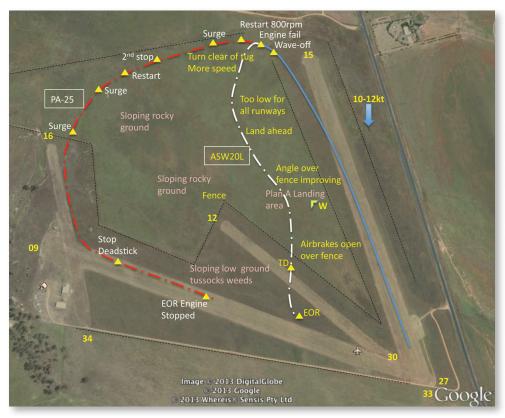
Blok, the Pawnee tug pilot, had a rotten time with engine power loss, an engine failure as I released, restarted in flight, and max 800rpm in engine power surges. He limped back with irregular and partial power to runway 09, and landed dead-stick. I understand that subsequent investigations by our LAME showed that the Pawnee had suffered a mechanical failure in the distributor, with the top bearing overheating and melting the plastic, causing the ignition timing to jump and left magneto to fail, hence severe loss of power. To his great credit, Blok also landed safely, with no further damage. We shared a few relieved smiles and refreshments later.

As a Level 3 instructor, I have initiated dozens of launch failure and rope break emergencies as training scenarios for students and trainee instructors, as well as for instructor revalidations. Many times I have arranged for tug pilots to give wave-off signals as part of emergency training. These scenarios require care to plan and execute, but they did not cause much anxiety, as I was always sure of reaching a safe runway option. I learned to fly gliders at Woomera SA on the auto tow wire, so cable breaks there were frequent, and handled properly, were safe to recover from.

On 25 August 1987 I had a launch power failure in a Schweitzer S2-22 at Bunyan, due to Pawnee carburettor icing after a high launch, and I landed ahead on runway 09. As a Pawnee tug pilot, I once aborted a launch in September 2012 due to power loss and landed ahead on runway 27. So I knew power failures were possible, and planned accordingly. As this actual emergency showed, the best plans might never be practicable.

GOOD LESSONS LEARNED FROM THIS INCIDENT

- The training works! After an initial unpleasant surprise "oh bleep" reaction, the essential actions kicked in get off tow NOW, keep clear of the Pawnee also turning left, manage safe speed near the ground at all costs all the way into the flare, plan the emergency outlanding, keep concentrating on flying to the safest possible land ahead option.
- We normally turn right after releasing the tow. In a launch emergency you cannot assume you will be able to turn right after release - particularly if you are already in a left turn.
- If you are flying a fast slippery glider behind a draggy towplane, and the power fails, the towplane will decelerate and you will need to manoeuvre quickly to avoid it. You cannot underestimate how quickly bits of towplane airframe will grow in your field of view.
- The situation was very dynamic, rapidly changing, and the preconceived notions about outlanding options on other runways



or adjoining paddocks were quickly gone.

- Planning 'O' for Outside / Options includes safe speed near the ground for the conditions on the day, as well as launch failure options. That is an essential discipline, for all pilots, every launch. I couldn't use the planned options, and I sure needed the airspeed!
- While we might plan for launch failure options, the fact is we normally expect a benign launch, given the reliability of our towplanes and the rarity of engine failure events. Launch emergencies are by definition an unexpected event, and disbelief, fear and stress will occur. Murphy's Law may well conspire, as it did in this case, to have the emergency occur in the worst possible position.
- There was no way I was going to allow a stall-spin scenario so I was very focussed on safe speed near the ground above all else. That meant trading altitude with not much available for airspeed, decreasing in a steepening turn to avoid the Pawnee, and then maintaining a safe attitude all the way into the flare.
- I had a safe paddock option near the windsock Plan A, and I would have used it if there was any doubt about avoiding fences. If I had been in the lower-performance two-seater Puchacz, rather than the ASW20, I think I would have had to land ahead near the windsock.
- Monitoring changing vertical angles to fences and obstacles allowed me to find a safe alternative landing area.
- I judged that I was too low to even contemplate turning near the ground to align myself with a runway. Landing ahead on the airfield paddock across a runway was far safer than risking cartwheeling the glider in a low turn.
- Put another way, even if you can reach a runway, you might not be able to land along it but perhaps across it.
- No matter how experienced or inexperienced you are, after a fright like that you will experience strong fear responses and adrenalin letdown symptoms. The other instructors agreed I should relax and calm down for a couple of hours before flying again! Getting back on the horse later, for a fun soaring flight, was a good way to relax and recover.

GLIDING DURING EXCESSIVE HEAT



Glider pilots fly under a range of weather conditions. While the sport is progressively more dependent on ageing members who in some cases also have health issues, we strive to maintain a high level of safety consciousness, but I believe we may be falling short when it comes to excessive heat issues and how those situations are defined.

The construction industry has a well researched and proven weather policy. It basically covers rain, wind and heat. Those on construction sites are in the main relatively young and healthy. Nevertheless, work in the sun when temperatures exceed 35°C is generally considered unsafe. Possible consequences to fellow workers and nearby public are seriously considered.

GLIDING OPERATIONS

- Excessive wet results in the cessation of gliding activities.
- Excessive wind results in the cessation of gliding activities
- •Excessive heat results in the highly motivated cross country or badge pilot expecting a launch at an optimum time and this we must continue to cater for safely.

Ultimately, these experienced pilots make their own decision in regard to their own safety. However, we need to consider the remainder of our operation.

• Air experience flights and training are different. Should we consider cancelling these activities during excessive heat as we do for excessive wind and rain conditions? With both of these activities the passenger or student is totally dependent upon the pilot in charge and tug pilot, both of whom may have been exposed to the heat for several hours.

I believe we should review at lease these two activities and give guidance to our members. The Club has the responsibility for providing a high level of duty of care for the

public and dependent members.

• Tug Pilots, Instructors, AEF pilots and ground crew are unfortunately not immune from the effects of excessive heat. They all carry the responsibility for the safe application of their particular activity. Unfortunately, our ageing members are among the most conscientious and stoically strive to provide the needed service. Performance degradation due to excessive heat can be insidious and even result in the loss of consciousness without warning. Even the young are not immune from this as I well remember National Service trainees from Laverton during the Queen's visit collapsing unconscious due to heat only seconds after assuring those in charge that they were feeling well. There was no warning.

In making a policy decision, I believe we would need to consider medical advice. We should also take notice of considerations made by other organizations who have a responsibility for safe operations during high temperatures.

ALAN BRADLEY, ADELAIDE SOARING CLUB

HEAT STRESS

An aircraft left in the sun will obviously 'soak up' heat - especially those with a large expanse of Perspex. Gliders are prime examples of the potential for the effect of heat-soaking.

The advantage of good visibility from the 'glass bubble' brings the disadvantage of high cockpit temperatures when left even for a short time in the sun.

Temperatures within cockpits may rise to $15-25^{\circ}$ above ambient temperatures and the surface temperatures of items within the cockpit may be even higher, in some instances even high enough to cause true burning of the skin.

A principle of physics, taught to most of us at school or learned by experience, was that black or dark objects are good absorbers of heat so we should ensure that our clothing is light coloured, preferably white, to reflect as much heat as possible.

Headgear is useful and will help to keep the head cool, especially if there is a layer of air between the hat and head.

While you expect the heat to dissipate once you get airborne due to cooler ambient air and the loss of heat due to convection, conduction to the cooler air and radiation from the heated aircraft structure, there is the risk of heat absorption beneath the canopy from solar radiation.

The 'greenhouse' effect of the Perspex 'bubble ' is very real, particularly if the flight is not to any great altitude and is extended more than a few hours.

The effect of getting into a hot cockpit and being exposed to solar radiation is akin to gentle cooking.

As our bodies produce energy internally for us to live, to drive our internal engine, heat is produced. We take in fuel, food and drink, and convert it into energy for life. The heat produced is usually lost to the environment as with any other machine, by radiation, conduction and convection to the surrounding environment. In addition, our bodies produce sweat - liquid on the surface of the skin - which evaporates to provide additional cooling.

If we are in a hot environment we are unlikely to lose much, if any, heat by radiation, conduction or convection to the surrounding air or structures. Our only facility for cooling is this evaporative effect of losing fluid.

Quite obviously, to produce sweat we need a reserve of fluid within our bodies and this topic of fluid balance will be discussed later.

What happens if we cannot keep our temperature down? Our design specification calls for very narrow limits for the internal core

temperature. To go outside those limits will produce a severe reduction of performance.

Studies show that aircrew make more control errors in hot environments than in temperate ones and the errors are characterised by unpredictability.

Typically, errors were made in speed, altitude and heading control movements. Attention was narrowed and learning ability impaired among student pilots. Newly acquired or little-used skills were affected first, as one would expect.

Heat stress will add to other stressors such as fatigue, sleep deprivation and emergency situations and may influence the most vulnerable phase of flight, landing - especially after a long day of flying.

DEHYDRATION

Mention has already been made that in a hot environment, cooling of the body may only occur through the evaporation of sweat. The formation of sweat depends on fluid being available within the body to be brought to the skin surface to produce this cooling effect.

The body contains a large quantity of water, about 60 per cent of body weight. We maintain a balance of this fluid by drinking and eating and then excreting excess fluid through the kidneys.

We have all experienced the after-effects of drinking large quantities of fluid over a short time period. There is a need to rapidly lose the excess fluid through the kidneys.

On the other hand if we deprive ourselves of an adequate water supply the body uses its own stores to produce sweat and if the store is not replaced we lose more fluid than we can afford. This is dehydration.

The extent of the dehydration is related to the amount of sweat lost and the amount of fluid we replace by drinking.

Once the ambient temperature rises to 33°C, our only chance of keeping the body temperature down is by evaporating sweat. At that sort of temperature the body needs at least four litres of water a day, even without any untoward exercise.

The fluid replacement must be spread reasonably uniformly throughout the day. If we exercise, then we require more fluid.

As an aid to cooling, the drinking fluid should be cool. Iced water is not always easy to drink. Tea and coffee are best avoided as they contain caffeine, which is a diuretic. A diuretic is a substance promoting excretion of urine from the kidneys which is not what is required in this situation.

When we sweat we also lose salt, but there is no need to concern ourselves on this count unless we are to be in the hot environment, working and sweating, for more than a couple of days.

If we are in that position then salt should be added to your meal as the most palatable means to that end.

It has been suggested that your fluid intake should be spread throughout the day. You cannot wait until you feel thirsty, it is too late by then, and you are already dehydrated.

A better indication is the frequency of the need to urinate and the colour of your urine. Once it is darker than a pale straw colour you should drink at least 250ml of fluid every 30 minute, or more frequently if you are actively working.

Symptoms of dehydration include headache, muscle weakness, drowsiness, nausea and impaired vision. All the symptoms appear vague and could be related to other conditions, but in a hot environment dehydration must be considered as the likely cause.

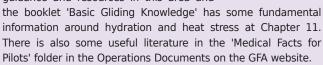
The performance of a complex psychomotor task like flying will be affected in an insidious manner and you may not be aware of your deficiencies until too late.

OPERATIONS

If you have any questions or feedback please contact me at cop@glidingaustralia.org CHRISTOPHER THORPE

The GFA does not have a Policy for flying in hot weather as most pilots prefer to take personal responsibility for their own actions by managing risk through their own choices. So whether or not to fly in hot weather is very much up to pilot choice.

Notwithstanding, GFA does provide guidance and resources in this area and



Pilots can avoid heat stress by wearing appropriate clothing - shirt, pants, socks - that wicks away sweat, shorts, short sleeve shirts where appropriate, white or light coloured clothing, head gear to assist in cooling, proper sunglasses, and plenty of sunscreen to prevent sunburn and skin cancer. You should also hydrate with water. If your urine is dark you're not adequately hydrated, and if you have not urinated in the last hour you're not adequately hydrated.

A very good article on Heat Stress titled 'The Heat is On' was published in the old 'Aviation Safety Digest' in the early 90s and is reprinted here.

CONCLUSION

Flying in the summer months can be fraught with danger unless we think ahead.

- Attempt to provide shade for at least the cockpit of the aircraft.
- On the ground have as much cockpit ventilation as possible, doors, window and 'bubble' open.
- Ensure you have prepared yourself with adequate rest and fluid intake in the days beforehand.
- Wear sensible clothing to reflect heat and protect again solar radiation.
- Have a sun screen agent of your choice with a high blocking factor: 15+ is safest.
- Drink plenty of fluid during the day, aim for at least 250 ml every 30 minutes.

SUNBURN

Sunburn may destroy skin cells and produce scarring such as one might see in a person burnt by fire or scalded by hot fluid.

Sunburn causes a change in the skin not unlike a severe allergic reaction, with swelling and blistering. This process is accompanied by pain, and if it occurs in the region of joints, a substantial degree of immobility.

We are all aware of these dangers and if we set out to 'sunbathe' we usually take precautions by not exposing our skin for too long or protecting the skin with suitable sun screen applications.

Problems arise when we bare our skin for what we think will be short periods of time and forget the effect when the sun is beating down on bare skin through a side window or even under a glass bubble of a cockpit.

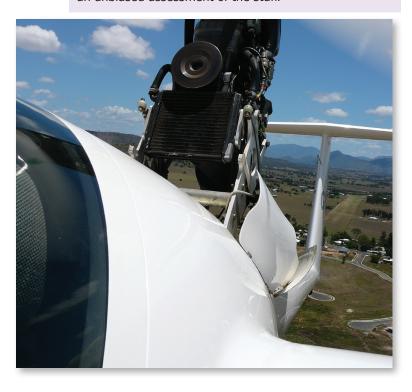
It is in these situations when we are trapped without additional clothing or sunscreen agents that we run into trouble and give ourselves yet another stressor with which we have to cope on top of possible dehydration, heat stress and all the difficulties of flying. GA



+

GELCOAT

Gelcoat has gained a rather poor reputation over the years and many people prefer a polyurethane surface finish instead. This poor reputation has come about for a few reasons and is mainly undeserving. In this article I hope to explain a few things, dispel a few myths and give an unbiased assessment of the stuff.



In the late seventies and early eighties a product called **Vorgelat** was used by a few manufacturers as it was easier and more cost effective to sand than other 'harder' gel-coat products that were available at the time. This actually saved the manufacturers money during the construction of the aircraft and this saving was passed down to the aircraft buyers, or so the intention was at least.

In time however, this Vorgelat proved to be an inferior product and began to prematurely fail. This resulted in expensive refinishing of the aircraft at a very early stage in its life. Many of the manufacturers returned to the original **Swalberlack** gelcoat and this has been used now for a few decades. Gelcoat chemistry has continued to improve over the years and most manufacturers now use a gelcoat product called **Scheufler T35**, as it demonstrates good workability and longer, better service life.

When many of these earlier aircraft needed refinishing, and the knowledge and experience working with gelcoat was comparably low, some people and certain manufacturers were thinning out the gelcoat with acetone and other non-recommended thinning agents.

Contributing to these early failures was a lack of understanding on how to maintain gelcoat in pristine condition, resulting in tatty looking oxidizing 'yellow' aircraft with a chalky feel. These factors contributed to poor quality refinishes and premature failures, adding to the poor publicity already in circulation regarding gelcoat.

RESEARCH PROGRAM

To better understand these issues, back in the 1980s the GFA conducted a research program with the Defence Science and $\frac{1}{2}$

AIRWORTHINESS

BY STUART ADDINELL
CHAIRMAN, GFA AIRWORTHINESS DEPARTMENT
cad@glidingaustralia.org

Technology Organization's Material Science Laboratory to examine in depth gelcoat failure and its effects.

The report concluded that brittle failure under applied stress, gelcoat cracking, was most likely caused by excessive styrene monomer being used, as well as excessive catalyst. Styrene monomers are added to resins and gel coats to reduce viscosity and allow the liquid to flow and spray better. Interestingly, the report also stated that gel coat surface finishes should only be between 0.25mm and 0.4mm thick.

The good news however, is that gelcoat has proved over the decades to be an excellent aircraft surface finish when applied correctly and maintained appropriately. This is why some sailplanes flying today still have their original gelcoat 25-30 years since manufacture. Most glider manufacturers still use gelcoat today and there are good reasons for this.

WHY USE GELCOAT?

To understand these reasons we must first look at why we use gelcoat. The requirements of gelcoat extend past simply having a good resistance to UV radiation and stopping moisture penetrating to the underlying laminate structure.

It is very important to have a surface that is robust and hardy and will withstand a certain amount of unintended pilot or trailer abuse without requiring repair. It also needs to be a good character witness to underlying surface issues, defects or delaminations in the glass structure underneath. In this capacity, the brittle nature of gelcoat actually works in our favor as subsurface discontinuities are quite readily detected. Gelcoat also provides an excellent base material in the manufacturing moulds that readily accepts the later glass cloth matrix. With appropriate mould release agents it also separates easily from the manufacturing moulds, many of which use compressed air to assist in separation.

Most glass cloth structures infused with resin shrink over time, in all directions. The majority of this shrinkage occurs in the first two to three years of the aircraft's life. This shrinkage can produce non-ideal spar bumps where the outline of the spar is clearly visible on the upper and lower surfaces of the wing. Not only does the glass structure shrink, but the gelcoat shrinks over time as well. Gelcoat shrinkage produces a faint cloth matrix pattern visible at relatively short distances and at low angles. These shrinkage-related imperfections can often be removed with a light sanding of the gelcoat in the affected area.

The main failure mode of gelcoat is to crack or craze. Unless the gelcoat has been applied incorrectly, it rarely 'falls off' in pieces the size of 10 cent coins or larger. The most common form of gelcoat cracking typically occurs in two modes. The first mode is long parallel cracks, usually propagating lengthways either down the fuselage or from wing root to wing tip. The other common type of failure mode is short cracks in random



directions that have no pattern. The photo below shows both modes of gelcoat failure.

Most chips and scratches are tolerable but if they extend visibly to the glass a touch-up repair is necessary.

Often, the gelcoat begins to crack along the seam lines from the join of the two fuselage halves when the aircraft was being manufactured. This is the same for the wing leading edge as well where the upper and lower wing skins were joined. Sometimes this shows the early onset of gelcoat issues before the rest of the aircraft has begun to show any signs of impending gelcoat failure.

The main alternative to gelcoat is a polyurethane or PU paint. PU does not crack or craze in the same way as gel coat. Some of the older Polish gliders were finished with this material during production. Generally, aircraft that have a PU finish have a gelcoat base that is used to prepare the surface ready to accept the PU covering. PU is not as affected by UV as much as gelcoat is and does not suffer the same oxidation rates either. This is a major factor in why a PU finish can look superior to gelcoat over a longer duration with the same levels of care and maintenance.

PU finishes are generally much thinner than gelcoat finishes. There is significantly less opportunity to remove shrinkage related defects as discussed previously compared to gelcoat. PU is also considerably more flexible than gelcoat and because of this will not reveal underlying damage and delamination that is as evident with gelcoat. For this reason, PU-finished club aircraft are not as common as PU-finished privately owned aircraft. It must also be said that re-finishing with PU is considerably less

effort than gelcoat, as the surface texture straight from the spray gun has much less 'orange peel' that needs sanding and polishing out.

The overall colour of FRP gliders is always white, with only the smallest amount of colour permitted at the tips of the wings and maybe at the fuselage nose. This is because the airworthiness certification of the structure is only guaranteed up to 54° C and the white colour helps to ensure that as much energy as possible is reflected and that the glider does not overheat in the sun. Manufacturers often state that no paint pigment shall be added to certain areas of the aircraft. Next time you are out on the field, place your hand on the white surface and then on a red wingtip. The difference is very noticeable.

IMPORTANT NOTE

Many people attempt to save themselves a few dollars by stripping old cracked gelcoat from their aircraft prior to refinishing. The GFA raised AD278 (in 1987) due to a lack of quality and consistency in these activities, and also due to many people having to conduct the full refinish a second time due to poor methods or poor quality controls used. In all instances the RTO/A is to be notified that the aircraft has been stripped of gelcoat so that he/she may carry out or delegate an independent inspection of the glass substrate prior to new material being applied. This, like all AD,is mandatory. Also, refinishing FRP sailplanes must only be certified by approved persons. Refer to the GFA MOSP 3 for details.

AIRWORTHINESS SAFETY ALERT

ASA No. 01/13 8th OCTOBER 2013

MODELS AFFECTED: Schempp - Hirth Std Cirrus (15 meter - all variants) Schempp - Hirth Nimbus 2 (A and B Models) And possibly Mini-Nimbus models and Janus A models also.

NATURE OF ALERT

Increased risk of flutter and poor security of tailplane

DETAILS: Investigations into loose tailplane attaching bolts on 5 and 6 October have discovered that due to very dry conditions experienced in Australia recently, the wooden tailplane spars have shrunk slightly allowing the attaching bolts that mount the tailplane to the fuselage to become loose. The bolts are retained by nuts at the rear of the spar however these are not captivated and spin freely. Access to these nuts is not possible without cutting holes in the fibreglass. This prevents the bolts from being torqued to the correct specifications.

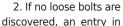
Schempp – Hirth have two different methods of attaching tailplanes in this generation of sailplane, and both methods have been found to exhibit the same problem. Of six aircraft inspected, both Cirrus and Nimbus 2, five were found to have this issue, with varying numbers of loose bolts. One aircraft was found to have all eight bolts loose. There are eight bolt/nut combinations that affix the tailplane to the fuselage. Both methods are shown below in Figures 1 and 2 on page 2 of this alert.

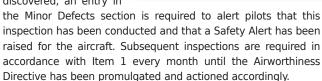
IMMEDIATE ACTION REQUIRED:

To allow the GFA sufficient time to develop an Airworthiness Directive to resolve this issue in the long term, the following mandatory action is required before next flight:

1. A GFA 'Form 2' authorised FRP Annual Inspector is to remove the tailplane and inspect the attaching bolts for security. If more than two bolts are found to be loose the aircraft is rendered un-airworthy and a Major Defect is to be placed in the

Maintenance Release of the aircraft. If two adjacent bolts, in any combination of 1-4 in the photos, are loose the aircraft is also rendered un-airworthy.





3. Please send a brief inspection report by email to returns@ glidingaustralia.org outlining the results of the inspection including how many bolts, if any, were loose and the status of the aircraft. This will assist the GFA in determining the scope and magnitude of impact to the affected fleet.

For further information, please contact the GFA Airworthiness Department or the Australian Schempp - Hirth agent, Maddog Composites at mike@maddogcomposites.com.au









The British Gliding Heritage Centre is the most recent gliding museum to open its doors for the first time, a part of the increasing trend in protecting gliding heritage around the world. The aim is to preserve and display the beautiful wooden gliders that embodied the sport of gliding from the 1920s and earlier up to the fibreglass revolution that began in the late 1950s. Where possible the old gliders are maintained in flying condition and qualified glider pilots and passengers can experience first hand the excitement enjoyed by the pioneers in breaking free from the bonds of gravity at last.



The Heritage Centre has been long awaited by British and other glider pilots, aware that no formal steps had been taken to collect and preserve the many gliders of the past that make up the rich heritage of British gliding. A large bequest from the estate of Chris Wills, much loved founder of the Vintage Glider Club with over 800 members worldwide, got things going. The International VGC Rally held at Lasham in August 2013 provided a deadline as an ideal time to open the Centre and garner the support of the wider gliding community.

Support among prominent British pilots was sought, a committee was formed and a site on the airfield owned by the Lasham Gliding Society negotiated. With funds from the Chris Wills estate, the sale of memberships and donations, a large hangar was constructed. Some significant gliders were donated while other arrangements were made with private owners to display and hangar their precious historic aircraft, until a hangar full of of pristine gliders and sailplanes of every shape and colour were collected.

On 4 August 2013, one day after the commencement of the Vintage Glider Club Annual Rally, a crowd estimated at almost 400 people assembled expectantly for the opening in the late afternoon. Following a short introduction about the origin and aims of the Centre by GHC Chairman Tony Newbery, General Manager Werner Stroud from the Lasham Gliding Society welcomed the GHC to Lasham. The opening formalities were followed by





OPPOSITE, MAIN PHOTO:

The MU 13D is in the centre, above it to the left is the Weihe and above to the right is the Willow Wren.

OPPOSITE BELOW: Heritage Centre Opening Day

I FFT:

The Scud 1 and Colditz Cock replica

BELOW:

Prince Rira's Gull III

a passionate speech by Justin Wills, citing the tremendous achievement of both his brother Chris and that of the GHC. After Justin revealed the names of all donors present, the ribbon on the hangar door was cut by Peter and Samuel Cody, descendants of the first man to conduct a powered flight in Britain - and the new hangar was declared open! Vintage Gliders Australia and the Australian Gliding Museum were well represented at the opening, and a presentation from the Australian Gliding Museum was made.

Already, ten historic aircraft dating back to the early 1930s have been donated or are on loan, and another thirty from private owners are available for display from time to time. Some very interesting gliders are displayed,

such as a replica Colditz Cock, and a Gull 3 that was once owned by Prince Bira of Thailand. His dog, a small white Highland Terrier known as Titch often went flying with him perched on his shoulders, with a small clear vision panel above so Titch could see out better! Titch was aboard on a climb to 12,000 feet in cloud.

The Heritage Centre now has the task of consolidating itself by adding workshop facilities, organising collections of memorabilia and establishing an archives collection. Judging by the rapid progress made to date, this will happen soon, but already the British Gliding Heritage Centre is well worth a visit for anyone with an interest in the development of gliding as it happened in the good old days!



VINTAGE GLIDING



ABOVE: The Hols der Teufel was popular in Europe in the 1930s, however, this replica was constructed from 2002 to 2004. No Instruments are fitted. The well known barefoot glider pilot Ulf Kern accomplished his Silver C, and also flew a 101km task, in this glider with an L/D of 13.

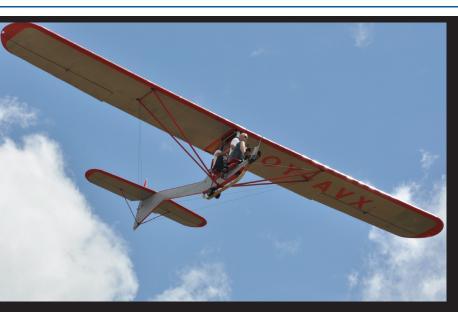
BELOW: Many thousands of the Edmund Schneider "Grunau Baby" were produced, the most of any glider. This Grunau Baby Ilb was built at Dunstable, UK in 1948, probably for the London Gliding Club, and was restored by Gary Pullen at Lasham after he took ownership in 2004.

RIGHT: The Moswey III was designed in Switzerland in 1942, and 14 were built. The first world record for speed around a 100km triangle was set by a Moswey III. This Moswey attended the first and second VGC Rallies, in the UK and at the Wassekuppe respectively. It was restored to its present beautiful condition in 1993, and is owned by a club near Zurich, Switzerland.









ABOVE: The 2G was designed by two Danish Engineers in 1945 to introduce two seater training in primary gliders. Nine were built. OY-AVX again took to the air in 1996 after a 30 year rest and has been participating in VGC Rallies in Germany, Great Britain and Slovakia. As the first open cockpit winch launch, it is a fantastic and unforgettable experience and perfect for passenger flights. The L/D is 13.

RIGHT: This Slingsby T-38 Grasshopper was taken in charge by the Royal Air Force for youth training in 1952, and became surplus to requirements in 1989. It was acquired by Dutch enthusiasts in late 2000 and has done much flying since then, launched by bungey, cartow, winch or aerotow, as well as spending training time pointing into wind while balanced on a tripod!

BELOW: This SZD Mucha Standard was sold to Belgium in the early 1960s and bought by its second and present owner in the UK in 2004. It has attended many rallies, and owner Bruce Stepenson says its delightful fingertip controls, impressive operating range, and ease of operation make owning and flying the Mucha a real pleasure.



PHOTOGHAPHS BY VINCENZO PEDRIELLI TAKEN AT LASHAM GLIDING CENTRE (UK) DURING THE VINTAGE GLIDER CUB INTERNATIONAL RALLY 2013.



COACHING



There are authors who write about gliding who invariably turn to the mathematics of the sport. Like moths to the flame, they are unable to veer away from the subject. This author is not so inclined but I will admit there are times when some mathematics is required to drive home a point. Many years ago my accountant always claimed that you had to put it on paper to see the whole picture. I agree with that statement.

Thus, if we look at cross country gliding, the most costly mistake in terms of time is to overstay in what might have been initially a good thermal. Suddenly, the vario' that started out at 6 knots is now down to 4 knots or below. Time to depart and find another 6 knot thermal or better as a provider of lift! If we are honest with ourselves, how many times have we thought, "Well, just one more turn." It's a decision we may regret when the expected lift just keeps reducing. I am sure that every glider pilot, particularly in his early cross country days, is guilty of doing this. Unconsciously we also think, "Well, it was just a single turn." What we fail to consider is just how these extra turns will add up over a longer flight.

EFFICIENT THERMALLING

It is a well known fact that the best way to increase your cross country speed is to thermal more efficiently. This has greater effect than increasing your speed between thermals. So it is fair to ask just what another turn in a thermal costs you in terms of time or, perhaps of more

importance, what the CUMULATIVE effect of multiple extra turns costs you. Hence, we have to revert to the dreaded mathematics.

EACH TURN AT LEAST 20 SECONDS

It is fair to assume that each turn in a thermal is worth at least twenty seconds of valuable time. As the man said, half the time in a turn is spent going backwards, and this does not include the effect wind strength is having on your flight path and groundspeed. A circling glider at 50kts of airspeed and 45° angle of bank is completing one turn each 16.5 seconds, so I suggest an average time of 20 seconds per turn is a reasonable assumption unless we do perfect 45° banked turns every time - which we do, don't we?

It is also fair to assume that on any cross country with multiple legs, the plus and minuses of wind velocity will cancel each other out, and you will gain a little on this leg and loose a similar amount on the next. Thus, what is the cumulative

effect of each extra turn? To a large extent this depends on the length of any cross country flight - the longer the distance, the greater the potential time loss. Perhaps on a short flight we are guilty of taking ten extra, non-productive turns, thus the time lost while turning is 20 seconds X 10 = 200 seconds, or 3.3 minutes

The problem becomes much greater if we apply the same logic to a triangular flight that might cover 300km or so. If we do 10 extra non-productive turns per leg, suddenly we have a 10 minute deficit, time that is wasted for no reward. If we apply this time to the groundspeed between thermals, suddenly we have, in effect, extra distance to fly. At a nominal 75kts of inter thermal groundspeed. This is an extra 12.5 n.m (23.2 km), and overall speed reduces.

POST FLIGHT ANALYSIS

If you really want to see exactly what is going on with your cross country speed, look at a few past flights and total all turns of three minutes or less plus all of those that result in sink rather than lift. I guarantee the results will be sobering. It pays to record all training flights!

Good cross country speed is the accumulation of many items that all come together to provide a good result. Flying that extra turn will not assist the process at all!

GFA CLUB LIST

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

716 FLIGHT GLIDING CLUB

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

2 WING AAFC

Operations from Warwick airfield shared with Southern Down GC. E, Located 12km NW of Warwick on Warwick-Allora back Rd, L at hall Other locations as directed by the FLTCDR 229 FLT (AAFC). Operations are aerotow on 1st Sunday and third weekend of every month plus first week of school holidays. Club fleet 2 x two seaters and single seat with Tug. Facilities include own hangar complex. 20 members. Tel# 07 3879 1980. www.2wg.aafc.org.au

ADELAIDE SOARING CLUB

Operations every day except Tuesday and Christmas day

Hangars, Bar, Clubrooms, Bunkhouse, Caravan park, Camp sites, Workshop, Club leases airfield Easter Regatta (April), Gawler Week (December), Flinders Ranges camp (May) Gawler (YGAW)
-Ward Belt Road Gawler

P.O. Box 94, Gawler, SA 5118 Tel (08) 8522 1877, Fax: (08) 8522 3177 Aerotow, Piper Pawnee (BOT

www.adelaidesoaring.on.net

ADELAIDE UNIVERSITY GLIDING CLUB

Operations from Stonefield with Barossa Valley
Gliding Club. Winch launching weekends and
public Holidays year round. Facilities include,
Clubhouse, bunkhouse, toilets, showers, Kitchen, BBQ area and entertainment. The club owns 5 gliders including 2 x two seaters, 4 private gliders. 22 members. Tel 0412 870 963. www. augc.on.net

AIR CADET GLIDING CLUB

Gawler airfield – Two Wells road Gawler. Facilities and operations shared with Adelaide Soaring Club. Located at: -34° 36' S, 138° 43' E. Operations weekend sand school holidays or by arrangement. Aerotow and self launch. 2 private two seater motor gliders. Clubhouse, Bunkhouse and briefing room. 13 members. Tel 08 8522

ALICE SPRINGS GLIDING CLUB

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

BALAKLAVA GLIDING CLUB

Weekend operations by winch 10km's NW of Balaklava on the Whitwarta Road. Tel 08 8864 5062. Located at. 4 Club aircraft including 2 x two seaters, 10 private gliders. Facilities include Bar, Canteen, clubhouse, caravan Park, camp sites, workshop, Hangar sites, Club owns Airfield. 49 members. www.bgc.asn.

BALLARAT GLIDING CLUB

15 members operating from the Ballarat airfield. Airport Road Ballarat. 47.5 E Tel 5339 2444. Aerotow operations most weekends or by arrangement. Single club two seater. Access to hangarage and airport facilities for Bar, showers and rooms.

BAROSSA VALLEY GLIDING CLUB

Stonefield, 16km East of Truro, L 5km, behind Stonefield church, Tel 08 8564 0240, Winch operations weekends and public holidays or by arrangement. 2 club Gliders including 1 x two seater, 5 private gliders. Facilities include canteen, clubhouse, caravan park, camp sites workshops, Hangarage and spare sites. Club owns airfield. 7 members.

BATHURST SOARING CLUB

Pipers Field - (On Fremantle Rd, 1.5km from Eglinton) E. Tel: (02) 6337 1180. Aerotow operations weekends and public Holidays. Club has two tugs and 7 gliders including 4 two seaters. Private fleet is 24 aircraft. Club Facilities include: Clubhouse, ablution block, Caravan park with Power, Hangars, Full Kitchen, Dormitory.

www.bathurstsoaring.org.au 91 members.

BEAUFORT GLIDING CLUB

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

BENDIGO GLIDING CLUB

Borough Road Raywood. Operates weekend and public Holidays. Hanger, workshop, kitchen and club room with Showers and ablutions. Winch launching, own airfield. Tel (03)5436 1518. The club fleet comprises a two seat trainer and single seat glider. There are 27 other private aircraft on site. 31 members www.bendigogliding.org.au

BOONAH GLIDING CLUB

is in South-East Queensland about 25 minutes south of Ipswich. Contact the Boonah Gliding Club via Email infomail@boonahgliding.com.au for any queries

7 days a week. If you wish to speak to someone about bookings, call our mobile 0407 770 213.

www.boonahgliding.com.au

BORDERTOWN-KEITH GLIDING CLUB

Western Hwy 5kms west of Bordertown, Tel 08 8752 1321. Operations by winch every Saturday or all year by arrangement. 5 club aircraft including 2 x two seaters, 1 private glider. Bar canteen, clubhouse, bunkhouse, Caravan Site, Camp Sites. 23 members.

BUNDABERG GLIDING INC

Elliott Gliding field, Childers Hwy Bundaberg, Tel 0417 071 157, Winch operations weekends and public Holidays. Club Fleet includes 1 single seat and 1 two seat glider, Private fleet 1 x 2 seat glider. Club Facilities: Clubhouse, Area available for camping & caravans, 2 hangars. Grass and sand runways. www.gliding.inbundy. com.au 15 members.

BYRON GLIDING CLUB INC.

Tyagarah Airfield (council owned) - E side of Pacific Hwy, 5 kms N of Byron Bay. Entry off Gray's Lane then 2nd left into Old Brunswick Road passed the blue hangars to club white bangars at the pacific and of this dist mod Road passed the blue hangars to club white hangars at the eastern end of this dirt road. Telephone (02) 66847627. Operations are 4 days a week, self launch only. The club owns 1 Jabiru Falke and there are 4 private motorgliders - Falke 2000, 2 Dimonas and Grob 109A (some available for hire). Facilities include: Clubhouse with kitchen and bathroom, 2 hangars, with only basic camping on 2 hangars, with only basic camping on grounds. 42 members. www.byrongliding.com

CABOOLTURE GLIDING CLUB

45 km's North of Brisbane on Bruce Hwy

PO Box 920, Caboolture, Old 4510 Tel 0418713903

Flying: Fridays, weekends, Public Holidays. Aerotow with Piper Pawnee (SPA) Licensed aerodrome, bar - canteen 85 Flying members www.glidingcaboolture.org.au

CANBERRA GLIDING CLUB

Bunyan Airfield, 1297 Monaro Highway, Bunyan Bunyan Aimeid , 1297 Monaro migriway, buriyari NSW 2630 (13km north of Cooma, Western side of highway), Located at: -36° 08' S, 149° 09' E. Tel# 0429 523 994. Aerotow operations weekends and public Holidays. The club has 4 aircraft including 2 tow seaters. Private fleet is 11 gliders. Facilities include: Clubhouse, bunkhouse, club and private hangars, Club own the airfield. www.canberragliding. org 51 members. Wave flying centre for NSW

CENTRAL COAST SOARING CLUB

Bloodtree Road, Mangrove Mountain NSW 2250, Tel 02 4363 9111. Rope Winch operations Thursday, Saturday and Sundays. 5 club aircraft including 2 two seaters, one private glider. Club facilities, workshop, hangar and clubhouse. 40 members. www.ozstuff.com. au/ccsoaring

CENTRAL QUEENSLAND GLIDING CLUB

Gliding Club Road, Dixalea, 90km's south of Rockhampton, Tel 07 4937 1381. Winch operations weekends and weekdays by arrangement. Club fleet 3 gliders including 2 x two seaters, 10 private gliders. Facilities include: Clubhouse, Bunkhouse, Caravan Park, Hangarage, Club owns the airfield. 26 members.

CORANGAMITE SOARING CLUB

Kurweeton Pastoral Co, Kurweeton Derrinallum - Private strip. Tel 03 5593 9277. Winch and self Launch. Club Fleet 1 x two seater, 2 private aircraft. Flying by arrangement. 5 members

CUDGEGONG SOARING P/L
Gulgong - (199 Stubbo Road, North from
Gulgong. Leave on Medley St., road becomes
"Barney Reef Road" after level crossing. At
7km, turn right onto Stubbo Rd. Airfield 2km
on left). Tel 0418 286 033. Winch operations weekends and by arrangement. All aircraft are privately owned. The club owns the airfield, has a clubhouse, caravan Park, camp sites, workshop and hangars. 10 members.

DARLING DOWNS SOARING CLUB

McCaffrey Field (Warrego Hwy, at 8km W of Jondaryan, turn S down Mason Rd), Tel 0409 807 826. Aerotow operations weekends, public Holidays and by arrangement. The club has 7 gliders including 2 x two seaters. There are 26 private gliders. Facilities include: Bar, Kitchen, Cluhouse, Bunkhouse, caravan park, camp sites, BBQ area, Showers, Wi-Fi, Lounge, Workshop, Hangarage, Club own the airfield. 100 members. www.ddsc.org.au

GEELONG GLIDING CLUB

Shared facilities with VMFG and Beaufort GC at Bacchus Marsh Airfield. Tel 0409 212 527.
Operations by aero tow weekends and public Holidays and by arrangement. Monthly winching also available. 3 Tugs, 6 club gliders including 2 x two seaters, 16 private gliders, 61 members.

GLIDING CLUB OF VICTORIA

Samaria Road Benalla, Tel 03 5762 1058, State Gliding Centre of Victoria. Club rooms with Bar and large lounge dinning, Office, Members kitchen and commercial Kitchen Toilets and briefing rooms with storage. Members Caravan Park with Ablution block and dormiton accommodation.. Weekends from April-Sept, 7

day a week operations at other times. GFA approved workshop. 8 club aircraft including 4 two seaters, 41 private aircraft. Hangar space, Large private hangar complex. 115 members. www.glidingclub.org.au

GLIDING CLUB OF WESTERN AUSTRALIA
GCWA is about 1.5 hours, 160 km's east of
Perth, towards Kalgoorlie. The club operates
weekends and public holidays, with sealed
runways, hangar, club rooms and a fleet of 7
aircraft and Pawnee Tow plane. The club
operates from the Cunderdin airfield and can
be contacted on 0417 992 806 or see us at
www.glidingwa.com.au. The club currently has www.glidingwa.com.au The club currently has 61 members.

GLIDING TASMANIA (The Soaring Club of

Tasmania) is situated half way between Launceston and Hobart on the Midland highway (4km east of Woodbury). 28 members. Operations every Sunday and Saturdays by arrangement. Club owns ASK13, Club Libelle, Pawnee Tug. MotorFalke also available for dual flying. Private fleet includes Nimbus and Grob 103M. Ph. 0419992264 www.soaringtasmania.org.au

GOULBURN VALLEY SOARINGN

Lot 2, Tidboald Road Wahring, Located at: -36.41S 145.14E. Winch operations Saturdays and Sundays by appointment. 4 club aircraft and 2 private. Clubhouse, Shower and toilets. Caravan Park, Private units, Hangars. 13 members. Private owned strip.

GRAFTON GLIDING CLUB

Waterview Heights (Eatonsville Rd, 8km W of South Grafton). Tel 02 6654 1638. Winch Operations Saturday or by arrangement mid week. The club has two aircraft including 1 two seater, with one single seater. Facilities include a hangar. 8 members.

GRAMPIANS SOARING CLUB

Located at Ararat Airfield (Victoria) the club operates at weekends and public holidays with independent operator mid-week activities by arrangement. Launching is primarily by aerotow; winching also available. Fleet comprises basic trainer (Puchacz) and advanced trainer (Janus C) plus Jantar Std 3 and H201B Libelle; 8 private single-seaters Hangar space often available for visiting pilots plus club-house and bunkroom accommodation. Locality offers excellent XC, ridge soaring and mountain wave opportunities. Camps at Jallukar (near Grampians) Easter and Queens Birthday. Well-deserved reputation as the Soaring Centre of Victoria. Clubhouse phone (03) 5352-4240 W/E or 0409-336-914. www. grampianssoaringclub.com/

GYMPIE GLIDING CLUB

GYMPIE GLIDING CLUB
Located at Kybong 10 km south of Gympie,
26 degrees S, 152 degrees 42 E. on the
Bruce Highway. Telephone
54851895/54477647 . Winch operations .
Operates Wednesdays and Saturdays and
other days by arrangement. Facilities include
Club House and Hangars . Gympie Airfield is
a CTAF and hosts other power aviation and
commercial operations. The Club has 2 Club
two seaters . 2 single seaters and 10 private two seaters, 2 single seaters and 10 private single. www.ggc.gympiegliding.org.au . 43 members.

HORSHAM FLYING CLUB

Horsham airport – Geodetic Road Horsham. Tel 03 5382 3491. Weekends and public holidays, aerotow. Clubhouse, Bar, canteen, Bunkhouse, campsites, Caravan Park, Workshop, hangar space. 5 club aircraft including 2 x two seaters. 8 private aircraft.

HUNTER VALLEY GLIDING CLUB

Warkworth - (10km W of Singleton. S along Warkworth - (10km W of Singleton. S along Putty Rd to Mt Thorley intersection, then W towards Denman. 1st turn right after crossing the river at Warkworth), Tel 02 6574 4556. Aerotow operations weekends, Public Holidays and one friday/month. Club owns 2 two seaters and 2 singles and the private fleet includes 16 gliders. Facilities: Clubhouse, bunkhouse, carayan park, camp sites bunkhouse, caravan park, camp sites, workshop, club owns airfield. www.hvgc.com.au 54 members.

KINGAROY SOARING CLUB

Situated at Kingaroy Airfield, Club Gliders include Duo Discus X, Ask 21,2 Discus CS and Astir CS77. 30 Private gliders, Facilities include Club House with licenced bar, Bunk House accommodation for 35 in single and family rooms. New Club Hangar to be completed by late 2013. Operations every weekend, First Thursday of the month 4 day weekend and two after 3 day weekend i.e. Friday, Saturday and Sunday. Come and visit one of the friendliest clubs around 130 members Contact Club House 61 7 4162 2191 Launch Point 0438 179 163 www.kingaroysoaring.com.

LAKE KEEPIT SOARING CLUB

The Club lies within Lake Keepit State Park off the Oxley Highway between Gunnedah and Tamworth, Elev 1120ft AMSL. Tel: 02 6769 7514. Operates 365 days a year. Aerotow every day, winch every second Saturday. 9 Club Gliders including 4 two seaters, 40 private gliders. Facilities include Flight Centre; Clubhouse; kitchen/BBQ; double, single, twinshare accommodation; camp sites; workshop; hangarage. 135 members. www.keepitsoaring.com.

LATROBE VALLEY GLIDING CLUB Latrobe Valley regional Airport – Airfield Road Morwell. Tel# 0407 839 238, Weekends, Public Holidays and mid week by appointment. 3 club gliders, 3 private gliders.

LEETON AVIATORS CLUB

Brobenah - (9km N of Leeton PO, on E of main canal at foot of Brobenah Hills). 26' 07" E. Tel 02 6953 6970. Winch operations Saturday and Sunday by arrangement. Club A/C 1 tow seater and one private motorglider. Facilities include Clubhouse showers toilets, Canteen, hangar with workship, Camping. 7

MELBOURNE MOTORGLIDING CLUB

Moorabbin Airfield, Grange road Mentone. Tel 0418 511 557. Operates Motorglider AEF's around Melbourne anytime by booking. Royal Victorian Aero Bar and restaurant. Controlled airspace operations, 2 members,

MILLICENT GLIDING CLUB

Mt Burr Road Millicent. Tel 0427 977 241. Winch launch operations Sundays or by arrangement. Two club aircraft one two seater, 3 private aircraft. Bar, Clubhouse, Workshop, Hangarage. 9 members.

MORAWA GLIDING CLUB

We are a small country gliding club 410 km's North of Perth We are a winch club with two 2 seaters and one single, operating when we can and usually by prior arrangement.
Morawa Contact - 08 9971 1775, Perth
Contact - 08 9387 3654 derry@primus.com.au,
PO Box 276, Morawa, WA 6623. Current

MOUNT BEAUTY GLIDING CLUB

Mount Beauty Airfield operations weekends and public holidays and by arrangement.

Winch launching with a two seater and single seat fleet. 30 members with a range of private gliders and motorgliders. Tel 0417 565 514. www.mtbeauty.com/gliding

MOURA GLIDING CLUB

Location: On Moura-Theodore Rd , 5 mins from Moura, Tel 07 4997 1430. 3 members, operations Sunday by winch. Facilities include Club House, hangar, 1 x two seater.

MURRAY BRIDGE GLIDING CLUB

Pallamana (7km from Murray Bridge on Palmer Rd). Tel 0403 318 277 www. murraybridgegc.com Operations are self launching and by arrangement. 1 club 2 seater motorised and 3 private motorgliders. Club House, Hangarage. www. murraybridgegc.com 15 members.

MURRAY VALLEY SOARING CLUB

Redlands Road Corowa 3km's west of town. Tel 02 6033 5036. Seasonal professional operation, aerotow or self launch. . www. australian-soaring-corowa.com Large hangar, clubhouse with office, internet, bar, Showers, BBQ, Swimming pool, Spa, water ballast, battery recharging services, Paved roads and runways, camping and caravan sites. Two tugs. We own and operate four unique 40ft sea containers to ship 6 gliders per container.

NARROGIN GLIDING CLUB

Located 8 km's west of Narrogin Township WA on Clayton Road This is about 200km's 5th East of Perth. The club features a powered Caravan Park, Ablution Block, kitchen, workshop, Licenced Bar, clean accommodation, Sealed Runways. The club clean accommodation, Sealed Runways. The club fleet comprises three two seaters and three single seat A/C with Pawnee Tug. The club operates weekends and public Holidays and conducts 5/6 day beginner courses. The club conducts annual wave camps at the Stirlings, Fly-ins to local farms and Cross country courses. Contacts at Tel 08 9881 1795 or 0407088314, www.narroginglidingduborgau Members 76 Members 76.

NARROMINE GLIDING CLUB

The club owns and operates Twin Astir, Duo Discus, LS4, Libelle, Discus B. Tugs: club owned Pawnee 260 and private owned C-180.14 private owned gliders.

Facilities include club house with licenced bar and kitchen. Private owned tourist park on with En-suite rooms, airconditioning, kitchen, recreation room, laundry. Walking distance from town. The club operates full time November to April and Fri, Sat, Sun, Mon for the rest of the year. 46 Members - The club welcomes all visitors.

www.narromineglidingclub.com.au

NORTHERN AUSTRALIAN GLIDING CLUB

Batchelow adjacent to the township. Tel 08 8941 2512. Operations Saturdays and public Holidays. Aerotow operations, 1 two seater, 3 private gliders. Club House, Hangarage available. 2 members.

NORTH QUEENSLAND SOARING CENTRE

Corinda Avenue, Columbia, Charters Towers, Tel 0428 797 735, Operations by winch Sundays and public Holidays by arrangement. 5 Private gliders. 13 members. www.nqsoaring.org.au

RAAF WILLIAMTOWN GLIDING CLUB
Williamtown airforce base 25 km's North of
Newcastle on Nelsons Bay Road., Tel 02 4982
9334. Club fleet 2 Two seaters and 2 single
seat gliders. Facilities include: workshop. 14
members. Operations weekends by members. Operations weekends by appointment.

RENMARK GC - RIVERLAND SPORT AVIATION

Renmark airfield, Turn off 6km on Renmark to Berri Rd, Tel 0417 890 215. Operations weekends, public Holidays and by arrangement. Two club aircraft, 1 private, Bar, canteen, Club house, bunkhouse, workshop, hangar sites. www.sportaviation.riverland.net.au 6 members. Aerotow operations.

SCOUT GLIDING CLUB

Armstrong, (On Morgan Rd, 10km N of Blanchetown, W side of River Murray). Tel 0418 815 618. www.airactivities.sa.scouts. com.au Operations weekends and by arrangement. Self launching 2 x motorfaulks. Club House, Bunk house, Full kitchen and dining facilities, camp sites. 9 members.

SOUTHERN RIVERINA GLIDING CLUB

Gate 3 Tocumwal Aerodrome 2km east of the

Operations 7 days a week all year round. Launching by aerotow. 3 club operated gliders - 2x2 seaters and one single seater 76 members with a range of private gliders and motor gliders. BBQ and full kitchen facilities. CFI 0358 743 052. Located at -35° 48' 42" S, 145° 36' 30" E www.srgc.com.au.

SOUTHERN CROSS GLIDING CLUB

Located at Sydney Metro Airport Camden, a licensed General Aviation airport, hosting operations in the commercial, private, sports and recreational aviation areas. It has a reputation as

Australia's leading sports/recreational aviation airport. Hangar sites available, GFA approved workshop on the aerodrome. Aerotow Piper Pawnee (CPU, FBI, SMS) Flying Friday, Saturday, Sunday, Monday and Wednesday. P.O. Box 132, Camden, NSW 2570

0425 281 450 or airfield on 0402 055 093 www.gliding.com.au

SOUTHERN TABLELANDS GLIDING CLUB

Lockesyleigh" Carrick (11nm NE of Goulbum - N on Hume Hwy 12km, Left onto Carrick Rd, 8km, over railway on right). Tel 0408 647 671. Winch operations Saturdays or by arrangement. Facilities include hangarage. www.stgc.org.au The club has 2 two seaters and a single. 37 members.

SOUTH GIPPSLAND GLIDING CLUB

Leongatha airfield 8km's south of Korumburra. Tel 0437 041 709. Operations weekend and public Holidays and by arrangement, Winch launching with rope. Aerotowing by arrangement. 4 club aircraft including 2 x two seaters. 2 Private gliders. 14 members. Camp sites, workshop, hangar

SOUTHWEST SLOPE SOARING P/L

Operations from Bendick Murrell airfield. E. Tel 0488 531 216. Winch and self launch by arrangement. Club own 1 two seater and has 3 private gliders. Facilities include: Hangar, powered camping area on town water.

SPORTAVIATION - TOCUMWAL

7 day a week all year round operations by Aerotow. Gate 10, Babbingtons Road Tocumwal airport. Tel 0427 534 122. www.sportaviation. com.au 52 members, 5 club aircraft including 2 two seaters, 9 private aircraft. Caravan Park, Kitchen, Bathroom, BBQ area reception/Office, Conference and briefing rooms, Wi/Fi Hangarage water, full time courses. www. sportaviation.com.au

SUNRAYSIA GLIDING CLUB

Winch launching Weekends and public Holidays. 3 km's West of Koorlong, Mildura. Tel 03 5025 7335. 22 members, 2 two seat and 2 single seat aircraft, 5 other private aircraft. Canteen Clubhouse, camp sites. www.sunraysiaglidingclub.

SYDNEY GLIDING INC.

Operations from Camden Airport.. Tel 0412 145 144. Self launch operations weekends and midweek by prior arrangement. Club has 2 self launching 2 seaters. 10 members. www. sydneygliding.com.au

SOAR NARROMINE P/L

Operations from the Narromine airfield west outskirts of town. Tel 0419 992 396. 7 day a week aerotow operation 2 tugs. 10 club aircraft including 3 two seaters. Facilities include: Caravan park with En-suit rooms and showers and air-conditioning. Camp Kitchen self cooking, recreation room with TV and Laundry Facilities. www.soarnarromine.com.au 11 members

SCOUT ASSN OF AUSTRALIA NSW GLIDING WING

Operates from the Camden airfield. See Sydney gliding for location details. Tel 02 9773 5648. Operations with self launch motor glider and 1 two seater glider. Weekends and other sites by arrangement. Membership restricted to youth scout Assn members.

TEMORA GLIDING CLUB

Operations from Temora Airfield 2km's Nth of the township off airport Road.. Tel 02 6977 2733. Operations by aerotow weekends with full time camps in January and others by arrangement. Club owns a two seater, Private fleet, 7 single seaters. Facilities include: Bar, canteen, Clubhouse, camp

VICTORIAN MOTORLESS FLIGHT GROUP

Bacchus Marsh Airfield 8 km's south of Bacchus Marsh on the Geelong Road. Operations weekends, Public Holidays and Fridays. Tel 0402 281928. 115 members, aerotow operations. Two tugs and 7 gliders in the fleet with 4 two seaters and a two seat motorglider. 34 private gliders.

WARWICK GLIDING CLUB

Warwick Gliding Club is a small, friendly gliding club located at the Warwick Airfield on the Darling Downs in South-East Queensland 2 hours drive from Brisbane. Tel: 07 3077 6973 www.warwickgliding.org.au

WAIKERIE GLIDING CLUB

Operations weekends and by arrangement, 7 day operations December and January. Waikerie airfield 3 km's east of town. Tel 08 8541 2644. Aerotow operations. 4 club aircraft including 1 x type coates 17 minutes all 1 including 1 x two seater, 17 private gliders. Trailer park. 29 members. www. waikerieglidingclub.com.au

WHYALLA GLIDING CLUB

Tregalana (25km from Whyalla on the Whyalla to Port Augusta Highway on the Right) Tel 08 8645 0339. Winch launching operations Sundays. Two single seat club aircraft, 1 private. Club House, hangarage available.

FOR SALE SPEED ASTIR 2 VH-IZW



1550 hours, very good condition, original crack free gelcoat, simple maintenance, unique full span flexible hinge flaps and ailerons, excellent performance 41/1 LD at 57kts dry, 67kts wet, stalls 34kts, VNE 145kts, thermals on rails, very sweet and forgiving to fly, carries 145 kg water= 45kg/sq.m.

B50 vario coupled to ALTAIR moving map colour display glide Microair radio, vertical card compass. Excellent rebuilt GRP clamshell trailer, full covers and tow-out gear. Gear warning system, auto cruise/climb switch on flaps. Form 2 until August 2014.

Many fast long distance flights recorded ASW20 performance at half the price! asking \$27,000, ex Warwick FLARM and parachute also available CONTACT DAN 0427 654 663 OR RAY 0438 286 228



I have just spent the best week of my life, soaring with birds and coming eye to eye with eagles, but I'll start from the beginning.

Ever since I can remember, airplanes and flying were my passion. Not so long ago my parents gave me a paper plane folding calendar. For a whole year I made a paper plane each day. I even made 747s and other models which I sold at an airshow in Manjimup. The organiser gave me a free flight in a Foxbat. The pilot let me land it too.

I read lots of books about aviation and started flying RC planes. For my twelfth birthday my parents gave me a two-hour TIF flight in a SportsStar at Busselton Airport. This was a really awesome experience.

I met Matt Hall, the Australian Top Gun, and Ryan Campell, the youngest pilot to fly solo around the world, at Avalon Airshow in 2013. I also flew in a DC3 at Wanaka airshow.

For my birthday in October, my dad organised an ab-initio course with the Narrogin Gliding Club. The day after my 13th birthday we drove 300km to Narrogin to start the five-day course.

We had a wonderful BBQ the first night when I got to meet my fellow gliding students. I was so excited I could hardly sleep.

After breakfast on Monday morning we

were briefed on the weather and the daily schedules. I couldn't wait until we started flying. We pulled out the two Puchacz's that we would be flying in, along with a DG505 and a Piper Pawnee, the tug plane.

I was chosen to take the first flight of the day. My instructor was Bryan Blackburn. We did all the required pre flight checks and then I heard the tug pilot over the radio, "Narrogin traffic this is Tango Uniform Golf Pawnee entering runway 28 for a glider launch, Narrogin."

Off we went. I was amazed at how quickly the glider got unstuck. Once the tug had enough speed it

lifted off too and we passed through his slip-stream on the way to the low-tow position. We did a relatively short tow to about 2,000 agl. What a feeling.

Now I was given control of the Puchacz from Bryan. I gently moved the rudder pedals with my feet and with my hands I moved the stick, getting a feel for the way the glider handled. We found a thermal and circled in it. The countryside below me was all lush green farmland. Too soon it was time to head back. We did the FUST check and then joined the downwind circuit. Once we had landed a big smile was all over my face.

My four fellow students all had their first flights and had similar experiences that morning. We each did three more flights that day. In the late afternoon we parked the gliders back in the hangar and went to do more theory. We learned more about the secondary effects of the controls and how the instruments worked.

We went on to fly all week. We were mostly lucky with the weather. Each day we were given tasks to perform and more responsibilities. I did a lot of flights with Andrew Jackson, all of which helped me a lot to fine tune my flying. I did all of the take-offs from Day 2 onwards and I also made my first landing that day. On Day 3 the flying doctors came and I was allowed in the cockpit of the PC-12. It also just happened that the pilot was the brother-in-law of my school principal.

The catering at Narrogin Glider Club was really great as well. Jo and Alan



made some really nice food while we were there.

Alan also gave me a flight in his Vari Eze. It was a 30min flight around the area and when we got back we did circuits over the airfield before we announced over the radio that we would be doing a runway inspection.

Flying close to the ground is an awesome feeling. Again I had a big smile on my face when I got out. The next day I also flew some aerobatics with Dayle Found. We did a split S and even a loop, pulling 3.5 Gs. This had the desired effect of making my smile even wider.

My Dad, Tom had fun, too. He was happily sitting in the pie cart all day keeping the flight logs.

Before dinner we would all sit together and have a few beers - ginger for me. We would talk about gliding and aviation in general. After flying this was my second favourite activity during the week. Some

the stories unbelievable. My favourite quote of the week was from ex-747 pilot Tony Henderson. "Forget the variometer, you can feel a thermal with your bum."

Two other students did their first solo flight on Thursday and got awarded their certificates that evening.

Friday was a sad day, as we had to leave. I still managed to do two flights, a long one of 40min which was good fun and a shorter one with Dennis

Buckley in which I did a perfect landing.

According to my instructors I was ready to do my solo, but I would have to wait another two years until I turned 15. During the week I did 22 flights and flew for 7 hours and 6 minutes.

I am now saving every cent to go



flying at Narrogin.

"Narrogin base this is Mike India Kilo echo declaring a PAN PAN PAN I've got a serious gliding bug here and I request more flying time, Narrogin."

Many thanks to everybody at Narrogin Glider Club for everything. I will be back.

GFA CALENDAR

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

Narromine Cup 24 - 30 November 2013 www.narromineglidingclub.com.au

20 Metre National Championships Narromine

28th Novemberto 6th December www.narromineglidingclub.com.au

Girls Just Want to Have Fun Week **Bathurst Soaring Club** 1-7 DECEMBER 2013

Please email Leonie with expressions of interest to give an indication of numbers. Bathurst Soaring Club Member's caravan accommodation can be arranged. Suggested payment, beer or wine. Leonie Furze leoniefurze@hotmail.com

Junior Nationals Narromine

7 - 14 December 2013

Contest Director, Liam Donald: Idonald87@hotmail.com

Saturday 7 December is the official practice day. Final Night Dinner: 14 December 2013, Entry Fees: \$150 competition entry, \$100 coachee entry (Please note that the entry fees will increase to \$250 and \$150 respectively after 1 November 2013). www. joeyglide.com.au and The Aus Junior Gliding Facebook Groupenter.

SA State Championships Gawler

26 - 31 December 2013

Prcactice on 26th Dec. 1st contest day on 31st Dec thetemples@internode.on.net

Club and Sports Class Nationals Waikerie

1 - 11 January 2014

contact Grant Hudson granthudson4@gmail.com

VSA State Championships Bacchus Marsh

12 - 18 January 2014

Practice day Sunday12 Jan, Comp commences Monday 13 Jan to Saturday 18 Jan. Wind up & Awards Dinner Sat 18 Jan. Contest Director - Ian Patching patching@westnet.com.au

SA Coaching Week Stonefield Jan 19 - 27, 2014

Cathy Conway cath@internode.on.net

Coaching - G Dale - SA Clubs **Cathy Conway** cath@internode.on.net

48th Horsham Week Competition Horsham Airfield

1 - 8 Feb 2014

This is perhaps the longest continuously running competition in Australia, and is a welcoming and friendly competition

suitable for all levels including pilots entering a competition for the first time. For details contact the Contest Director Rolf Beulter at cd@horshamweek.org.au or see the website at www.horshamweek.org.au

Alpine Coaching Mount Beauty

1 - 10 March 2014

Experienced pilots contact Ian Grant ian.grant.gliding@gmail.com

Coaching - G Dale - WA Clubs 10 - 14 March 2014

Swain Johnson

Swain.Johnson@bentley.com

Queensland Easter Comps 19-26 April 2014

Friday 18 April serves as arrival, registration, tie down and practice day. First comp day is Saturday 19 April with last comp day on Saturday 26 April. Dinner to be held that night at venue TBD, but probably same as last year. Dry comp - no water ballast, and open to all classes. CD is Dave Donald on 0409 059929 icansoar@y7mail.com Organised by Boonah Gliding Club - Denis Nolan on **0400 159259** denisnolan@gmx.com. Website details to be advised.

Club & Sports Class Nationals Goondiwindi Old

6-17 October 2014

The competition is being run by Gliding Queensland as a co-operative effort of all Queensland Clubs. For further information in the first instance contact Dave Donald **0409 059929** or icansoar@y7mail.com

CLASSIFIED ADVERTISING

www.glidingaustralia.org

Please send classified advertisements with payment to: GFA

1-13 The Gateway Broadmeadows VIC 3047. Tel: 9359 1613 Email:

Registration@glidingaustralia.org

Your ad will be placed on the GFA website for a period of 1 month and published in the next edition of Gliding Australia. For the current advertising charges, please go to www.glidingaustralia.org and click Classifieds.

GLIDERS FOR SALE TWO SEAT

ASH 25 1800 hours Refinished in PU, Cobra metal top trailer, bugwippers, Jaxea all weather covers, 26m Tips with .5 High Winglets, Mountain High Oxy. Make an offer; Contact Aaron for more info and pics 0412 867 672



Duo Discus T JSR First flown January 2003, 2000 hours, 10 hours engine time, one owner, impeccable condition, reliable turbo, beautifully finished, meticulously maintained, winglets, instruments, oxygen, parachutes, trailer, complete package. Contact Ralph, ralph@ jsrsoaring.com.au or mobile 0409 009 094

SINGLE SEAT

ASG29E Less then 200 hrs, Engine zero time and still factory inhibited. Cobra trailer always kept in a hangar, comes with all tow out gear. Everything presents like new, would suit the most discerning pilot, available after the Kingaroy Nationals. Asking 175,000 OBO for more details contact Brad Edwards Mob 0427 202535.



LAK 12, 1996. Genuine 50:1 (Google Richard Johnston Lak 12 flight test); 20.5m wings; Flaps; Retractable wheel; Tail wheel mod; Tow out gear. TT 490 hours. Fabulous glider to own and fly. Easy to fly. Perfect first glider. Excellent factory trailer. \$38,500. Hangared Stonefield. Would consider one or two co-owners. Chris 0418 234 000. ultrabat@gmail.com or go to photos pages on www.theultrabat.com

LS6, tail tank, basic instruments, Microair radio, tow-out gear and Komet trailer. Offers around \$53k. Cambridge logger, AusFlarm, Ilec vario, parachute negotiable. Contact Andrew 0409 829 895 or Mike 0403 840 607



Nimbus 3 25.5m, single seat, 4500 hours, finished in PU- exc condition, L Nav, XCOM Radio, Bohli vario, Mtn High Oxy, Oudie, Colibri with FLARM, tail tank, tow out gear, wing covers, Dual Axle German built enclosed trailer with rigging system for 1.5 persons, current Form 2 provided, hangared at Benalla, completed several 1,000 kms flights. Pics available. Price: \$65,000. prhco@bigpond. com 0420 379 068 / 0428 583 746

IS29D VH-GWC (1252 hrs / 928 landings) basic instruements, tow out gear.Last flown 2009 trailered since then at Caboolture. No trailer, \$3800. Contact Vince Everett at vinceev8@gmail.com 0403 563 251

HPH 304 SHARK 18M competition sailplane. Showroom condition, Less than 300hrs. Altair flight computer and Cobra trailer, factory painted and extras. \$110 000 or best offer. Andrew 0488161844 georgo28@ bigpond.com

LS3 VH-DLJ serial no 3080 40-1 glider for sale in very good condition, 1900 hrs c/w current form 2, roadworthy trailer good instruments inc Becker radio Cambridge ELNAV, Oxygen system plus new water Bags and good tow out gear. \$34k ono . Call Cliff on 0405 450 881 or c.hitch@bigpond.net.au

SparrowHawk VH-GNY Ready to fly: EDS oxygen with kevlar cylinder, BRS ballistic parachute, Cambridge 302/303, Xcom radio, excellent trailer, other extras available. Located at Warkworth, NSW. \$58,000 morgan@sandercock. com +1 541 350 8517

SparrowHawk N-707PM Ready to fly: EDS oxygen with kevlar cylinder, BRS ballistic parachute, Cambridge 302/303, Microair radio, excellent trailer, other extras available. Located at Bend, Oregon, USA. USD\$40,000 morgan@ sandercock.com +1 541 350 8517

Foka 5R. Curious about the 'R'? Contact me to find out. Good condition, basic instruments and dry trailer. Reasonable offers. Caleb 0414 902 196 or gliderdriver@gmail.com

VENTUS 2CX 900hrs, LX9000 flight computer, ready for jet sustainer installation (wiring, Fuel tank and pumps already installed) All reasonable offers considered. Andrew 0488161844 georgo28@bigpond.com

POWERED AIRCRAFT/TUGS

DG 400. Hangared at Gawler GYO currently has 1,299 hrs airframe and 104 engine (25 hourly recently completed). Chute, Trailer, MH Oxy, covers etc. included. All maintenance and annuals by Morgy. Brilliant climb rate and 15 or

meter span gives convenience plus performance plus fun. A steal at \$79,000. Contact Richard Skinner on **0419 818 024 or** skinnerr@iprimus.com.au

STEMME S10V. 1995 model, 1490 hrs. 350 hrs engine TBO. New magneto, clutch. Propellor last overhauled 2012. Wing folding mechanism for single pilot ops, solar panel, Jaxida covers. Hangared always. Mike 0488 787 738 stemmeggx@gmail.com

Super Ximango AMT-200 VH-VLO, built 1996.Rotax 912A, <500 hrs engine and airframe. Extensive Form 2 being finalised. All Rotax AD's complete. Wings refinished in poly this year. New harnesses. New brake discs. Retractable undercarriage. 100knot Cruise. \$98,750 ono Contact mark@swiftavionics. com.au

Motorglider Syndicate - Melbourne



Interested in convenient, easy to access soaring all year round, just minutes from home? We are seeking expressions of interest in syndicate shares in the Melbourne Motorgliding Club's HK-36R Super Dimona XGE. Email barry.hendy@gmail.com for more info

Touring Motor Glider G109. Great condition and low hrs, 1890 hrs TT only 190hrs. New Engine and Prop fitted 2007 by Grob in Germany. Dual CHT,EGT, transponder and GPS100. Great Glider 30:1 plus touring 85knot TAS at 15 I/hr NSW. Must sell price reduced to \$55,500. ken.flower747@gmail.com 0457 811 627

AMT 200 Super Ximango



Unquestionably the best touring motorglider of its type. Latest wing, winglet and aileron profile. 35:1 glide ratio. Well ballanced, a pleasure to fly. For a full Specification and photographs, email energy@whitsunday. net.au \$135,000 for quick sale. Organise your trial flight.



UNIQUE AVIATION OPPORTUNITY







- A fully operational flying site only 6km from the centrally positioned township of Gulgong
- Set on an attractive freehold property of some 60 hectares with quality improvements and a range of services
- Established improvements that include clubhouse, amenities block, main hanger 20m X 20m, a workshop shed 15m X 5.5m & a second hanger 36m X 18m
- Sound water supply, mains electricity, solar system, council road frontage and telephone plus all current approvals to operate
- Great opportunity for an aviation enthusiast or syndicate to secure a long term investment in the flying industry.

PRICE: \$600,000





SZD - 54-2 PERKOZ 42 max L/D (20 m version)

37 max L/D (17.5 m version)



it can challenge Duo Discus and DG 1000! Fully aerobatic in 17,5m version!

- · easy rigging
- roomy cockpit, great visibility
- easy ground handling
- hand controlled rudder option

Even nicer to fly then Puchacz Simplified maintenance

- no more 50 & 250 hourly services
- · one piece, classic mount, elevator
- · spring loaded trim
- · gas strut in place of canopy retractor
- special automotive-like shock absorber
- hydraulic disk brake (TOST) operated by a lever on the stick
- · text-book spins (both versions)

Design life 15000 h

74,950.00 EUR basic config. Ex f. 9600.00 EUR Avionic AVM Duo trailer Ex f. (when bundled with the glider)



PERKOZ FACTORY NEWS I

The queue for PERKOZ is starting to form in Europe! Bulgarians first to order!

On the 4th of October 2013 Polish arm of EASA completed work on certification of Perkoz and sent the paperwork to HQ of EASA for formal issue of the certificate. We anticipate it to be issued soon.

Australia don't miss out! Order now and take advantage of free transportation offer! (2 gliders only, offer ends on 31st of December 2013)

9 months lead time.

'capitalizing on 50 year experience in manufacturing gliders'



www.szd.com.pl other gliders available from Alstar:

SZD 51-1 Junior SZD 59 ACRO call agent for pricing



www.szdjezow.com.pl other gliders available from ZS Jezow:

call agent for pricing





mobile: 0404 311 656 NEW! email: amysavia@iinet.net.au