



G.F.A. White or Black Drill Badge		6.50	☐ Tost Rin	ns		45.00
G.F.A. Transfer		1.00	Ottfur R			10.00
Silver or Gold Glider Pendant		20.00	Sunglas	0		60.00
G.F.A. Metal Clasp		7.50			er glider motif)	6.50
Glider Pin Badge		5.00		ds Bronze (I		25.00
G.F.A. Tie (Brown or Blue)		17.50		ds Bronze (S		20.00
Pilot Training Log Book		3.50		s Bronze	oniun,	10.00
G.F.A. Pilot Log Book		3.50	G.F.A. B			11.50
Deluxe Pilot Log Book		17.50			rather be Soaring)	4.00
G.F.A. Instructors Hand Book		32.00			h silver c motif)	3.50
G.F.A. Daily Inspectors Handbook		12.00	Cloth W		in shiver c monij	7.50
O.I.A. Dully hispectors hundbook		12.00	CIOIII W	iliyə		1.50
Aerotowing Manual	15.00	■ Meteorology Simplified		6.50	☐ Theory of Flight	17.50
Operations Manual	17.50	☐ Understanding Gliding		45.00	☐ International Soaring Symposium	10.00
Airways & Radio Procedures	5.00	☐ The Complete Soaring Gu	ıide	39.50	☐ Basic Gliding Knowledge	20.00
Cross Country Soaring	75.00	☐ Flight at Lower Level		17.50	☐ Performance Enhancement	
Silence on the Wind	75.00	☐ Sailplane Aerobatics		42.50	of Modern Sailplanes	20.00
Beginning Coaching	27.50	☐ Gliding		45.00	☐ Glass Fibre Repairs - Slingsby	30.00
Better Coaching	32.50	☐ Practical Wave Flying		32.50	. ,	
Turn Points	47.50	☐ Flying Sailplanes		75.00	VIDEOS	
Gliding Safety	52.50	Understanding Flying We	eather	27.50	■ WIND-BORN – A Journey into	
Beginning Gliding	45.00	☐ Winning on the Wind, Mo	offat	17.50	Flight (N.Z.)	50.00
Meteorology and Flight	47.50	Great Glider Pilots Storie	s Vol.2	52.50	CHAMPIONS OF THE WAVE (N.Z.)	50.00
3, 3					LET'S GO GLIDING - Lake Keepit	28.00
	RECINNI	ING COACHING RETTER COACHING			AIRSCAPE - Soaring Weather	50.00
CROSS - SILENCE ON THE WIND	LEVEL I CO	ING COACHING COACH'S MANUAL  BETTER COACHING ADVANCED COACH'S MANUAL	J		■ AIRSCAPE - Landing Out	50.00
SILENGE ON THE WIND	A.T.	Meteorology	Beginnins		AIRSCAPE - Nav & Maps	50.00
	UNDERSTANDING GLIDING	and flight	GLIDIN		AIRSCAPE - Thermals & Thermalling	50.00
TURNPOINT Gliding	Derek	Gliding	7		AIRSCAPE - Instrumentation	50.00
SAFETY SAFETY		weich	6		AIRSCAPE - Speed to Fly	50.00
	9		- V	7	AINSCALE - Speed to Try	30.00
GREN SEIB		Tom	Derek P	lelane - amitim	SORY FOR S	
Derek Piggott		SOARING DEREPISEON		in the state of th		
UNDERSTANDING FLYING WEATHER	D	Theory of Flight for Glidder Pilots		"ANSWERENCE	CFA E	
DEFINE PIGGOTT	YNAMICS					
	NG PIEC	GREAT GLIDER PILO	(A)		CUNDED 1843	

## G.F.A. SALES DEPARTMENT

Prices Include Postage

GPO Box 1080, Adelaide, South Australia 5001 Ph: (08) 8231 6263 Fax: 08 8410 4711



Official publication of the Gliding Federation of Australia (GFA) and the Hang Gliding Federation of Australia (HGFA).

#### **EDITORIAL CONTRIBUTIONS AND ADVERTISING**

Contributions for the combined magazine should be sent to the appropriate sub editor:

AUSTRALIAN NEW GFA sub-editor: Sandra Rosner

**GLIDING** PO Box 1315, Byron Bay NSW 2481, ph/fax 02 6680 1298

email: rossie@nor.com.au . Website: www.gfa.org.au

AG Advertising Contact

Australian Gliding, GPO Box 1650, Adelaide SA 5001

SKYSAILOR HGFA sub-editor: Richard Lockhart

c/o Blackheath Post Office, Blackheath NSW 2785, Ph: 0418 130354
Email: skysail@ozemail.com.au Website: www.ozemail.com.au/~skysail/
Skysailor classifieds: Mailed or emailed to the sub editor or faxed to the HGFA on (02) 6947 4328. Classifieds will be included in the next possible issue after receipt

All photos and materials will be returned after publication only if a stamped, self-addressed envelope is supplied. Otherwise, photographs, whether published or not, will be filed and may be used subsequently in further publications.

#### **CLASSIFIEDS AND ADVERTISING RATES**

Classifieds are charged at \$15 for the first 4 lines, \$4 for every line thereafter (40 characters). Display advertising rates and mechanical specifications are available on request. All ads to be paid prior to publication.

#### **ALL OTHER MATTERS**

Subscriptions/circulation/changes of address:



The Gliding Federation of Australia – ACN 008 560 263 & GFA Sales: 130 Wirraway Road, Essendon Airport, VIC 3041, Ph: (03) 9379 7411, Fax: (03) 9379 5519, Email: AdminOfficer@gfa.org.au Website: www.gfa.org.au Hang Gliding Federation of Australia



PO Box 558, Tumut NSW 2720, Ph: (02) 6947 2888, Fax: (02) 6947 4328 Email: hgfa@tpgi.com.au

#### **NEW DEADLINE**

The new deadline for articles, photos, news and display ad bookings is the 21th of each month, 5 weeks prior to publication.

#### NOTICE TO READERS AND CONTRIBUTORS

Contributions are always needed. Articles, photographs and illustrations are all welcome although the editors and the GFA and HGFA Board reserve the right to edit or delete contributions where necessary. Articles of unknown origin will not be published. All contributions should be accompanied by the contributor's name, address and membership number for verification purposes.

Photographs should be printed on glossy paper either in black and white or colour. Captions and photographer's name are needed. Please do not print on the back of photos.

**Drawings, maps, cartoons, diagrams, etc.** should be in black ink on white or transparent paper. Lettering may be pencilled lightly but clearly on the drawing, for typesetting.

Views expressed in this magazine are not necessarily those of the GFA, HGFA nor the editors'. They are strictly the views of the contributor. Any GFA officer quoting his title will be responsible for submitting an official GFA article.

Copyright in this publication is vested in the GFA/HGFA. Copyright in articles and other contributions is vested in each of the authors in respect of their contribution.

Trade Practices Act 1974 (CTH): The publisher cannot ensure that the information/ advertisements contained in this publication comply with the Trade Practices Act 1974 (Cth), and the responsibility for such compliance must therefore be upon those who submitted the information/advertisements for publication.

The publishers take no responsibility for any product advertised. The publishers reserve the right to refuse or withdraw any advertisement at their discretion. While every care is taken with material published, no liability is accepted for errors or delays in production.

#### **CREDITS**

Cover: Neil Evans above Canowindra
Design: Suzy Gneist, Gneist & Moffatt
Film, Printing: NCP Printing, Newcastle NSW
Mailing: ContacMail, Newcastle NSW



The Gliding Federation of Australia and the Hang Gliding Federation of Australia are members of the Fédération Aéronautique Internationale (FAI) through the Australian Sport Aviation Confederation (ASAC).



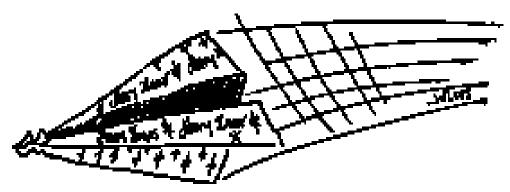
## Contents

December 1999

GFA Editorial – HGFA Notices	2
GCV 70th Anniversary 3	VAR
In the Circuit — Airworthiness Directives	9
European Experience	10
Guns, Thorns, Smoke and Beer	13
Okanagan Spring!	14
GAD and Evolution	16
Gliding Worlds: Post Tasks 18	J16
FAI Gliding World Records	21
Hang Gliding with a Powered Harness	22
Risk Management	24
HGFA Airmail	26
<b>GFA Executive and Councillor Profiles</b>	28
Book Review	30
New World Record set at Bacchus Marsh	31
New FAI Badges and Certificates	31
Reserve Parachutes – Out of Sight, out of Mind?	32
HGFA News	34
HGFA Operations Manager's Report	37
1999 QLD FAI State Championships	38
Baron Hilton Cup Rules: Good News	40
GFA Letters to the Editor	41
GFA Soaring Calendar	42
The Nautical Mile	43
The Kosciusko Experience	44
HGFA Events Calendar	46
HGFA Classifieds	48
GFA Classifieds	50
HGFA Addresses	52

September 1999 Skysailor • Australian Gliding

#### Gliding · Hang Gliding · Paragliding · Microlights



To all members of both free flying associations a Merry Xmas, and many more kilometres flown and stories to tell in the New Year!

From the editorial team, Richard Lockhart, Sandra Rosner and Suzy Gneist

# Australian Gliding Editorial

h, summer. Lashings of long hot days that no-one could love more than a glider pilot. I hope the season is good to you, but just in case you get grounded by a summer storm, you needn't despair. We've got some great reading for you in this edition, from an amazing world record set at Bacchus Marsh to Maurie Bradney GADing about again, to a seriously funny rundown on the Queensland comps. Miles Gore-Brown reviews a book that could save your life and undertakes a thought provoking analyse of the Post Task. And that's not all.

Thank you to those people who have contributed to the magazine so far. This is my second edition and I have been impressed by the contributions rolling in. I would like Australian Gliding to appeal to all people involved in and interested in gliding in all states, so I welcome articles on any gliding related topic. A note, however, to zealous writers (not unlike myself). Please do not format your articles. You who put so much effort into your presentation should be looking over my shoulder when I'm trying to scan it or unscramble an email that the satanic computer beast jumbles between your place and mine. Just send either an unformatted email (use bold to emphasise, but don't underline, tabulate, vary font size, titivate (however much you are tempted) or a clear hard copy through the mail and we'll save your time and mine. Easy - your articles will be quicker to write, easier to edit, you'll send more, the magazine will grow and we'll all benefit.

I look forward to hearing from you! Happy reading, happy flying.

Sandra Rosner
Sub-editor GFA Australian Gliding

#### Notice to all HGFA Pilots

The HGFA office will close for the holiday period on THURSDAY 23/12/99 AT 4:00PM, and re-open on MONDAY 3/1/00 AT 8:00AM.

If anyone wishes to receive documentation by post, paperwork must be received at the HGFA office by no later than Friday 17/12/99. There will be no exceptions.

Please ensure that your membership is paid, and that instructors have enough supplies for the holiday period.

lan, Craig and Margaret wish all pilots and their families a very Merry Christmas and Happy New Millennium.



# Chamberlain Knights. Let us set a better course for your GFA Glider insurance.

#### Chamberlain Knights Pty Ltd Insurance Brokers

Chamberlain

Knights

Australia's Aviation

Insurance Specialist

ACN 002 493 521

PO Box 329

Epping NSW 2121

Fax: (02)9868 5262

Chamberlain Knights Glider insurance packages are the only option approved and initiated by the GFA for the benefit of Members. Why pay more than you need to?

Call Kevin Chamberlain now\*

(02) 9868 4044

\* and swap flight stories with a pilot of over 25 years experience!

December 1999

#### A PROFESSIONAL REGISTERED INSURANCE BROKER

Australian Gliding • Skysailor



# Gliding Club of Victoria 70th Anniversary

ROBBIE BURNS

On the evening of 1 October, members, former members and friends of the Gliding Club of Victoria met to celebrate a special occasion in its history — the club's 70th anniversary. It is the only club in Australia that can boast such a period of continuous operation.



**44 years of presidency:** Dave Darbyshire ('55-'58, right), Jim Barton OA ('58-'94, centre right), Darcy Hogan ('95-'97, left), Viv Drew ('98-present, centre left).

As one can imagine, the night was one of great enjoyment for all. It started with arriving guests being entertained with an audiovisual show depicting stunning gliding sequences.

Vivienne Drew, the President, gave a warm welcome and presented a pictorial history of the club. The presentation included photographs taken 70 years ago, right through to today. This was followed by a fashion parade of the new club clothing. John Switala (who also put together the audiovisual display) coaxed a bevy of brave volunteers as they strode the catwalk modelling a range of T-shirts and coats, all carrying the club's new logo.

The last of the formalities was the presentation of awards and recognition of the achievements of many of our pilots. Special recognition went to Lisa and Peter Trotter and Gary Brasher all of whom recently represented Australia in gliding at the World comps.

With the presentations over, the guests were able to mix and swap stories and tales of derring do, many of which went back to pre-WWII. It was a particular pleasure to have together the past four Presidents, Dave Darbyshire, Jim Barton OA, Darcy Hogan and Viv Drew. Between them they steered the club for over 40 years!

## 70 Years Young and Still Going Strong!

The Gliding Club of Victoria was formed at a meeting in the Ambassadors Café in Melbourne on 27 September 1929. Chairman of the meeting was Flight Lieutenant Ray Garrett, an officer in RAAF Reserve, employed by the Larkin Aircraft Company. Ray Garrett was elected president of the club and Charles Gordon became honourary secretary.

The club acquired its first glider in August 1930. It was a privately built Zogling that was officially named 'Falcon' by the wife of Air Commodore R. Williams at a ceremony at Essendon aerodrome. The glider was so heavy that it soon acquired the name of 'The Brick'. All launches were by bungy.

Despite a few perils and surprises, the club continued to grow and by the end of 1930 had about 250 members.

The influx of trainees led the club to seek a second glider and tenders were called among the aircraft firms in Victoria for a suitable machine. Shaw Aviation Company based at Port Melbourne offered to build a Rhon Ranger primary from drawings published in an American magazine. It was test flown at Tower Hill, near Koroit, a large saucer shaped crater enclosing approximately 1,700 acres of soft springy turf. Around the perimeter of the crater, steep ridges rose 300-500 feet to provide excellent slope lift. The crater today has been flooded to create a lake, making the site unsuitable for gliding.

## The Melbourne Gliding Club at Coode Island

In the autumn of 1931, the GCV, now called the Melbourne Gliding Club, made an agreement with the Larkin Aircraft Company to fly from Coode Island aerodrome, which was situated a few miles to the West of the main city section of Melbourne. The site was very convenient for gliding and allowed car tow launches to respectable heights.

As members gained experience, launches to 1,000 feet were common in the open primaries.

Among the members flying at this time were Ham Hervey, Carr Withall, Fred Gascoyne, and Ken Davies. Members paid an annual subscription of £1 plus another pound a year if they were flying members. Launches cost a penny each by bungy and sixpence by car tow. Later in the same year the club carried out some night flying at Coode Island which was easy to find in the dark as it was the only pool of blackness amid the glimmering street and house lights of the surrounding city and suburbs. In addition to flying at Coode Island, the club made several expeditions to Mount Fraser, at Beveridge, 25 miles north of Melbourne. The Coode Island aerodrome was closed in 1935 and the Melbourne Gliding Club transferred its operations to the field at Mount Fraser, which they shared with several private owner groups including Bill and Jack Iggulden. Instructors at this time included Geoff Richardson, Jim Borgeest, Ken Davies and Carr Withall.

#### **Profile**

**Geoff Richardson,** a long term member of the GCV, had a long standing interest in flying.

Whilst still a teenager in 1929, he began work on a Zogling glider from drawings featured in 'Popular Hobbies' magazine. He finished the glider in 1932, during which time he had become a member of the Melbourne Gliding Club and had begun training at Coode Island. His red and white Zogling attracted a lot of attention and became a regular participant in the club's flying and was eventually bought by the club. In 1934 Geoff realised the need for a more advanced machine and herein commenced the construction of the Golden Eagle, which took 3 years, during which time the young Geoff had advanced in experience to being one of the club's instructors as well as its President. Alan Patching owns and still flies the Golden Eagle today at Bacchus Marsh.









Clockwise from top left:

Taking Kadet and Grunau to top of north slope at Beveridge

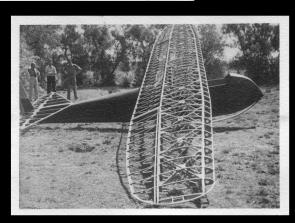
Grunau Baby II being shock-cord launched at Beveridge

GCV's Kirby Kadet

Grunau flying off north slope at Beveridge



Clockwise from left:
Mordialloc hangar
Merlin rigged
for the first time
Utility trainer No.1
Assembling sailplane of the utility
Slingsby Gull,
Geelong, Xmas 1939
Photos: Fawkner









#### **Grunau Baby**

As regulations covering government subsidies required clubs to be legally constituted, steps were taken during 1936 to incorporate the Melbourne Gliding Club as a registered company. As the Victorian Gliding Association had, by this time, ceased to operate, it was decided that the club should revert to its original name and it was under the title of the Gliding Club of Victoria that the incorporation was finalised.

Due to the attendant publicity of the incorporation and an influx of a small amount of extra money from government subsidy, membership grew.

As more members joined the club, thoughts turned to the acquisition of a more advanced sailplane. The Grunau Baby was chosen and ordered.

As the German Government refused to sell gliders in kit form, due to the fear of bad workmanship that it could not control, the original price of £140, put up by Geoff Richardson and Dick Duckworth escalated to £205 for a complete machine. The cost of a quality car, such as a Wolseley at that time was around £380!

Due to an epidemic of infantile paralysis (polio) in Melbourne, the club temporarily

ceased it operations at Mount Fraser to avoid the risk of infecting the local residents. A site was selected near Laverton. The Grunau Baby and the Golden Eagle made their maiden flights on the same day at the Laverton airfield.

#### Winching

The winch was introduced to the GCV at Beveridge at around this time. On the first flight, Les Williams drove the winch and launched Geoff Richardson to about 600 feet from which height he made a circuit over the club members who were sunbaking on the side of the hill! After this demonstration, the long held view that car tow was best saw a complete turnaround and the committee very soon after made Richardson an offer for the winch.

#### Merlin

Norm Hyde was among a growing number Australian gliding people who saw that the Primary glider was not the most efficient vehicle for learning to fly. Norm began drafting out a design for a suitable 2-seater based on the Kirby Kadet. A syndicate of GCV members comprising Hyde, Keith Hearn, Leo and Rob Dowling, Charles Lambeth,

A Fraser and E. Weller put in to produce the Merlin. The Merlin was test flown at Easter of 1943 with 30 flights flown.

It was taken over by the club and flew for another 10 years.

On the same weekend as the Merlin was test flown, a Hutter H.17 built by Harry Bartram and Ken Davies took to the air with several successful flights.

#### Benalla

During 1947 new club trainees entered the ranks, including Lin Beck, Bob Jervis, Dave Darbyshire, Jim Darbyshire and Frank Dowling. It was also this year that the club decided to hold a gliding camp at a country centre to allow members to carry out advanced soaring and cross-country flying. Arrangements were made to use the aerodrome at Benalla.

During the war, the aerodrome had been the home of the RAAF Elementary Flying School and there were still a lot of hangars and other buildings on the site.

In 1948, trainees included Jim Barton, Gordon Isaacs, Bob MacAliece and Pat Bourke.

The success of the previous camp encouraged the club to meet there again. It was at this camp that a thunderstorm whisked the

grey Grunau to 13,300 feet above sea level to establish a new Australian record for maximum altitude and gain in height. Benalla was on its way.

In 1952 the club negotiated an agreement with the Department of Civil Aviation to shift its operations permanently to Benalla. Hangar space was made available at a peppercorn rent and a building nearby was leased to become a clubhouse. Over a period of time more buildings were moved onto the site and these provided the club with facilities up until the opening of the State Gliding Centre.

#### **Profile**

Dick Duckworth, Secretary and a long serving member of the GCV, established a national body for gliding during 1939, which was given the name Australian Gliding Association. Dick wrote to clubs in all states to survey their present position and their future needs and to call for suggestions for action in collecting and distributing the subsidy. This developed into a regular newsletter. The efforts of Dick Duckworth, Norm Hyde and Jim Kelleher involved a very real effort to set up a viable and united gliding movement in Australia. Several times during the war years, Dick and his associates travelled long journeys interstate to publicise gliding, stir enthusiasm and try to unite the sport.

During these tours, Dick spoke at Club meetings, displayed movie films of gliding and generally worked to promote the sport. The cost of this was borne by the participants. The full value of Dick's contribution has never been appreciated by the gliding movement and we pay tribute for the selfless enthusiasm and dedication of both Dick and others.

#### The Flying Plank

In 1955 there were people who complained that gliding was becoming too expensive for the masses. (Nothing changes does it!) This led to the development of the "midget" sailplanes, among them the Flying Plank. Fred Hoinville obtained drawings and set about selling them with the claim that the aircraft was simple and cheap to build and easy to fly.

Some problems developed, so Fred, in conjunction with Glidair Sailplanes, built a prototype strictly according to Fred's plans, after sufficient demand persuaded him to do so. On 30 August 1957 at Moorabbin airfield, the Flying Plank was successfully test flown.

After Fred Hoinville was tragically killed in a flying accident in 1959 the project lapsed and the Flying Plank was stored at Benalla. Today, The Plank has been resurrected from



"The Sun" front page, 25 August 1930



First GCV tug Photo: V K Rosenfeldt

Australian Gliding • Skysailor December 1999



Photos: V K Rosenfeldt

John Edmons, President, Bob Jervis,
Jim Darbyshire, Ted Desmond,
Dave Darbyshire, Reg McDonnell, 1948



Red KA 6 GRS, Yellow Arrow GPS, White KA 6 GNN in 1966



Northeast, Eddie Burke, John Tribe, Les Oakes, Jack Edmonds, Nick O'Keefe, Ted Desmond, John Barton, Kew Davies, Noel Hardy, Lin Beck, A. Davies



the mothballs, and a restoration team led by Jim Barton plan to place the craft in the proposed Gliding Museum at Point Cook.

#### **New Designs**

With the new breed of sailplanes emerging from Edmund Schneider's company, design and performance became enhanced and two seat trainers were in great demand. In 1954 the ES52 Kookaburra emerged as a result of this demand and some years later the Long Wing Kookaburra responded to the call for better performance.

With higher training standards, pilots wanted better performance, single seat gliders and the ES59 Arrow was developed. In 1964 followed the ES60 Boomerang and in 1969, responding to new design requirements, the

ES60b Super Arrow descended on the scene. The Kookaburra, Boomerang and Super Arrow were all flown at Benalla Over the years, 23 Schneider designs were purchased by the club.

In 1960 the club purchased an ex-army Auster and began on site aerotowing. Seven years later a second Auster was purchased followed by a specially developed Piper Pawnee. This period coincided with the great leap forward of the age of fibreglass and the demand for better launch performance. In 1969, the first fibreglass sailplane, the Libelle, was imported to Australia. The Libelle was soon followed by the Cirrus, Kestrel and Phoebus. Both the Cirrus and Libelle designs are still flying at GCV today, respectively owned by John Switala and Claire Rudolph

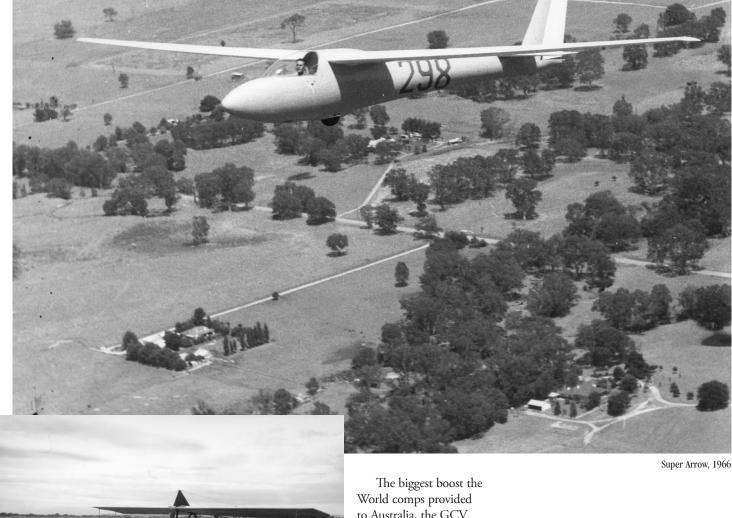
& syndicate. Finally, in 1970 the trusty winches were silenced and since then the club has launched exclusively by aerotow.

The 1960s also saw the club move from a voluntary operation to one of a mix of paid professionals and volunteers. The first paid staff member was employed for engineering and commercial duties in 1967 and professional flying staff began in 1970. With this change the club was able to offer full-time courses to students, new and experienced; a practice continued today.

#### **Competition**

With the advent of the new, fast and extremely high performance sailplanes on the market, competition flying soon advanced to a high level.





World comps provided to Australia, the GCV and Benalla was the increased recognition overseas that Australia has a virile gliding movement, top class pilots and excellent soaring conditions; a fact that Benalla has attempted to capitalise

on over the years. In keeping with this tradition, next February the club will be hosting the National championships

The GCV has a long, chequered and glorious history – one of courage, persistence and patience. It is imbued with adventurous people who seek a fresh existence in a new and exciting universe.

Congratulations to the members of the Gliding Club of Victoria on perpetuating the sport of gliding over 70 years. It is a tribute to people who have a love affair with flying that is married to a tenacity to preserve our unique sport.



In January 1987, GCV was host to the 20th World Gliding Championships. 108 pilots from 28 nations including 10 former World Champions, along with 110 gliders and 17 tugs, turned up at Benalla for three weeks of incredible activity. The competition was a culmination of several years of effort, mainly voluntary, which included the redevelopment of the airport, construction and relocation of hangers, workshop and other sundry buildings, the development of the State Gliding Centre and the running of two pre-competition events – Australglide '84 and '86.

Club primary trainer

## In the Circuit

#### **Local News**

For your information, I have reproduced a Letter to the Editor of Cloudbase, the magazine of the Adelaide Soaring Club, from Alan Killmier. (Ed.) It reads: The photograph of the Grunau Baby 11B in the last Cloudbase with Richard Geytenbeek seated in it is timely. It is believed that this is the Golden Grunau built by the club, having its first flight on 27 December 1949.

The aircraft is now syndicate owned at Waikerie and it is proposed to have a 50th anniversary luncheon at Waikerie Gliding Club on 27.12.99 at which all who were connected with the aircraft as builders, owners and pilots are invited to attend.

Registrations of interest should go to Alan DeLaine P.O. Box 158 Winkie, SA 5343, ph: 8583 7206. Anybody who can contribute to the history of this aircraft, particularly after it left Adelaide, is invited to supply that information to Alan Killmier 30 Albert Ave, Tranmere SA 5073, ph: 8331 3576, fax 8364 0878, email: <gresham@telstra.easymail.com.au>

#### Darling Downs Soaring Club Pylon Race

The Darling Downs Soaring Club conducted its three monthly club pylon race on Saturday, 18 September on a day of brisk southwesterlies that had reasonable cu's building from the south. The race format was altered slightly to incorporate a 150km triangle rather than have the usual smaller course, as part of the push to have more members vying for club awards. A long standing club member, Reg Trevor, had previously donated a trophy for a flight over a 150km triangle for 2-seaters with the crew of the fastest 2-seater being the winner. The club 2-seaters were all competing for this annual trophy.

All six club gliders together with four private aircraft attempted the task with all three club twins and two of the club singles completing in good time. Conditions were good in most areas with lift going to over 9,000 feet QNH. Unfortunately once below 5,000 feet the thermals became broken and very hard to work. There were also large areas of very strong sink north of Yandilla Silos of up to 10kt, which hampered good progress. A large fire about 30km to the west of Cecil Plains produced a lot of smoke which drifted aver the task area and made visibility difficult unless you could get over the top of it. The task was DDSC, Yandilla Silo, Dalby Airfield, DDSC for a total distance of 164km.

The race format for the pylon race is divided into two groups. The first group

is for pilots who have flown at the State and National level and the second group is for the

remaining club pilots which helps to even out the competition. This form of competition minimises the chance of an outlanding while providing a set task for early pilots and also catering for experienced pilots by allowing them to complete as many laps as they can in a set time.

The course was flown twice by Peter Griffiths and Lars Zehnder (Nimbus 4DM) and John Moore (Ventus 2CM). Dudley Waters won in the Nationals Class, narrowly from John Moore both with speeds well over 100km/h, with the club trophy being taken out by Michael Codling and Tony Barker in the Grob 10-3 with a time of 2:23hr for a speed of just under 70km/h which is not bad for their first 2-seater cross-country task. Our new Puchacz QX also flew its first cross-country task with Peter Bell and Steve Harris as crew, to come a very close second in Club Class. Peter Thomas and Dieter Gerschwitz also did well on their first cross-country task, flying Puchacz RI. Chris Aniftos completed the final leg on his Silver C badge in the LS7 and Dieter Gerschwitz also converted into the Hornet, A BBQ provided by Dianne and Peter Bell was enjoyed by all after the day's flying. Michael Codling also used his computer set-up to download several pilots' GPS tracks for everyone's entertainment, and just to prove how far off course we drift when scratching to stay in the air.

#### **QSA Teams Challenge**

The QSA Teams Challenge was held from Sunday 26 September to Friday 1 October at the Darling Downs Soaring Club. The event attracted 8 pilots from as far afield as Cairns with the majority coming from the DDSC. The event was fairly low key and informal with lectures in the morning prior to briefing and in the evening after flying. The majority of leaders came from the host club with the National coach, Maurie Bradney, and the RTO Sports (QLD), Mal Keys, also in attendance for part of the week. The lectures were given on subjects such as Comp Preparation, Outlanding Preparation, Thermal Selection, Airspace, Instrumentation, Weather, Long Distance Flying, Aviation Medicine, Collision Avoidance and Cross-Country Flying Techniques.

The week started well with good weather on the Sunday but was hampered by poor weather and airspace problems on the Monday. The poor weather continued throughout the week, which resulted in



frequent outlandings, several occurring within sight of the home field, however on most days tasks of 200km or so were flown by some of the teams. The poor conditions proved extremely challenging to all pilots and most students commented that the conditions were ideal for training as they made you work very hard to complete

the set task or just to even get home. Unfortunately, as is usually the case, the best clouds were in the airspace that we were unable to use. Costs for the students were kept to a minimum with the QSA generously allocating funding for the event which was most appreciated.

P.S.: Our club has recently taken delivery of our new Puchacz 2X and a second tug, a Cessna 180.

#### **Airworthiness Directives**

GFA AN 122 - Issue 1

Modifications and design approvals on Sailplanes and Powered Gliders.

GFA AD 249 - Issue 4

Type affected: Hornet and Hornet C Subject: Increase of service life from 6,000 to 12,000 hours.

GFA AD 512 - Issue 2

*Type affected:* Hoffmann variable pitch propellers, all models.

Subject: TBO for Hoffmann variable pitch propellers.

#### **GLIDING FEDERATION OF AUSTRALIA**

Airworthiness Inspection

#### **FORM 2 NOTICE**

A Form 2 inspection is due Cheque for \$125 is enclosed
A 20, 30 yearly, etc is due Cheque for \$275 is enclosed with copy of aircraft log book
An initial C of A inspection and initial registration is due Cheque for \$465 is enclosed
(tick appropriate box)
an that fall accion aireacht

Cheque for \$465 is enclosed
(tick appropriate box)
on the following aircraft.
TYPE
VH
Please forward relevant airworthiness
documents to:
Postcode
Forward to:
GFA Secretariat, 130 Wirraway

GFA Secretariat, 130 Wirraway Road, Essendon Airport 3041

#### Paragliding



Setting up at Dingli Cliffs for an afternoon glass-off

Photos: Andrew Polidano

#### ANDREW POLIDANO

I am Australian born of Maltese parents, or second generation Maltese. I went to Malta to meet other Maltese paraglider pilots with whom I have been in contact with. I had a fantastic experience, paragliding and meeting other Maltese pilots with the same interests.

live on 14 acres in northern NSW where everything is green. In comparison the Malta countryside is very dry and rocky, a unique part of the world. What follows is my discovery of the Island of Malta, as well as the Alps of Switzerland and Austria.

#### Malta

Around 12 May I landed in Malta, a small Mediterranean island situated just below Sicily. The sky was blue and by the temperature I knew I was on the other side of the world. It had been 20 years since I'd been to Malta and I stayed at my grandmother's house. This proved to be a central location in terms of flying sites. My grandmother thought I was a little crazy as I explained to her that my backpack contained an aeroplane which was going to safely fly me from the cliffs surrounding Malta. As if my long hair wasn't a big enough shock.

The paragliding sites are scattered all around the island except in the airport region Luqa, and since it is an international airport paragliding activities must stay below 300 feet above sea level. Every time



The Maltese pilots threw me a farewell party

we flew we had to call the control tower. Having never flown around the coast of Malta before, I entrusted in local knowledge. This was always by my side and his name was Michael Mangion. He was one of the keenest pilots on the island. He was very impressed with the stories I had told him about my flights in Australia, both hang gliding and paragliding. It was hard for him to imagine flights longer than twice the length of the island he lives on. I have flown that length

in Australia in Manilla in Northern New South Wales. I could sense the Maltese paragliding club members wanted to visit Australia.

The terrain in Malta is not too friendly to paragliders. The limestone is sharp and the dry vegetation seems to attach very well to lines. I was glad that I was to buy a new glider later in my travels.

I flew at 'Dingli cliffs' or *Had-Dingli*. The location is great; a ridge line stretches for about 4km with a bar only 200 metres from take-off

#### **Paragliding**

and top landings possible. This was special, as I've seen no other site so convenient for landing with close by refreshments.

Another site flown was called 'Top of the World' or Madliena. You knew it was flyable there when you could smell the rubbish from the tip about 5km away. I let the locals lead the way: Keith Pisani, David Pizzuto, the club president, and Michael Mangion. They were all maintaining height so I launched into the air.

The air is different in Malta; even though there is wind at times it doesn't produce the same lift I experienced in other countries. The pilots here are sharp and skillful - they need to be to stay up! After I had had enough,

I joined Keith Pisani on the ground, and decided to walk up the hill, just for the exercise. I've always thought climbing and paragliding go well together. Three of the other Maltese pilots are climbers as well as pilots, so I was already briefed on the climb. As I got closer to the top they guided me up the last limestone wall. The climb was exhilarating in itself. Negotiating an assortment of hazards, I knew I would be safer in the air. It's funny, ever since I have been flying I have noticed how scared I can be while I am on the ground.

The other place I managed to fly was Ghajn Tuffieha. The bowl shaped ridge produces good lift for paragliding, allowing one Maltese pilot to fly for over 6 hours at this site on one occasion.

To summarise the flying in Malta one needs to understand the size and composition of the island; the limestone, the heat in the summer, the proximity to North Africa and the Sahara desert. The flying opportunity can be small, often the wind calms in the evening and in the summer daylight is long. The locals are fascinated by the paragliders. The Maltese farmers have a tendency to shoot anything that flies, thank God we are not a species on their list.

#### **Switzerland**

The next stint of flying I did

was in Thun, Switzerland. The Swiss Nationals were on at the time so there were plenty of pilots around. It's good to see people flying on the other side of the planet, ground handling, launching, seeing different gliders and equipment brands - there's a lot to see. My guide was Christa Sommer, a paraglider pilot I had met twice, both on trips to Manilla, NSW. She knew the sites well and had arranged lifts, pick-ups and other people to fly

with. I flew in Blümerstein (a 1,400m take-off) the first day I arrived, my first Alpine flight. It's difficult to really go for it and attempt a cross-country flight, with new launch, new country, new language and new conditions. In my own country I can ring a friend even if I land 100km from my take-off, but here exploring was kept to the minimum. The first flight was a slow glide down to the bottom, a 45 minute smooth ride to the landing area. One of the guys with us flew all the way back to Thun, a good effort. Clouds were at the same height as our take-off, you can imagine the breathtaking view. I was in awe.

Flying at "Top of the World" site in Malta



## The Ultimate Combination: Outstanding Performance Incredible Penetration Ease of Handling You Find out why this is the **BEST SELLING DHV 1-2 GLIDER** in Europe this season. The ARCUS is NOW available downunder. With a solid 3 year 300 hour warranty and with prices starting at \$3,850, this new generation SWING ARCUS will blow you away! Contact: ANDREW POLIDANO at Poliglide Ph: 02 66843510 • Fax: 02 66856150 Mobile: 0414843510 Or come visit us on the web and visit the free classifieds section: http://swinginoz.hypermart.net

#### **European Experience**



Flying into Interlaken during the Swiss Nationals, June 1999.

Photos: Andrew Polidano.

The next day I was at Niederhorn (950m launch), another crew to fly with and a sky which didn't seem like it would hold out for us. With three gliders jammed in a little sports car we made our way along a road that curled around Lake Thun, showing the snow capped Alps over the water. Then a ride up on the cable car to a site I will never forget. The hang gliding launch was breathtaking. As I have been flying hang gliders for about four years, I was tempted to hire a glider to fly these Alps. The launch site looked frightening, unlike anything I had ever seen before. It may as well have been vertical. We scampered over to the other side of the mountain where the paragliders were taking off, and noticed conditions were poor. The wind was blowing in the wrong direction at times and the locals were starting to pack up and go home.

The conditions varied as Christa and I tried to be positive. There were intervals of rain, with clouds at our height or below us. This was my welcome to European Alps flying. We were patient and it was worth the wait. Flying over the town of Interlaken was an experience I can only share through the photos. The wind was calm and the flight was smooth. There were other gliders in the air showing the best place to fly. I managed to take some photos of Lake Thun and the town of Interlaken. We landed at the competition ground and went on to fly several other spectacular sites over the next few days. In the evenings there were opportunities to mix with the top European pilots, where I gained some invaluable tips to improve my own skills.

#### Austria

The next flying leg of my journey took me to Austria, the place of the World Championships. Due to consistent rain there were limited opportunities to fly, although I managed to arrive at the right time. The first and last days of the competition were the best. I arrived on the last day to greet my fellow Australian pilots. The team leader was the man that first taught me to fly. He currently holds the World Distance record, which he set in Australia. I was invited to fly alongside them and took the opportunity. The task was difficult, with competitors from all over the world flying the most up to date equipment. I had managed to test-fly a new glider I had picked up from Munich. I rocketed into the air and within minutes I was at cloudbase. My demo glider was much higher performance than what I was used to. I had a full flying suit on but my gloves weren't warm enough. During my flight I spoke with other pilots in the air. One pilot took photos of me doing steep turns. I was happy with the new glider and with the conditions. I spent a total of two hours in the air and travelled over 30km, my personal best flight. I landed in a paddock and was greeted by a group of Austrian children. The kids were happy to see me, especially when I gave them all some chocolate and as the word got out that I had chocolate the group got bigger.

That night I walked in the closing ceremony with the Australian team. As I participated in the march I gladly shared the job of holding the Australian flag. Elevating a kid on my shoulders, the flag was flown high and proud.

Dealer enquires welcome

## Guns, Thorns, Smoke and

RICHARD WILLIAMS

Mike Ipkandanz and I went up to Bakewell the other day, arriving at Lou's Place around 9:30am. As usual our first "port" of call was to see Lou (our club patron and landowner) to drop off a "thankyou" (usually a bottle of port, but this time half a dozen stubbies of light beer). He was just outside the house burning off dry grass stubble, so we were actually able to get out of the car without being attacked by his dogs.

e started telling us about the trespassers he had caught on his property a few weeks ago, and how he bailed them up with his gun! "...It was just getting dark when this white car came in through the gate, headlights on, and went straight up the track, through the back paddock and started going up the hill." He told us how he fired his gun into the air first to see if they'd stop. They did stop, but mainly because the back wheel of their car had slipped into the two foot deep ditch next to the track! When he got to them, gun still in hand, he told them to get out of the car. They jumped out with their arms up, saying "...Mike Thorn ...Mike Thorn", namedropping in an attempt not to get shot. It turned out to be Russell and mates, whom Lou didn't know from a bar of soap (Russell usually flies his Dragonfly east of York). They told Lou that they just wanted to go up and watch the sunset.

Maybe now everyone will remember the rules. Ring first (site caretakers: Mike Thorn or myself) and no one goes up the hill without seeing Lou first with the usual thankyou gift. Even so, if he doesn't know you, he may question you extensively and decide not to let you fly on his property anyway! Lou has a good understanding of flying and makes for an ideal Hill Flyers Club patron when it comes to protecting sites, but definitely stay on his good side!

Anyhow, the cu's were building fast, so after listening to Lou's story we were keen to get going. There was already a big dark patch to the north only about 50km away (up around Toodyay). The wind was a bit off to the east (about 15 degrees) but around 12 knots (according to the York skydivers) with

lots of great thermals. Lou's grass stubble fires were also cooking up some nice hot thermals, right below take-off.

Just as we finished setting up, other pilots started to arrive, all keen for a fly. Unfortunately with the wind off I knew it was going to be a challenge getting up, especially for the inexperienced pilots, so I spent some time going over the usual flight patterns needed to get up in these conditions.

When I was ready to launch a nice thermal came through, no doubt one cooked up by Lou's grass fire below. I did a clean launch, finding good lift and gaining 50 feet almost straight away. Then it happened! I caught the back of my shoe on the harness as I climbed into prone. Instantly I felt the back of the shoe slip off my heal and had a terrible visions of my foot full of thorns (the dreaded Western Australian "double gee") like pins in a pin cushion, from landing in the thick carpet of double gees which I knew lay across the paddock below. My shoe hung precariously on my upturned toes while I fought to steady the glider that was now banking toward the hill due to the strong thermal I was in. Only half in prone, one hand on the basebar and one hand fishing for the shoe which somehow stayed on my toes, I wrestled the glider away from the hill. By now I had committed myself to landing, and with the shoe clasped in my fingers as I hung onto the uprights I pulled off a perfect soft landing - one shoe one sock - and thanked God there were no double gees under my sock.

After watching my snaky flight to bombout, strangely no one else wanted to launch.

Half an hour later, with my shoes safely secured on my feet, I was back up on launch and ready to try again. By this time the cloud cover was total and the thermals were shutting down. Derek and Steve headed back to Perth, while the rest of us got ready for what turned out to be a great afternoon's fly - it seemed only minutes after they left that the cloud began breaking up and thermals restarted.

One by one we all launched into the now buoyant air, and enjoyed several hours cruising in a combination of ridge lift and light thermals. Miguel, our friendly visiting Spanish paraglider pilot, had learnt hang gliding only recently and was on his first soaring hang gliding flight at Bakewell. As we cruised over the towers together in a thermal we heard Mike Annears on the top launch telling us he'll be next to take up hang gliding, and cursing his paraglider's inability to handle the brisk launch conditions.

Meanwhile Mike Derry and Ken were car towing in the paddock across the river, with Ken flying over to Bakewell later with his Explorer harness on full power. Mike Thorn, Dave Eck and Peter Leach could be heard on the radio. They were with Sid aerotowing in the Cunderdin paddock, all having good cross-country flights with Dave finishing as far as Toodyay. The rest of us finished with a gentle touchdown in the usual paddock at Lou's Place, and celebrated a great day of autumn flying.

The following weekend was to be even better with most of the farmers in the district burning the grass stubble from the harvested crops. Again there was a big turnout of pilots at Bakewell, buoyed by the previous week's great flying. The air was silky. If not for the grass stubble fires you'd think you were cruising at a coastal site. The gentle fire generated thermals were a real pleasure to climb to the inversion at around 5,000 feet. You'd get the slightest smell of smoke and you knew a thermal was there. Following these 'visible' thermals over the back had to be the easiest and silkiest flying I'd done for a long time.

Four of us (Mike Thorn, Derek, Dave Eck and myself) had a 25km cross-country flight to the Spencers Brook Pub. We all agreed after landing that it was one of those beautiful flights that makes this sport so great. Ah, to finish such a pleasurable flight on green grass right next to a pub ...that calls for a beer!

# Okanagan Spring?

#### GRAHAM LEE

I guess I'm not the most adventurous of paraglider pilots, though I've been around for a while. I have, however, been lucky enough to have had the opportunity to fly in a number of countries over the years. A classic case of 'have paraglider, will fly'. The most recent of these opportunities came when my job offered me the chance to work in Canada (in Vernon in the Okanagan Valley in British Columbia, to be specific). Well, I mean, what could I do? Heave up the old flying mattress (not to mention family), leave Mackay, North Queensland and go on teacher exchange. What else? So, that's how I found myself in Okanagan as the snow was melting...



es well, as flying weather goes, spring here in Okanagan just means c-c-cold! Also, a rather long succession of sleddies has given rise to new twists on old vocabulary:

Parawaiting: A familiar fate when the weather is being fickle, however, a little unusual when it means waiting out an unseasonal flurry of the cold white stuff.

Parawalking: Again not that unfamiliar, except that the locals will insist on discussing bear and cougar attacks in suitable gory detail. When I started looking for some safe-looking trees to climb they told me not to bother -"them thar damnation cats can climb!"

But you really must, when next you fellow sack pilots go walkabout, take a wander into this Okanagan Valley. You'll find it by arriving in Vancouver, turning away from the sea and heading into inland British Columbia for about six hours. On the way take a look at the 3,000 feet take-off at Chilliwack (about 100km outside Vancouver), then keep an eye out for Kelowna and Vernon. If you get to Golden you've gone too far. Not that Golden is to be sneezed at, mind you. With a take-off at 6,370 feet and a landing zone at 2,500 feet, you'll get a 20 minute sled ride at the very least.

The whole Okanagan Valley is littered with flying sites. A good thing too, since pilots of all persuasions are thick on the ground. There's a club just outside of Vernon which calls itself the "Lumby Airforce" and has been around for well over 20 years. There's also a pretty healthy set of sailplane clubs around. All the folks I've met have been really friendly and enthusiastic. I must make a special mention the BCHPA President, Rick Hunt, who makes a real effort to meet, greet and help new faces.

Anyway, back to the flying.

Yesterday there were five hang gliders and three paragliders on a local hill called "Coopers" (TO 3,000ft, LZ 1,300ft). Nasty great grey things dropped little white pellets and kept the paragliders on the ground. A distinct tendency for the wind to blow at something only vaguely above freezing didn't help either. However, two of the hangies took off and disappeared, upwards on the vertical scale and downwards on the Celsius one, I'm sure. Game types they were. We saw them just cloud hopping off along the valley.

One of our own game types, 'Clouddummy' Ian, gets thrown out to the wind pretty regularly. I've often watched him getting a dose of the old pitch and rolls, and I must admit it seems to scare the bejabbers out of this guy. It's interesting just how much you have to reconsider when you make the move to flying inland. Amazingly, not the least is just reminding yourself that you don't



have to land in the bomb-out. Cutting the umbilical is an act of assertion.

Then there's the matter of climate. Now when the jolly old wind blows on the Queensland coast you sort of know that, for at least a good few kilometres north and south of where you are, it'll be pretty consistent. Here in the Okanagan, no way. Many differing factors make it a complex place to figure out. However, for a morning fly your best bet is Coopers. For an afternoon fly try King Eddie or Baldy (though I don't really like those damned trees in front of the Baldy launch). Also, within 20 minutes of Vernon are Vernon Mountain, Middleton Hill, Predator Ridge and Anderson Hill, with Silver Star Ski Resort another close by possibility. Yes, I even got to fly in the snow!

Speaking of snow, the approaching Christmas season here will be bringing plenty of it. I'll be thinking of my flying mates back in sunny Queensland, and I wish them all the best.

Author's note: Some internet sites that might help you make contacts in the area are: www.hpac.calsites\_e. html (for Okanagan Valley sites), www.skyadventures.com/hang/HGsites/canada/index.html (for Canada & North America), http://members.home. net/soar/ (for the sailplanes) and <sac@comnet.ca> (the Soaring Association of Canada). There are also a couple of very helpful paragliding schools, useful for information about local conditions. Try: Zdenek Erban <takeoff@bc.sympatico.ca>, or Wayne Bertrand and Glen Druoin, www. ParaglideCanada.com.







#### 3 Great Deals!!

#### Free Nav Display or Software:

Buy a complete system (L-Nav and Logger) and receive a GPS Navigator display OR Palm-Nav software absolutely FREE!

#### **Unbeatable Trade-in Offers:**

Unload your old vario, audio or Nav in any condition from \$US100 to \$US400 until December 31st.

Why no upgrade now to the latest system for the best prices you'll ever see?

#### 2-Seater Deals - save \$US450:

Equip your 2-seater with an
L-Nav and receive the rear seat
display for only \$US500.
Give your passengers and trainees
the chance to fly with top grade
equipment right from the beginning.

#### It's Cambridge Time!

Don't upgrade on price considerations alone. Think about reliability and after sales service

— it is well worth the extra investment. Over 80% of the approved loggers in use in Australia are Cambridge, so get with the strength!

#### **Bruce Taylor**

"The Hill"
Kentucky NSW 2354
Ph/Fax: (02) 67787345
Email: BruceLouise@bigpond.com

#### Ian McPhee

PO Box 657
Byron Bay NSW 2481
Ph: (02) 6684 7642
Fax: (02) 9777 0331
Mob: 018 668 761

Try: www.cambridge-aero.com

## **GAD** and Evolution

First I should say that GAD does not exist. It is a figment of my imagination. However, as I think that there is some use for GAD I should put some time into getting it into existence. However, as there have been some earlier attempts at getting GAD up, it is more a matter of evolution than creation.

ne of the useful things about computers is that if things are handled well, an item needs only to be entered once. Thereafter with a few key entries it can be transferred or reformatted to whatever we wish.

Well, that may be true, but generally we cock things up, so that everyone hand enters the 101 turnpoints in three or more different formats in preparation to flying at a comp or spending a week at a summer camp.

As most years, I spend several weeks at several different summer camps, this all multiplies until it seems that I am like some modem flying Dutchman, condemned to be forever entering data.

A Great Australian Database, GAD, could be useful in that it could save me and many other people all this donkey work.

Of course this is just a modern curse put upon us. Once we simply used a rule upon the map, measured out a task that seemed appropriate and wrote the names of the places. If we wanted a distance like 300km for the purpose of a badge flight we just made sure the task was a few kilometres over to allow for measuring error, map shrinkage and wrinkles and that did the job.

With the advent of camera TP identification, items like silos began to be selected so that the verifier could gauge if the pilot really went the distance and did not turn short as was possible with some open TPs in the old identify the ground markers system.

Yes, once we used to have people out at a TP changing a set of big markers and noting

the pattern set and time of change. The pilot had to note the pattern and time to get credited with the TP. Cunning TP crews sometimes did use silos and put the markers on the far side to make sure the pilots behaved honourably. More cunning TP crews used the carpark of the local roadhouse or pub and spent the day in comfort with food and drinks available as needed. Sometimes those signs could be seen from some distance short of the turn. Not all soaring pilots are

as honourable as we would like to think.

Now that we have accurate measuring things like GPS, and data recorders that record them, we need to accurately measure where the TPs are as well; hence the need for the GAD.

There are two collections close to GAD; the selection that comes with the Borgelt Joey software called 'The Lot' and the database imbedded in the Tim Shirley Soar Data verifying and scoring program. Tim's database has been used for a number of years as the basis for various nationals tp data and has its origin in the database of 600 turnpoints made for the GTC (Great Circle Calculator) program developed by Alan Pilkington at the Lake Keepit Soaring Club.

This program has been the mainstay of checking for the GFA certificates officer for many years. It has recently been replaced by the programs which come with the various dataloggers. These are all easy to use, (being in DOS), have very low computer requirements and give very few problems. However, it is important to verify the flight in the program attached to the datalogger that was used for the flight.

Now most clubs seem to have developed some database of their frequently used TPs and generally it has been made without reference to The Lot or GTC, so that most TPs are slightly different. It does not matter whether each DB agrees with any other as long as it serves the purpose of the club. It begins to matter if comparisons need to be made. And, if a major comp is to be held, a standard subset needs to be agreed upon for all competitors to use.

Being a lazy person, I think it would be useful to correlate these separate databases and then we will not need to repeat the entries forever into the future. There will be some minor problems where flying areas overlap, but that is where I can come in and make some resolution between the differences.

About 10 years ago the FAI, which is the world governing body for gliding certificates and records, decided for the purpose of these measurements to reset the earth radius to 6,371km. This was slightly larger than the previously accepted navigational model. This meant that all the standard distances worked out prior to that time had to be recalculated.

Shortly after that time AUSLIG, who make most of Australia's maps, issued a new (1/4 million survey) chart for Waikerie and adjoining Gawler, Pinnaroo and Mildura. This gave reason to re-measure the position of the turnpoints in the area. Fortunately Waikerie did not shift, but some places did by as much as a kilometre! One of our favourite 101.5km triangles became 99.9! Of course, it just meant that we selected a different nearby feature for the tp to make it up to size again.

All this meant that our revised TPs became different to that of the two "standard" databases of the time. Now with the advent of the affordable GPS, all these are being checked, (and sometimes moved), again.

So, I think it is time to get GAD up and running. But wait, there is still one more problem. In a world that cannot agree on a standard for a three pin plug, it will be no surprise to find that the GPS/datalogger makers have all adopted different formats for their data. So, as well as agreeing where places are, we also need some agreed common standard of recording the data.

The International Gliding Commission (IGC) has made a standard file format for recording flight files. The various dataloggers produce their own format of flight files, but they can all be converted to an IGC file on downloading or as an add-on part of that process.

While we measure the place data in latitude/longitude there are a number of formats for that and the various datalogger companies have added bits of other data like height, airspace and so on. This is where the extra work comes in. Borgelt, Cambridge, Filser, Garmin, Zander all require the data to be entered in their own specific way in order to use it.

Tim Shirley has been developing SoarData as a universal verifying (and scoring if you need to) program. It will verify any IGC file. Of course, the TP data needs to be there in that program as well. That is in MS Access 97 database, although the computer does not need the presence of that program to use it. The required parts are built into SoarData.

The Lot is in a simple text format, but it has a number of other factors added in

to allow it to display the flight file in a map layout. To be used it needs to be made into a smaller map showing just the 20 to 100 TPs relative to a site. This makes a useful display and the turnpoints can be verified directly from the display.

Garmin data is just the TP position data in almost any format, making it very straight forward. Through OziExplorer, Garmin log data can be placed directly onto a computer map image. While of no real use for verifying, this can be very useful for flight analysis and relating thermal activity to physical features.

As I am using Joey, SoarData, Garmin and OziExplorer, I need the tp information in three different formats. As an Official Observer, it is useful to have the same data in Cambridge and Filser format as well. As the number of dataloggers proliferate, other formats may also become useful.

I'm sure that there are people around with the skills to make the required conversion programs so that once the TP data is there in one format, it can be converted into any of the other required formats. As a part of evolving GAD, it will save me a lot of work if I find those people, or perhaps they will find me?

#### OUR LATEST RELEASE Aussie designed and manufactured

#### Microair 760

760 channels – 25 memory
 channels • 2 displays – active/



standby with flip flop or memory only (25 memory channels plus scanning)

Priority toggle – immediately switches to channel 25, handy for 121.5,

finish line frequency etc.

- Remote stick mounted toggle switch can allow handsfree memory selection and scanning
- TX indicator steady red means transmit flashing indicates
  a transmission
- longer than 40 seconds STUCK MIKE INDICATOR!
- RX indicator Steady green means signal
- Variable squelch control 2 place hot mike intercom as standard
- improved mike input with speech compression
   3.5 watts carrier
   (14 watts PEP!)
   85 ma standby 1.2 amps transit will work down to 10.4 volts. Now only 135mm in depth!
- ACA approved VFR approved to 25,000ft

#### RRP \$1,150.00 ex tax

Please enquire with dealers for club pricing.

#### Microair

Boom microphone available
- rugged construction
electret insert.

Contact

#### MICROAIR ELECTRONICS

PH: 07 5448 9986 FAX: 07 5448 8866

## ICOM

#### 40GX UHF

2nd Ni-Cad FREE!

Top of the range ICOM UHF radio, up to 5 watts output, programmable scan, power saver, key lock, ICOM sellcall, TWO ni-cad batteries. 2 year factory quarantee.

#### ONLY \$ 495

ICOM 405 UHF radio. Budget price with no loss in quality. 5 watts power, scan, clear clean communications at the right price. Includes a free emergency battery pack.



409 \$ 395

#### Garmin GPS's!

Moving map display, weather-proof, and more. The 2+ includes a South Pacific town/city database, full zoom, both vertical & horizontal display. The 3 comes with greyscale & expanded map.

GARMIN 12 \$ 339
GARMIN 2+SP \$ 495
GARMIN III \$ 655

DEAD ON ARRIVAL! Look after yourself, if you do land out & need help our pocket size, waterproof, emergency locator transmitter may save your life!

KTi Sat-Alert \$ 249

All prices quoted tax exempt.

ULTRALIGHT FLYING MACHINES

(03)9431 - 2131

24 HR FAX (03) 9431-1869

# World Gliding Championships: Bayreuth Germany Post Tasks

MILES GORE-BROWN

The World Gliding Championships (WGC) in Germany was an accident free competition, which was a relief to all concerned. Memories of the mid-air collision that occurred at the Pre-Worlds were still very fresh in everybody's minds.

he organisers, in consultation with the International Gliding Commission (IGC), had decided to make several changes to the rules used at the Pre-Worlds. The prime reason for the changes was to try to reduce the chances of mid-air collisions. Prior to the WGC, a draft of the new rules was used on a trial basis at two regional competitions in Germany. I had the opportunity to fly at the Hahnweide, which along with the Hockenheim competition was the testing ground for the new rules.

The majority of the rule changes were centred on the start procedure and the operation of gliders within the vicinity of the start line. In summary the new rules included a 20km long start-line with a maximum start height, (nominated at briefing) and a maximum ground speed for crossing the start line. Sounds like the old days, you say? Well, you are right. The new rules along with the requirement to use an event marker resulted in safety problems within themselves, but that is yet another story...

Compulsory POST tasks were also included in the rules to try to reduce the size of gaggles and the risk of mid-air collisions. A POST task was set for one class per day. The task was set on a rotational

Standard Class grid. Check out the clouds! This was a 10,000ft day. All photos: Birgit Labbus



Discus 2l

basis so that in a three-day period each class would have flown a POST. The real unknown was which class would be set a POST on the first competition day. Standard Class drew the short straw.

The WGC competition started with four very good flying days. The good weather gave all pilots a real rush of adrenaline. Little was mentioned about the POST task, most pilots enjoyed their flights in the good weather. Why not, with 10,000 feet cloudbase and reports of up to 6m/sec climbs. Not bad for Europe.

But the real question in all the pilots minds was whether the organisers would set a POST on a typical European marginal weather day. To everybody's surprise, and relief, the organisers decided on a policy of not setting a POST on marginal weather days. It was now time for all the pilots to relax and enjoy the POST flights.

I have had little exposure to POST task racing, except that I do this type of flying when attempting long distance and record flights. The philosophy of using the optimum weather window for POST tasks is the same, so it is not new to me. However for the uninitiated, I am sure that POST poses a daunting task.

POST task flying in Australia is very familiar to those flying the Sports and 2-seater comps. However POST tasks for the FAI



Nationals are still a talking point. I must admit I have been ambivalent about the introduction of POST into the FAI Nationals, but I believe it is just a matter of time. Hopefully we will try it at Benalla.

#### **WGC Post Task**

The POST set at the WGC was a time only task. At the beginning of each day a task time limit was nominated along with a selection of 25 turnpoints. The time limit varied day to day, depending on the weather.

There was no penalty for arriving back at the airfield before or after the allotted time had expired. If you arrived back at the airfield before your time was over, then you penalised yourself by not optimising the total time available.

The time limit was only to determine the distance flown. As such, you had to fly the maximum distance in the allotted time. Your GPS track was analysed and your total distance calculated. The final leg distance was calculated by measuring the straight line distance along the GPS track from the last valid turnpoint to the time expired GPS position. The last leg could be flown in any direction from the last valid turnpoint. The pilot could try to optimise the distance flown by flying along a cloud street in any direction from the last turnpoint. However, as will be discussed later, this may not be the most efficient way to fly the task.

Each pilot returning to the airfield had a 15% bonus added to the distance flown. This then became the scoring distance. The pilot with the longest scoring distance became the daily winner and scored 1,000 points. The points for each pilot were calculated based on a direct relationship of their scoring distance to the winners scoring distance. This was a very simple and effective way of scoring the task.

The bonus system was an excellent idea as it gave the incentive for the pilots to return to the airfield. This reduced the chances of long retrieves from far away places like the Czech Republic. It appeared the bonus point system had the effect of compressing the daily scores, especially for those pilots who managed to fly a reasonable distance and then return home.

The POST set at the WGC included a compulsory first leg. In most cases this first leg was a distance equivalent to at least one hours flight time. This meant that the first leg was flown as a normal race. After reaching the first turn the decisions were all up to you. It was quite interesting that on the POST days, except for the first leg, you seldom flew with other gliders. It was true; the POST task was effective in reducing the size of the gaggles and dramatically reduced the chances of mid-air collisions. The three POST tasks I flew were spent mostly on my own, which was a comment made by most pilots. Don't forget that there were over 120 gliders at the WGC with over 45 gliders in Standard Class.

As a sideline, I remember one day where about 30 Standard Class gliders were in one gaggle, basically from the bottom of the thermal to the top (about 3,000ft). We were all thermalling, going up slowly, when a local club ASW15 arrived. There was absolutely no room for him so he decided to fly in the opposite direction around the gaggle, slowly going down as the gaggle went up, waving to everybody as he went past until the gaggle had climbed past him. He then entered at the bottom of the thermal. I wish I had had a movie camera!

#### **Post Task Preparation**

Preparing for the POST task flight and arranging all the data was a real nightmare. You had to be organised otherwise the workload in the cockpit would have been too high.

The biggest problem with the POST set at the WGC was the number of turnpoints that could be used. The briefing sheet would nominate 25 turnpoints. The rules for using the nominated turnpoints were straightforward. First you had to fly the compulsory first leg. Then you could fly to any nominated turnpoint as long as you did not return to a previously flown turnpoint without first having flown to two other turnpoints, ie you could only fly a sequence A-B-C-A, not A-B-A. This in itself required careful consideration.

Planning was then the most important aspect of flying the POST task; even more so than a normal set racing task. As part of my preparation before the WGC I had made up some planning tables to try and reduce the mental arithmetic required in-flight. Two of these tables are shown in Figures 1 and 2 below. I photo-reduced these tables, placed them back-to-back in a plastic cover and kept them in the cockpit.

Figure 1: Average Cross-Country Speed Planner Cats cradle in-flight planner: Average cross-country speed (km/h) Distance to go (km)

											0	٠,		_							
Time Minute	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550
30	100	150																			
45	67	100	133																		
60	50	75	100	125	150									[							
75	40	60	80	100	120	140															
90		50	67	84	100	117	133	150													l
105				71	86	100	114	129	143	157											
120				63	75	88	100	113	125	138	150										
135					66	77	89	100	111	122	133	144									
150					60	70	80	90	100	110	120	130	140	150							
165						64	73	82	91	100	109	118	127	136	145						
180						58	67	75	83	92	100	108	117	125	133	142					
195			-					69	77	85	92	100	108	115	123	131	138	146			
210									71	79	86	93	100	107	114	121	129	136	143		
225									67	73	80	87	93	100	107	113	120	127	133	140	
240									63	69	75	81	88	94	100	106	113	119	125	131	138

Example: Time left in minutes 105min. Cross-country speed average 115km/h, extra distance to fly approximately 200km.

Figure 1: Time Required Planner

Cats cradle in-flight planner: Time required (min) with distance to go (km) at average cross-country speed (km/h)

spd kph	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550
145	20	31	41	51	62	72	83	93	103	114	124	134	145	155	165	176	186	197	207	217	228
140	21	32	43	54	64	75	86	97	107	118	128	139	150	161	171	182	193	204	214	225	236
135	22	33	44	56	67	78	78	100	111	122	133	144	156	167	178	189	200	211	222	233	24
130	23	35	46	58	69	81	92	104	115	127	138	150	162	173	185	196	208	219	231	242	25
125	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	26
120	25	38	50	62	75	88	100	113	125	137	150	162	175	188	200	212	225	238	250	263	27
115	26	39	52	65	78	91	104	117	130	143	156	169	183	196	209	222	235	248	261	274	28
110	27	41	55	68	82	95	109	123	136	150	164	177	191	205	218	232	246	259	273	286	30
105	29	43	57	71	86	100	114	129	143	158	171	186	200	214	229	243	257	271	286	300	31
100	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	33
95	32	47	63	79	95	111	126	142	158	174	189	205	221	237	253	268	284	300	316	332	34
90	33	50	67	83	100	117	133	150	167	183	200	217	233	250	267	283	300	317	333	350	36
85	35	53	71	88	106	124	141	159	176	194	212	229	247	265	282	300	318	335	353	371	38
80	38	56	75	94	113	131	150	169	188	206	225	244	263	281	300	319	338	356	375	394	4

Example: Average cross-country speed 125km/h. Time left 144 min, extra distance to fly 300km.

The tables became very useful when trying to decide how long the next leg should be and particularly useful when trying to plan the last leg so that I would arrive back at the airfield as close to the elapsed time as possible, but never before.



Miles programming the flight computer before launch

As expected, with 25 turnpoints the decision where to go was never easy. I decided that it was most important to have a plan in place before the launch. I did not want to get airborne and then start trying to fit the turnpoints with the weather situation; you could not see that far! Based on the weather situation, I set a task using a selection of the nominated turnpoints. I made sure that each leg had as many turnpoints as close as possible to the track of each leg. I also tried to make sure, where possible, that there were turnpoints just before and after the planned turnpoint. This gave me the option to extend or reduce the leg length while also taking advantage of returning to a previously flown turnpoint if streeting conditions prevailed. This worked very well, especially when the visibility was so bad that you could not see the convection conditions well ahead.

The other big problem with having so many turnpoint options was the 1:500,000 scale maps we were using. The task area covered most of southern Germany so the map was enormous, to say the least. It was almost impossible to see where all your options were at any one time. The cockpit was not big enough; the cockpit of a B767 wouldn't have been big enough either!

Each day we were given an A4 size map sheet covering the complete competition task area. This was an Airspace map sheet showing the entire airspace system applicable to the task area. I decided to use this sheet as a reference map for the POST task days. I plotted all the nominated turnpoints onto the map as well as my flight map. This made it very easy to see which turnpoints you had close to the track without having to re-fold the huge map all the time. This was basic cockpit preparation necessary for optimum flight planning and safety. The last thing you wanted was the entire class flying all over the sky trying to fold their maps etc. while not looking out.

Loading the flight into the flight computer was also a challenge. With a normal set task you only need to load the turnpoints that make up the task. Trying to arrange a POST, with 25 different turnpoints into the normal route pages was challenging, to say the least. Some pilots had large moving-map displays, which helped with this. I found the Zander 940 very user-friendly, however the Cambridge without the Palm Nav was a bit tricky. Plenty of thought had to go into plan-

ning and loading the flight computer so that you were not spending half your flight playing with switches, etc.

There was much discussion on how to optimise the last leg of the POST flight. Some pilots decided that it was best to keep flying along cloud streets (if they existed) until the time expired. I had convinced myself that the best way was to try to plan your last leg so that as much of it as possible was a final glide back to the airfield. However if the flight could be flown at a higher cross-country speed along a cloud street then that is how the flight should be planned. But the cloud street would have to be very strong and you had to guarantee that you could see how far the street continued in the direction that you wanted to fly.

Basic calculations show it is best to arrange as much of the last leg as possible as a final glide. As an example, if we take a very conservative approach and calculate the average cross-country speed for a final glide, flown at best L/D speed (which for the Discus-2 is close to 70kt) we will see that the cross-country speed achieved is close to 130km/h. To achieve this as an average cross-country speed throughout a complete task you would have to be averaging climb rates of 4 m/sec or more.

Some pilots decided that near the end of the allotted flight time it was best to do a final glide in the direction they happened to be flying, down to low level, then climb up again and fly home. This was OK, as long as you could *guarantee* that after your time had expired you could fly back to the airfield. The penalty for not getting home was the loss of the 15% bonus.

In conclusion I found that on POST days there was a lot to do, even before going to the launch grid. The whole idea was to do as much preparation on the ground as possible, so that when you started on track you could concentrate on flying in the most optimal part of the sky and avoid running into somebody else.

#### **Post Tasks: Where to now?**

The POST task flying at the WGC was very interesting. The WGC approach to POST tasks could easily be adopted in Australia. I also feel that the "Bonus Point" scheme is a good way of reducing the scatter that can occur with the scores. If we are to mix POST



task with normal set tasks then the use of the bonus point scheme may help remove some of the point scatter.

I think that we as a gliding movement need to progress along with world trends. It seems that POST is here to stay. If POST is going to be regularly set at the WGC then we must incorporate POST in the FAI nationals, the sooner the better. In particular, I feel that as a start we could adopt the same POST system as used at the WGC. The argument about POST not being a race is quickly dispelled by introducing a compulsory first leg equivalent to at least an hours flight time, or more if you like.

In conclusion I feel that planning and flying an optimum POST task is a challenge that all FAI nationals pilots should become familiar with, especially if they want to compete in future World Gliding Championships. I also feel that it is time that we incorporate POST type tasks in the FAI Nationals. I am very aware of the feeling against change so I think that the incorporation of POST into the FAI Nationals should be done using a conservative approach.

The POST type task and scoring system that was used at the WGC in Bayreuth could be the basis from which to start, ie:

- 1. Bonus point system, ie 15% for returning to the home airfield.
- 2. Compulsory first leg, a distance equivalent to at least one hours flight time.
- 3. Set elapsed time task dependant on the weather window.
- 4. A reasonable number of turnpoints, maybe 10; this will depend on the site of course.
- 5. Turnpoints set in an allocated direction within the competition task area.

- 6. POST only set on normal predictable soaring days and not on tricky soaring days.
- 7. POST tasks set for each class on a rotational basis.
- 8. Change the name to Pilot Selection Task (PST!)

I hope that this article will generate some discussion on the subject to the extent that a decision is made to incorporate POST tasks at our next FAI Nationals. We have plenty of time to discuss this, as the FAI Nationals will be in Feb/March 2000.



Pilots and crew relaxing before the launch

Comments? Opinions? AG is the place to discuss and air ideas and opinions. Drop me a line on the subject, preferably via email or a clear hard copy in the mail. (Ed.)

# FAI Gliding World Records World Record holders from left to right: World Record holders from left to right: Diether Merceret (Company) Parish To



Sub-class DW (World Class Gliders) Category: General Out-and-return distance: 580.30km Pilot: Diether MEMMERT (Germany) Course/site: Vogtareuth (Germany) — Oberalppass (Germany) and return Date: 16/05/98, Glider: PW-5 Distance over a triangular course: 513.25km Pilot: Allen Keith Willis (Australia) Course/site: Bordertown – Green Lake – Sea World Record holders from left to right: Diether Memmert (Germany), Patrick Tuckey (USA), Claudio Blois Duarte (Brazil) and Keith Willis (Australia)

Lake – Bordertown (Australia) Date: 11/12/98. Glider: PW-5

*Three Turnpoints Distance:* 513.25km *Pilot:* Allen Keith Willis (Australia)

Course/site: Bordertown - Green Lake - Sea

Lake — Bordertown (Australia) *Date:* 11/12/98, *Glider:* PW-5

Free out-and-return distance: 580.30km

Pilot: Diether Memmert (Germany) Course/site: Vogtareuth (Germany) – Oberalppass (Germany) and return

Date: 16/05/98, Glider: PW-5

Speed over 100km triangle: 103.71km/h Pilot:

Patrick L. Tuckey (USA)

Course/site: Midlothian, TX (USA) Date: 28/08/98, Glider: PW-5

Speed over 300km triangle: 83.47km/h

Pilot: Claudio Blois Duarte (Brazil) Course/site: Formosa (Brazil) Date: 19/09/98, Glider: PW-5

Speed over 500km triangle: 76.42km/h

Pilot: Keith Willis (Australia)

Course/site: Bordertown - Green Lake - Sea

Lake – Bordertown (Australia) *Date:* 11/12/98, *Glider:* PW-5



FRANK FONTYNE

Before moving to Wodonga I lived in Mandurah, south of Perth. Good hang gliding locations were three to four hours drive away, and as I had a lot of other commitments (windsurfing, wavejumping, relationship) I didn't get much opportunity to fly. I contemplated getting a 2-seater trike, but was a little apprehensive about the cost and unsure if my fiancée would be game enough to come with me anyway.

fter moving to Wodonga, flying locations were closer by: Mt Buffalo  $1^{1}/_{2}$  hours, Mystic 1 hour and Conargo (towing) 2 hours. I did some great flying at these sites, but became frustrated by the number of marginal days, or days with unsafe conditions.

To reduce the amount of frustration and improve on my flying hours I decided to buy my Explorer powered harness from Airtime Products in autumn 1998. I had a little difficulty learning to fly with the motor on my Blitz 146, as this glider was a little small for the added weight of the motor (20-25kg including fuel). The added weight increased the stall speed, so in nil wind (which we get a lot of here) my Reeboks had a hard time keeping up – someone suggested Nikes.

Thermalling was also a little more difficult due to much earlier tip stalling.

Earlier this year I replaced my trusty Blitz with a SX6. This has turned out to be a great combination with the motor. For my weight it's a little big for flying without the motor, but I end up flying with the motor most of the time anyway. The larger size makes nil wind take offs and landings much easier, as well as thermalling. Of course, rough air handling is traded off.

With two five litre fuel tanks the motor can give me more than three hours flying time in nil lift conditions. If the landing conditions change at the last second (eg thermal generated tailwind) I can just do a fly by. That probably saved my neck once. I can take off from flat paddocks, and I have even taken off uphill. I get about three times more flying hours than I used to get without the motor.

There are of course some disadvantages. The added weight attached to your body can increase injury in case of a severe nose in. There is a slightly longer set-up time with more complexity. You have to have a big enough car to carry the motor harness. You have to carry fuel and make sure no petrol fumes end up in the car. The engine noise is annoying, but it's two meters behind you and in the airstream so you kind of fly away from it.

Climb rate is about 250ft/min, so not fantastic but in most cases sufficient. I have had some mechanical problems, but Airtime Products have looked after me with all of these. Mid-air restarting is possible with the pull cord, but is not that easy. Airtime Products are testing an electric start at the moment.

Scenic flying is what I enjoy most of all, and I have done some great flying with the motor as you can see from the photos. Some of my best flights have been Mt Buffalo, Mt Bogong over snow, Mt Beauty to Mt Bogong to Mt Buffalo, Fraser Island, Rainbow

#### Hang Gliding



Opposite page: Local flying over Lake Hume Left: Mt Buffalo Gorge All photos: Frank Fontyne

from the cloud and it looked like the wind was going up its side - you beauty! I started working my way up the side, but slowly the lift reduced to nothing. I was now at about 6,500 feet and getting a bit cold, but was enjoying the awesome view so pulled the motor back on. I then had some fun going in and out of the clear areas between large layers of cloud, and shot the photo while flying above a few smaller cu's. Other pilots launching off Mt Buffalo only had a sleddy straight down - bad timing I guess. After landing back at Porepunkah I was called a cheat for using the motor, but I knew who had had the best flight of the day!

The flight over Mt Bogong was done in September this year. I took off from

Mt Beauty airstrip and started to use small thermals, getting high very quickly. The air got rough due to light rotor when I made my way over to the eastern side of the Kiewa Valley. From there it was a small hop tailwind over to Bogong, getting rougher as I went. Clouds were forming rapidly and cloudbase was only just above the summit. One cloud was parked almost permanently over the summit, and thus I couldn't fly over the summit this time. However, I got close and took some photos. Great views of Falls Creek, Rocky Valley dam and the snow on the high plains, but it got too rough for my liking. I pulled some speed on the SX and made my way back over to Mt Beauty.

Beach, Teewah, Noosa, The Rock near Wagga, and Glenrowan to Porepunkah to Mt Buffalo.

I love flying around Mt Buffalo for the great scenery. When I took the photo shown, I had flown up from the Porepunkah airstrip. There was a small cu sitting over the Mt Buffalo Gorge. It stayed there most of the time, but changed size and shape regularly. I motored up to the bottom of the gorge, where the waterfall was flowing strongly. There was strong lift from the cu, and with the motor off I raced up past the hang gliding ramp and the tourist look-outs. Cloudbase was only about 1,000 feet over the gorge, so I started to head out of the lift of this growing monster. I found that even though I had worked my way over to the side of the cu, I was still in weak lift. I was upwind

Below: Mt Bogong



#### Hang Gliding

## Hang Gliding

#### with a Powered Harness



Fraser Island with resort in foreground

Last summer's flight from Rainbow Beach to Fraser Island was also very memorable. A perfect day with a light breeze, I wanted to make it to the lakes and sand dunes so I flew with two tanks (and a GPS to help with fuel planning). The water-crossing to the island wasn't far, and I made sure I had plenty of height to glide to either side in the event of a motor failure. The scenery was great, and just got better as I progressed up the island. The lakes were beautiful and I was tempted to land by the side of one of them where there seemed to be room, but I was concerned about getting out of there in the event of a mishap. On the way back I had some fun flying over the clouds. The motor had to be used all the time due to lack of lift. There was a 10 knot wind, 30 off headwind. Flight duration was over three hours all up, and I still had half a tank of fuel left. There were about a dozen guys sitting at Rainbow Beach that couldn't fly due to the crossed wind. Yep, these motors can be very useful!

The photo of the halo was taken during a flight from Teewah to Noosa and over the Noosa National Park. Cloudbase always seems to be very low in this part of the world. I flew over the eastern beaches and Hell's Gate, then headed back over to Noosa. After having a good look around I headed to Teewah in a straight line (over the water but with enough height to make land in case of a motor problem). I took the halo photo flying over some cloud out over the water.

Lake Hume is a 20 minute drive from where I live. The lake has not been full for a few years and there is plenty of space for taking off and landing. Scenery is pretty good with the mountains in the background. Soon I'm planning to fly from Lake Hume to Wodonga, around the control zone.

Next year I plan to fly the Burketown Morning Glories. Also on my wish list are the Bight cliffs and Ayers Rock – maybe these can be combined in one trip. More locally, the Great Ocean Road area beckons.

One problem I have encountered is that there are not many of these powered harnesses around. Certainly not near where I live that I know of. I rely on a paramotor friend, friends from Melbourne with powered harnesses, or other non-flying friends to come along. So if anyone lives near Wodonga, Wangaratta, Bright, etc with a powered harness, or if anyone wants a flying buddy when flying in this area, please send me an email Frank.Fontyne@Uncletobys.com.au>.

Happy motoring!

# Risk Ma

#### STEPHEN RUFFELS

CFI Hang gliding and microlighting (Eagle School) since 1988, HGFA Board member

Everything we do in life has an element of risk attached to it. From the moment we wake up to when we go to bed we are constantly at risk, 24 hours a day.

eople are never without risk, life isn't that simple. Lying in bed, you could experience being in an earthquake or some other natural disaster. Perhaps if we lived in a steel and concrete bunker with a year's supply of food, water and air we could think of ourselves as totally risk free, but what quality of life would we have?

As pilots we enjoy the ultimate freedom of flight, which by most people is viewed with an element of terror: We must be crazy:

#### If man was meant to fly God would have given us wings!

 the saying goes. We are able to fly in a safe manner because we are able to manage and identify the risks associated with our flying abilities.

Our ability to assess the level of risk to us is based on our **attitude**, **experience** and **knowledge**, all allowing us to make a rational **judgement** of the level of risk.

What made you take up flying? You may have looked at the birds and wanted to fly like them. Whatever your reasons, you were inspired to take the first step and overcome your fears, taking a risk to learn

to fly. If you are a complete idiot you might teach yourself, and, if you are somehow incredibly lucky, you might survive at extreme risk to yourself. However, for most of us a school reduces the risk of learning. When you first start flying you have no experience or knowledge, then through your instructor knowledge is passed on to you. Slowly, by incremental steps whilst under instruction, you gain experience bit by bit until finally you acquire the necessary flying skills.

While under your instructor, they manage the risk at an acceptable level – no risk equals no gain in experience. This is particularly the case in learning hang gliding and paragliding where you are under radio instruction. In microlighting and tandem learning situations, the risks whilst learning are lower because your instructor is always there. We have standards within our association that you are required to achieve in skill, experience and knowledge. Also, before an instructor signs off his student they should ask whether the student has a safe attitude to flying. A large part of a student's attitude is their ability to make the necessary judgements, and correctly assess the level of risk that they will be taking.

After you have left the school, instantly the level of risk increases, as your instructor is no longer there.

# nagement

Remember the level of risk is based on attitude, knowledge and **experience** whereby you can make a **judgement** as to what is a safe level of risk to take.

We need to manage and reduce the risk level by planning ahead and taking the following precautions:

- 1. Being rested and in a fit state of health. You should not be suffering from the effects of alcohol and drugs as these can greatly affect your ability to make conscious judgements.
- 2. Flying with others, particularly more experienced pilots that you can draw on for advice on potential dangers, weather and wind strength etc.
- 3. Flying at sites that are appropriate to your skill level.
- 4. Flying well maintained equipment appropriate to your skill level.
- 5. Wheels on your basebar can greatly reduce the risk of landing mishaps if you fly a hang glider.
- 6. Don't combine two or more new things or unknowns (ie new glider, harness or site) as these greatly increase the level of risk.
- 7. Flying regularly maintains and increases your skills and experience (airtime).

Having planned ahead and taken these physical precautions, risk is minimised but not eliminated. There still remains risks associated with our ability to judge weather and site conditions on the day (which comes from knowledge) and those associated with our willingness to accurately assess our skill level and physical state at the time (which reflects our attitude). Knowledge can be gained from reading technical flying books plus getting knowledge from others (asking questions etc). Keep a log, not just of your flights but what you observed about the weather conditions; what was forecasted, what eventuated and any effects that you felt.

Attitude is one of the more complex aspects of risk management to deal with because it's being constantly affected by internal and external influences. There are two common extremes of mental states which pilots may experience from time to time. At one end of the scale is enthusiasm and at the other, fear. Most pilots will likely oscillate between the two at different times throughout their flying career. These directly influence our attitude and therefore our actions. It's a matter of finding a balance between too much fear and not enough.

While enthusiasm is a good thing to have, if unchecked it can put us at risk. A common scenario: As an intermediate pilot you've got a little bit of experience, heaps of confidence and enthusiasm abounds. Not having flown for awhile, having driven a long way, taken time off work, car full of flying mates all wanting the same thing as you do, you arrive at the site. It's gusty, crossed, strong, over the back occasionally, impending weather on the horizon or there are advanced pilots 'parked' overhead ridge soaring. Will you rationally assess the conditions to your skill level, or will you risk it all and go flying? It's only ever up to you!

Just as enthusiasm can cloud our judgements, so too can fear. There is a balance to be struck with regard to the usefulness of fear. While we should not allow fear to dominate our actions to the point of inhibiting our normal functioning, we must acknowledge it enough for it to allow us to identify the associated risks in what we do. Fear is the mind's connection to our body and an important defence mechanism. It enables us to respond quickly in situations ('flight or fight').

It is clear that risk management depends upon becoming aware of the above factors. Managing risk allows us to aspire to the quality of life we choose, while enabling us to enjoy the freedom of flight safely.

#### Why do advanced pilots have accidents?

As our experience and knowledge grows we tend to make judgements more and more on a subconscious level rather than a conscious level. Most of the time this gets us by, and is necessary in order to make room for new skills and ideas.

While the level of pilot skill increases ("the known factor") the level of environmental risk remains the same and should never be taken for granted. These are the "unknown factors", those unforeseen situations that we need to consider and allow for. It's what we refer to as a margin for error. How much margin for error a pilot allows varies for each individual. While allowing no margin for error can prove fatal, allowing too much margin inhibits increases in skill level and growth.

Motivated by their will to win, competition pilots will often take risks that go beyond the level that they would normally take. Calculated risks will often be taken whilst flying during a competition. Constant judgements driven by experience and skill allow them to push themselves further. However, whilst in this focused state, pilots have been known to overlook a simple thing like hooking in. Distractions effect human performance and can occur in many forms: competition distractions, personal problems, spectators watching and talking during launch procedures, showing off, to name a few. Distractions are an everyday part of life, but can be the very reason we have accidents. Therefore we have to take precautions to eliminate the risk of overlooking important things, by checking ourselves and each other as a matter of course.

So long as we take the time to always assess the risks through conscious and rational judgements, we will all be able to fly to a ripe old age. Remember the saying:

#### There are old pilots and there are bold pilots, but there are no old, bold pilots.

This is because risk management is what it is all about.

As a pilot since 1976, and flying professionally taking people tandem from Mt Buffalo, I have a huge responsibility to correctly assess the risks. I can never let down my guard and become blasé, in fact the more I fly the more aware I have become of both my own and other people's fallibility. Never take anything for granted, complacency can be a pilot's worst enemy.

Every accident is never an accident; it is pilot error, error in judgements. Awareness, adequate knowledge, a good attitude and experience are the ingredients in making wise judgements. Take these words of wisdom from someone who has been flying a long time:

> The more you know, the more you realise how little you do know.

Be-a-ware.



#### Hang Gliding · Paragliding · Microlights



#### Name Change

Now that the futile amalgamation vote with the GFA has been laid to rest, I hope we can move on with the next most important job, which is to change our name to 'Hang Gliding and Paragliding Federation of Australia', to better represent its member's sports. To just say that a paraglider is a Class 3 hang glider is a load of bull. The States have already started to change their names without dire results, so we can too.

In the September issue it was said that the huge vote for amalgamation was a strong message for support. I would say the exact opposite, that it was people crying out for a change. If the HGFA does not start to better represent ALL its members you may find hang gliding standing and sinking all alone.

#### **Enda Murphy**

The question of a name change has come up on a few occasions over the years. A couple of years ago it became a formal initiative. We set out to find a new name for the organisation. Unfortunately, soon after the idea was kicked off. enthusiasm slowed. as no one could decide on a name that would encompass all the sports we do as well as whatever sports we may do in the future. Calling ourselves the Paragliding and Hang Gliding Federation (or something similar) leaves out the trikes. We are currently trying to formalise ultralight sailplanes (Class 4 hang gliders) into our system. Then there is the possibility of other air-powered sports. If we are going to change our name, it needs to be something that does not specify any particular aircraft, but does still carry the spirit of what we do.

**HGFA Board** 

#### **Promoting the Sport**

▶ I would like to respond to Gary Allen's letter (September issue) where he responded to Regina Böhler's July issue article entitled "Promoting the Sport".

Mr Allen's letter would have to be the most mean spirited letter I have ever read in Skysailor. The fact that someone could find exception to another person taking the time to entertain and stimulate the imaginations of some pre-school children is incredible to me.

He questions the realistic expectation that any of the 'kiddies' will take up the sport in the future. While I am sure this was not the overriding intention of the exercise, I know that I took up the sport 18 years after seeing gliders at Stanwell Park; career, financial and family considerations preventing it any

Inspiration comes in many forms and it would be an elegant irony if just one child went on to become a pilot – the boy who thought he was falling.

I am glad I am a bit of a romantic and not blinkered by 'commercial interests'.

My congratulations go to Ms Böhler for displaying a caring community spirit, which by comparison just makes Mr Allen's appear the more meaner.

**Craig Hopkins** 

#### Classifieds

It was a timely letter that I read in the AG/Skysailor called "More Classifieds", just as I have returned to the purchasing and selling market to upgrade my equipment. I have therefore been looking at the classifieds and I have been wondering what has happened to all the advertisements I used to see in Skysailor. I thought perhaps the lack of advertisements was due to it being quiet over winter, but as we have progressed towards summer I began to wonder. After talking to other hang glider pilots

I have discovered the new policy on classifieds. I would therefore like to reinforce the statements presented in the "More Classifieds" letter and add to them.

The huge decline in advertisements can only be due to the new costing. I find myself with a Moyes pod to sell at \$100, not willing to advertise it as it would not be worth the \$15 cost, especially as I have to wait two months for the next issue. I remember a large number of items for sale that used to be in the \$100 to \$500 range and I am sure that people with items at these prices have also come to the same conclusion. Unlike gliding and some other sports I have been involved in, we do not have clubs at fixed bases that become a focus for our activities and allow for the dissemination of information and advertisements. We have Skysailor as our central focus and I do not see it fulfill-

the needs of its members by not pro- viding a reasonable method of advertising.

As a possible solution I would happily pay a percentage of the value of the item. As suggested in the response to the "More Classifieds", a percentage of the item cost seems like a much more equitable method.

**Robin Sands** 

#### **Amalgamation**

I hope Vivienne Drew (President, Gliding Club of Victoria), writing in the October issue, is not looking for sympathy for the apparent plight of gliding clubs in Australia (or at least Victoria). She (presumably) and close to 50% of her colleagues turned their backs on a potential new membership base of about 3,500 soaring enthusiasts when they voted against amalgamation. Reading the correspondence over the past few months on this issue, there was a strong elitist theme in many of the views from the gliding fraternity which opposed amalgamation. It seems that if you're not flying something which costs at least \$50,000 and requires a \$100,000 aircraft to launch it, then you can't be a "real" glider pilot.

Such a view reminds me of the position a (fortunately) very small percentage of hang glider pilots took when trikes, then paragliders began appearing on the scene about 15 and 10 years ago respectively. With trikes the call was "they're too noisy; they're not really gliders; let them join the AUF!" With paragliders it was "they're too slow; they take up too much room in the sky; why should they get to use the sites we've developed?"

Fortunately, common sense prevailed to everyone's benefit. Trikes now fill an invaluable role as safe reliable tugs, take temperature traces before comps and offer two-ups when there's no lift! Paragliders have led to the opening up of great new sites, such as Manilla, and are really useful for giving a guide on wind strength – when they land it's time for us "real" pilots in hang gliders to take off! All jokes aside, the club scene has definitely been enhanced by having additional active members available to serve on committees and help achieve what we all want – more and quality airtime

I would suggest to Vivienne and other "real" pilots that by opening your doors to HGFA members you will gain more revenue, have more people available to help run the club and may even gain new sailplane pilots ('crossover' flying has certainly been widespread in the HGFA). Furthermore you may wish to explore the relative cheapness and ease of operation of trikes as tug aircraft. The benefits to HGFA members include access to permanent club/hangar facilities, tow strips and cross-country soaring expertise.

As a final point, amalgamation of our two organisations would not have led, as far as I can tell, to any compulsion on GFA members to fly an aircraft other than a sailplane or indeed a motor glider, which I

note are not excluded from GFA clubs. To share ground facilities and administration is surely just as logical and reasonable as to share the great sky above.

**Martyn Yeomans** 

#### **Standard Class**

Is it time for a standard class?

Here are the facts. Competitive flex wing racing gliders now cost at least half as much as a new car. Even armed with one of these production gliders, to be truly competitive last years Pre-World Champion states that modifications are essential. Some performance enhancing modifications significantly reduce the safety of these racing gliders (lowered sprogs, ultra thin wires, uprights, etc). Others push the costs ever higher (carbonfibre speed bars). Fewer pilots than ever can afford this competitive equipment. Perhaps even fewer can safely handle these thoroughbred racing machines. The number of pilots flying in competitions is in decline worldwide. The number of young enthusiastic pilots entering competitions for the first time is pitifully small. Hang gliding as a sport is in worldwide decline.

Paragliding is suffering similar problems. albeit with a slightly different emphasis due to their stage of temporal development and the nature of the equipment. The spate of recent serious accidents amongst top class pilots must cast a significant doubt upon the safety of some current competition wings.

Currently our competition wings represent an unlimited or development class. As every equipment based sport matures, it reaches the point where the performance of the equipment starts to plateau. At this point more and more money can be spent for less and less improvement in performance. Safety can and will be sacrificed to gain a competitive advantage, however small. Take Formula 1 for an extreme example where the specially fractionated petrol they use costs ~\$200 per litre! Whereas F1 racing has hundreds of millions of dollars of annual corporate sponsorship to support development costs, hang gliding/ paragliding competitions do not.

What can be done to address these issues? We are far from the first sport to encounter these problems. The sports of gliding (sailplanes), car racing and yachting have all faced, and been forced to attempt to address, similar issues. How they have tackled the problems has impacted significantly on their future growth. Some have been more successful than others.

Simple economics dictates the development costs of racing gliders must be recouped by the manufacturers or else

they will go broke. These costs are not covered by sales of gliders to the top factory pilots who rarely pay full price for their gliders. They are covered by the "average Joes" who buy high performance gliders and actually pay retail price. These pilots maintain the manufacturer's viability. These pilots maintain dealer viability. They provide a source of cheaper used quality equipment for aspiring newcomers. Most importantly these pilots form the bulk of the competition field at most competitions. Without pilots buying these gliders competition flying will die. Perhaps even worse, if enough pilots do not buy these gliders then their development costs must be recouped by adding a premium to other products the manufacturers sell, namely the entry level gliders bought by new pilots. Increasing prices are unlikely to promote sales or growth.

'So what' you ask? I don't like competitions anyway. I fly simply for the beauty and freedom of free flight. So do I. But I also compete because I enjoy the many facets that competition adds to the jewel of free flight. The camaraderie with fellow pilots. The new experiences at different sites. The inspiring performances of the top pilots. Expanding my skills. Pushing my limits. The heartache of failure and the joy of making goal. The high quality flying. And yes, I like to race. Better still. I like to win. If I do not win I want to know it was because I was not a good enough pilot, not that my equipment was inferior to the winner's. With this knowledge I can resolve to try harder, think faster, and fly better. Such is the essence of competition. A continuing process of self improvement. Man against man, using my skills and instincts to navigate the fastest course through the invisible currents of air.

Think about it. Few sports exist without competition. Fewer still flourish. Humans are competitive by nature. Without a vibrant competition scene what will our sports be like? How many manufacturers will survive the spiralling development costs of new competition wings? How many pilots may move on to other outlets for their competitive nature?

I do not for a moment advocate we abandon glider development or the current unlimited class. What I propose is that we need a Standard Class, and we need it soon.

There are two options for a Standard Class:

1. A rules based Standard Class where a series of rules sets out quidelines for the glider vis materials, wingspan, wire diameters, etc, etc. Development is allowed only within these

#### **NICK**

I still recall the night last year The mate upon the phone Something in the voice I hear Just chills me to the bone

You hear about Nick Dillane today? Comes crackling down the line Such simple words, said in a way Just knew he wasn't fine

It seems that he was towing In winds a little strong And there's no way of knowing **Exactly what went wrong** 

I hear the words wash over me And a tear grows in my eye Lockout-downwind-no release No chance to say goodbye

Well it's nearly been a year today Since I've seen his smiling face Still seems like only yesterday That he stood here in this place

Well I know that I won't see him And I know that he is gone But as long as I'm still breathin', His memory will live on

So now I'd ask, you charge your glass And just be glad we met him Let's drink to Nick, whose time has passed I know I won't forget him.

rules.

2. A strict One Design Standard Class where the glider's design is fixed and all gliders made exactly the same with minimum modifications allowed.

History has shown the disadvantage with rules based classes is they tend to become further development classes where competing manufacturers strive to gain any minor advantage to further their sales. Furthermore, there is a temptation to cheat as the rules must be policed to be effective and this is often impractical. This would however be the easiest class to implement if you simply declare king-posted hang gliders Standard Class. Attempts at a similar safety based class have already been made for paragliders.

The most vibrant competitions in sailing and motor racing are based on the one design philosophy. Competition pits man against man in exactly the same equipment, giving a true test of skill. One design does not need to mean one manufacturer. It simply needs to mean one standard design which can be made by any of a number of manufacturers.

The need for a Standard Class is here. It is time for action.

## **GFA Executive and Councillor**

This month we present the second batch of GFA executive and councillor profiles, in a series that will allow you to find out a little about your elected representatives, their gliding habits and what attracted them to the job.

#### **Darcy Hogan**

Length of time on executive/council: 6 years or so

#### Current position(s): VSA Councillor

• To represent GFA/VSA members at GFA meetings

#### Previous position(s):

- Chief Flying Instructor and President *Gliding details:*
- Member of the Gliding Club of Victoria at Benalla.
- 3,000 hours (thank god for good Polish gliders)

#### Personal gliding goals:

 Might think about knocking off some records in a 20 year old glider.

#### Goals as member of GFA executive/council:

• Constantly try to ensure we apply common sense and forward thinking to our group.

#### **Rob Moore**

Length of time on executive/council: Council member on and off since 1980

#### Current position(s):

- SAGA Councillor
- GFA Awards Committee convener
- Member of the organising committee for the World Gliding Championships Club Class 2001

#### Duties:

- To attend all SAGA meetings.
- Confer with SAGA members as to their wants and needs from the GFA.
- Explain GFA policies to SAGA members and solicit their opinions.

#### Previous position(s):

- Member of Adelaide Soaring Club for 38 years
- Former Committee member for 19 years
- Former CFI
- Former ASC competitions officer
- Organiser of the ASC Easter Regatta for 21 years

- Former convener of the SAGA Competitions Advisory Committee
- Committee member of the organising committees for three Australian FAI National championships held at Gawler
- Inaugural member of the GFA Competitions Co-ordinating Committee (now the Sports Committee)
- Previous convener of the GFA competition training scholarships
- ASC delegate to SAGA
- Former SAGA GFA Vice President
- Member of the 2001 World Gliding Championships site selection committee

#### Gliding details:

- Life Member of the Adelaide Soaring Club
- 3,800 hours gliding
- Competed in every Australian FAI National gliding competitions over 28 years
- 65 various types of gliders flown, from the 1936 Golden Eagle to an ASH25
- Instructor and tug pilot
- CFI South Australian Air Training Corps Gliding Club
- OIC SAAIRTC
- Gliding since 1969
- Australian team manager to the 1983 World comps in the USA
- Australian team co-ordinator to international competitions in Germany 1980 and France 1981
- International team member for Australian World and Pre-World championship teams 1965, 1972, 1984, 1985, 1988, 1989

#### Personal gliding goals:

• To get my Diamond height out of the Gawler Airstrip.

#### Goals as member of GFA executive/council:

• To represent the SAGA members as well as possible and help insure GFA continues as the premier sporting Aviation Body in Australia over the next 50 years.

#### **Ron Cant**

## Length of time on executive/council: 4 years Current position(s):

• WA Regional President, Airfield and Airspace Officer

#### Duties:

- To administer the efficient working of the Regional Committee.
- To act as Chairman of the scheduled Regional Committee meetings (5 + AGM).
- Monitoring the operation of gliding within the region and visiting clubs when possible.
- To attend RAPAC meetings (4 per year).

• Liaison with ASA, CASA, BASI when necessary and maintain a good working relationship with the local Aviation administrators.

#### Previous position(s):

• Regional Vice President

#### Gliding details:

• Member of Narrogin Gliding Club

#### Personal gliding goals:

• Retired from actually participating in flying gliders.

#### Goals as member of GFA executive/council:

The goals that I once had, the goals that I have still, seem to be as far away now as they were when I first became a member of Council. As my sun sinks slowly in the west all that I can do is stand and watch it slowly, but surely, disappear from my sight. The dreams I had for the GFA, and gliding throughout our continent seem to have gone the same way. Maybe tomorrow people on the Council, and others, will look over their shoulder into the opposite direction and watch a new sun being born, think of gliding past, contemplate gliding in the future and resolve to stand up, speak for themselves, and face the doubters, the sceptics and the immovable amongst us, and the some of my ideas of the past may become a reality. I can only hope, as do so many of us!

#### **Kerrie Ann Claffey**

Length of time on executive/council: Since 1994 (at least)

#### Current position:

- Councillor GFA
- Secretary NSWGA
- Trophies Officer NSWGA

#### Duties:

- To represent NSW members at GFA Council meetings, NSWGA meetings and minutes.
- Management of NSWGA trophies.

#### Previous position(s:)

- Secretary NSWGA
- Treasurer NSWGA
- Instructor Bathurst Soaring Club
- Duty Pilot Bathurst Soaring Club
- Instructor Southern Cross GC
- Duty Pilot Southern Cross GC
- Minutes Secretary Southern Cross GC

#### Gliding details:

- Member of Bathurst Soaring Club
- 1,100 hours flown in SW Kookaburra, LW Kookaburra, Schweizer 232, Blanik, K7, K13, IS28, IS30, Puchacz, Twin Astir, K21, Janus, Nimbus 3DT, ASH25, Grob 109, Pilatus, Astir, LS1F, Std Libelle, Open

## **Profiles**



Kerrie Ann Claffey and Wayne Kiely

Libelle, Jantar 2/3, Pegase, LS4, DG300, Discus, ASW24, LS3, DG400

 Competitions flown: 3 NSW/QLD Club Class, 11 NSW/QLD FAI Class, 1 National Club Class, 1 National FAI Class

#### Personal gliding goals:

- Distance > 750km
- Speed > 130km/h
- Place > last in Nationals!

#### Goals as member of GFA executive/council:

• To simplify administration so as to reduce costs accumulated and effort required.

#### **Maurice Little**

#### Length of time on executive/council:

1 year currently, 7 years previously

#### Current position:

- GFA Councillor
- VSA Vice President
- Chairman of State Gliding Centre

#### Duties:

• To represent Victorian members of GFA.

#### Previous positions:

- VSA President
- GFA State Vice President

#### Gliding details:

 Member of Grampians Soaring Club for 20 years

#### Personal gliding goals:

- Instruction
- Achievement of all three diamonds

#### Goals as member of GFA executive/council:

 Active involvement in any restructuring of the GFA and promotion/expansion of the sport

#### **Roger MacRury**

**Length of time on executive/council:** 1 year **Current position(s):** 

• Chair of the Airworthiness Technical Committee

#### Duties

- To provide input into the day to day running of the GFA by the Executive, particularly on airworthiness matters.
- To act as the supervisor for the Chief Technical Officer (Airworthiness).

#### Previous position(s):

• RTO(A) in NSW

#### Gliding details:

- Member of Harden Gliding Club
- First solo in Jan 1969
- Currently flying a Mini Nimbus
- About 2,500 total hours gliding
- 700 hours power
- Weather forecaster with Met Bureau fill 1988

#### Personal gliding goals:

• Fun and interesting flying

#### Goals as member of GFA executive/council:

- To develop the business systems of the GFA office.
- To provide the right services at an affordable cost.
- To work to develop a system which increases participation and membership in the sport. On the airworthiness side, I think the key goal is for there to be no accidents or incidents caused by airworthiness problems.

#### **Wayne Kiely**

**Length of time on executive/council:** 2-3 years

#### Current position: State Councillor Duties:

• To represent South Australian needs and ideals at the National level.

#### Previous position(s):

- State Secretary
- Club President/Secretary/Treasurer/ Committee Member

#### Gliding details:

- Member of Renmark Gliding Club
- Level 2 Instructor
- 500+ hours

#### Personal gliding goals:

- To be more current (!), then to seriously try to attain a 1,000km flight in a Racing Class machine.
- Attain my Diamond height in a thermal! *Goals as member of GFA executive/council:*

# • To try to attain the situation whereby most GFA members believe that the Federation is driven by 'grass roots' needs, as opposed to the current position.

# AIRBORNE AVIONICS Pty Ltd

## Sales and Service of Avionic Equipment

CASA approved Avionic Workshop

**Agents for** 

ICOM
KING
SKYPROBE
WALTER DITTEL
LEATHERMAN

Arnie Hartley
Phone 02 68 892 733
Fax 02 68 892 933
Email: hartley@avionics.

com.au



## **LAKE KEEPIT**

#### TAMWORTH NSW

- ★ Training 365 days a year
- ★ Good glider availability
- ★ Bulk flying discounts
- ★ Private owners welcome
- ★ Extended gliding season
   300km in July!

Contact Jim Stanley – Manager P.O. Box S152

TAMWORTH SOUTH 2340

Ph: (02) 6769 7514 Fax: (02) 6769 7640

www.users.bigpond.com/keepitsoaring



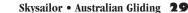














## **Book Review:**

## "Flight at Low Levels, Safety through Awareness"

By John Freeman, Wakefield Press, 109 pages. Available from Airservices Australia Publication Centre and most aviation book shops. Retail price: \$14.95

MILES GORE-BROWN

his book has been written for the pilot flying at low altitude. John Freeman is a very experienced agricultural pilot; he conducts safety-training sessions on the subject.

The book highlights those aspects of low-level flight that are fundamental to the safety of flight. It has been written with the power pilot in mind although the majority of the subject matter is fundamental to the safety of flight for both gliders and tow planes. It is highly recommended that pilots of both gliders and tow planes read this book before conducting their training for outfield landings and aerotow retrieves. It is also recommended reading for improving your knowledge on the aspects of low-level flight.

The book covers in detail one of the biggest potential killers that the glider pilot and tug pilot are confronted with when landing in a unknown field – powerlines, more particularly "SWER" lines. If you do not know what a *SWER line* is then you MUST read this book before you venture into unknown fields, ie before you go cross-country.

Powerlines are regarded as the obstacle that creates the greatest hazard for an aircraft operating at low level. At low levels, powerlines must always be located and avoided. All powerlines are potential killers, and it should be remembered that the powerline does not usually kill. The power wire will cause the glider/aircraft to collide with the ground, which is the ultimate obstacle. One of the clues of avoiding a powerline is the need for good lookout; greater vigilance combined with good planning in relation to the glider/aircraft flight path.

In the book the author provides many pointers on how to prevent a collision with powerlines. There are several diagrams and photos of the standard types of wires, how they are attached to the poles etc, all of which provide clues when trying to locate the wire itself.

In addition to the detail given to flight in the vicinity of powerlines, the book also covers aspects of circuit planning and general assessment procedures when choosing landing fields, low level navigation etc.

I found this book very interesting and easy to read. It has a large amount of information, obviously collected over many years of operational experience at low levels.

As an experienced cross-country glider pilot and previously rated cross-country tug pilot, I found the book to be a very good refresher of the many hazards that confront the pilot when landing in unknown fields.

I have added a few questions which every cross-country glider pilot and aerotow retrieve tug pilot should know the answers to. If you do not know the answers then you need to read the book. Even if you do know the answers you will still learn something, I am sure.

- 1. Which will show the wind direction and strength most accurately?
- a. Dust raised by a travelling car on a dirt road, or
- b. The ripples in a dam.
- 2. You are in the circuit for a landing; the landing will be into a strong headwind, eg 20kt. When you turn from crosswind onto final, the glider will appear to:
- a. Slip or
- b. Skid.

Along with this question you should think of the consequences of correcting for either of the two illusions in a and b above.

- 3. On final approach, you have to either fly over or very close to a dead tree before landing. The tree is seen to be full of birds, eg Galahs. Which way will the birds fly out of the tree?
- a. Into wind then downwind
- b. Into wind only
- c. Downwind then into wind or
- d. Downwind only

Silly question you may say, but I assure you it will take you by surprise if you hit a flock of birds on late finals. If you are prepared then you are in a better position to deal with the problem.

- 4. What is a SWER line?
- 5. What are the best indicators of the location of a powerline?
- 6. What is the best indicator of the direction a powerline takes from the pole:
- a. The power pole or
- b. The insulator.
- 7. If you notice two insulators on a power pole, how many wires should you locate?
- 8. What is the sequence of indicators you should identify in order to locate a powerline?

Some of the indicators are power pole, wire, birds, insulator, buildings...

- 9. If you have no other alternative but to cross a powerline (after you have located it) on late finals, where should you plan to cross it?
- a. In the middle between two poles,
- b. Over the top of the wire, or
- c. As close to the power pole as possible.
- 10. There are two sets of powerlines across your late final flight path. One powerline is higher than the other. Which wire will appear to be closest to you when you approach them?
- a. The closest wire, or
- b. The highest wire.

Think of the consequences of not identifying the closest or the highest wire on either late finals or during an outlanding aerotow retrieve.

- 11. How do you determine which is correct in question 10 above?
- 12. What do you understand by the statement that "the power poles are within the range of vision but outside the field of vision". The opposite is also very important, ie "the power poles are within the field of vision but outside the range of vision".

This is a human factor issue related to vision. It is very important and if you are aware of the limitations of the human eye, it may just save your life. This limitation of the eye also applies to general lookout while flying.

13. How would you determine the longest direction of a recently harvested paddock which otherwise looked like a square? How did you go, know all the answers?

We are in the thick of the soaring season again, so it is time to do our preparation both to our gliders and the pilot. I think that if you read this book before your next cross-country flight you will be able to outland with more confidence, and be more likely to locate those hidden obstacles. It may just save you life.

Safe Soaring

P.S. If you cannot get the book and want the answers to the questions then email me. <mgbjp@gol.com>



## **New World Record** set at Bacchus Marsh

#### IAN PATCHING

One of the nicest parts of the position of Secretary of Vintage Gliders Australia is the many letters and notes from enthusiasts from around the world. Back in February, I received one of the strangest letters yet. It was from Mr Edwin Shackleton who lives in the UK and currently holds the title of the "World's Most Experienced Passenger " in the Guiness Book of Records.

n short, he was seeking support to fly in some Australian designed aircraft, particularly gliders, and could I help? At this stage he had flown in 680 types all over the world.

I spoke to him on the phone and ascertained that he was looking at the Kookaburra, designed and built by Edmund Schneider. Well, this bloke is going to be lucky, not only could we offer two types of Kookaburras, Short and Long Wing versions, but the Zepherus and Platypus as well. Not an easy task, being Form 2 time and made even more difficult with Platypus having flutter tests done at RMIT, but with a little bit of luck, possible. To top that off, we could do it at one site, Bacchus Marsh. The only type I couldn't offer was a K4, ours won't arrive until February 2000. His travel itinerary put Bacchus into the time frame of the weekend of the GFA AGM in Sydney, so I wasn't even going to be available.

Edwin was arriving on the Tuesday before and I passed his phone number to Alan to arrange the pick up. It coincided that the Aviation Historical Society was having a meeting on the Wednesday night and Alan took Edwin along as a guest. This of course meant a late night as Edwin had flown in many aircraft that we have never seen in Australia so his impressions were in great demand. Edwin and Alan also shared the same profession as Structural Engineers so there was plenty to talk about.

I arranged, in addition to Alan, for my son Tighe and glider partner Geoff Hearn to help out on the day. The weather was ordered and all the gliders were ready to go. First of the rank was the Short Wing, GRX which was dusted down and towed out. This flight ended back at the hanger where it was put away and the Long Wing GRN taken out. Same again and Platypus then prepared. Luck was with us, as Beaufort was operating Zepherus and the long tow out was alleviated. Doug Lyon, the designer of Zepherus was able to take Edwin for the flight.

It took most of the day for all this to take place but it was definitely worth it. Edwin also has a passion for bird watching and he was able to take in-flight photographs of some friendly wedge-tail eagles that come out for the breeding season and consider gliders fair game, and some spur winged plovers that nest on the airfield. The local press also attended and took plenty of shots for the next edition. Edwin has also promised to write a story for the Vintage Club News, printed in the UK and sent around the world.

My thanks to all who helped on the day and in recent correspondence from Edwin he also sends his heartfelt thanks as well. By the time he left Australia he had entered another 14 types into his logbook, including our four.

## New FAI Badges & Certificates 5



#### FAI Certificates to 20 October 1999

#### A Certificate

WILSON Joel Bruce 10340 NSW AIR TC WATSON John Howard 10341 NSW AIR TC **CLEARY Michael Bruce** 10345 NSW AIR TC **KELLY Heather Margaret** 10347 Port Augusta KALANTARY Farzan 10348 WA AIR TC **B** Certificate NARDOT Sandra Joy 10298 GCV 10257 Adelaide HAUTOP Lorraine Ann A & B Certificates COOK Ian Hunter

10339 Beverley

#### C Certificate

**HALLT Ian David** STEWART Angus John O'NEILL Cameron Thomas A, B & C Certificates WOOLLEY Adam Graham

**CLARK Bruce Lindsay** 

**CURTIS Robert Andrew** WISHART Graeme William **HARROP Roger** 

10133 Lake Keepit 10331 Darling Downs 10188 NSW AIR TC 10187 NSW AIR TC

10342 Central QLD 10343 Adelaide University 10344 Beverley 10346 GCV

Claims for all badges and certificates to: FAI Certificates Officer: **Beryl Hartley** 106 Meryula Street Narromine NSW 2821 Ph: 02 6889 2733 (w), 02 6889 1250 (h) Fax: 02 6889 2933 Email: hartley@avionics.com.au **Decentralised Competition entries to: Gary Hollands** 92 Grange Road Westbourne Park SA 5041 Ph: 08 8230 5722 (w), 08 8271 2020 (h) Fax: 08 8230 4428 Email: Gary.Hollands@adelaide.on.net

# Reserve Parachutes: Out of Sight,

PETER DALL, ACTHPA Senior Safety Officer

For the holiday period, pilots should ensure their flying gear is in safe condition. Most important in a general overhaul of equipment is the inspection and maintenance of reserve parachutes. The following contains some useful points to bear in mind when checking your 'chute.

#### **Canopy and line inspection**

- Parachutes should be aired regularly to prevent moisture from rotting the stitching or fabric.
- Modern parachutes are made almost entirely from nylon. The number one enemy of nylon is sunlight. Store your harness and chute indoors. A surprising

amount of UV can penetrate your harness bag while it sits on the back seat of your car. Inspect for fading and loss of fabric strength when you repack. Install a UV protective bridle cover and deployment bag.

- Inspect the bridle for damage from wear, dirt or UV. Pay special attention to the carabiner loop and the point of entry to your harness container for velcro damage.
- Brass grommets on your deployment bag can create a chemical reaction with rubber bands. Consider changing to nickel grommets. At any rate, new rubber bands should always be used at repack time.
- Check that the bungy used to secure your safety pins is in good condition.
- Make a chute installation check part of every pre-flight inspection.

#### Packing and the 'knee test'

• The usual official recommendation for repack frequency is six months. However, this was originally based on war experience with cotton canopies. You should aim to air, inspect and repack a modern chute at least every 12 months. Take care to keep

- your chute clean; chemical contamination (eg, from a hangar floor or car battery) may hasten degradation.
- Rubber bands used to hold your bridle lines should be replaced with new ones each time you repack. These should not be too tight or strong, and should not be doubled up. A good test for rubber band tension is to pick up the chute by the bridle; the rubber bands should fall off under the weight of the chute alone.
- A square fold of the canopy skirt (as opposed to a mitre fold) will promote faster opening.
- The canopy structural tapes go on the outside.
- Check that safety pins are smooth (not rusty or damaged) and that they are not inserted beyond the shank. Test your bag installation after repack to make sure you can get the chute out.
- Perform a 'knee test' after you have reinstalled your chute in your harness.
   To do this, place your knee inside the harness behind your chute where your body normally goes. Pull the sides of your harness hard towards you while pushing on the back of your chute with



# out of Mind?

your knee. The velcro may give a little and should be re-attached. Repeat until the velcro stops 'complaining'. This will ensure that your chute won't pop out as soon as you drop into prone on your next flight.

#### **Deployment experience**

Practise, practise! No glider pilot who came down under canopy ever thought it would happen to him or her. Consensus is that practising deployments on the ground, attending parachute clinics, looking and reaching for the deployment handle during each flight and practising mental rehearsals are the best ways to prepare for the worst.

The chance of success in any parachute system depends on a number of factors:

- How well the system is packed and maintained.
- How well you are prepared mentally for the situation.
- How kindly the gods are smiling at the time.

#### Sequence

With most hand deployed systems the parachute deploys in the following sequence: the bridle reaches full extension, the lines snake out of the line pocket and the canopy snakes out of the deployment bag. One of the advantages of this system is that the canopy is protected inside the deployment bag until it clears the wreckage or collapsed glider. This reduces the risk of entanglement and the canopy starts to inflate immediately as it starts to come out of its bag.

Throwing the parachute in the direction you want it to go is a fairly natural manoeuvre. When you have determined that it is time to deploy, don't delay! If you are in a spin or tumble your situation can worsen rapidly. Expect at least a 250 feet altitude loss between the time you throw and the time you begin to decelerate under canopy. Because we frequently need to deploy close to the ground, opening distance can be critical.

The deployment is a two step sequence. First, get the chute out of your harness, then look for clear air and throw with all the power you can muster. If you attempt to rip out the chute and throw in one action, a lot of the energy that should have gone into your throw will be wasted in ripping velcro. Throw up and out-you do not want a limp bundle hanging below you.

If your chute does not inflate immediately, tug hard on the bridle. If this does not work you can try pulling it in and re-throwing it. Memorise these actions and mentally rehearse them often. Practise finding your chute handle in flight. Do not attempt a practice deployment in flight!

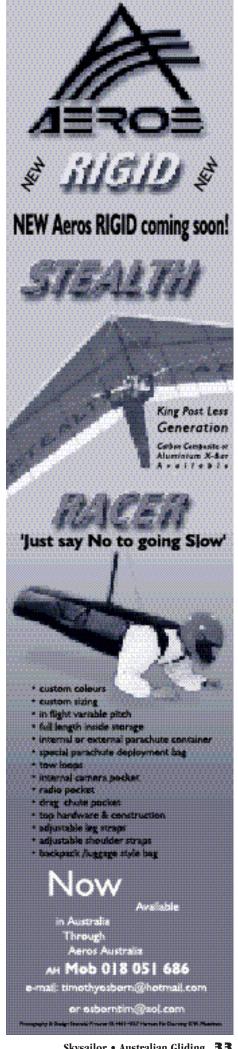
The two most common causes of parachute malfunction are canopy streaming (due to insufficient airspeed for inflation) and entanglement in wreckage.

#### **Preparing for impact**

You should aim to impact the ground glider first, feet next and head last. Here's how:

- Get your legs out of your harness and in a feet down position. With any sort of landing, getting your feet under you to take the initial shock is very important.
- If possible climb into the control frame, or stand on top of your glider if it is upside down.
- Tuck in your arms, keep your legs together with knees slightly bent, and focus your eyes on the horizon.
- If time permits, try to stabilise your glider. It may be quite controllable under canopy, even allowing you to steer and flare.
- Immediately upon landing unhook or cut away. It is usually recommended that you carry a hook knife to cut away after you have landed. Severe injury has resulted from being dragged over rough ground in high winds. However, a hook knife is yet one more piece of equipment to stow and maintain, and possibly interfere with other systems such as sidewires or tow bridles. It is absolutely no use unless you can get it when you need it. You decide.

As an aside, one final use for your parachute is for lowering yourself to the ground in the event of a tree landing.





#### South Australian Hang Gliding Association

This is a notice to all interested HGFA members, regarding summer competition dates incorporating the SAHGA State Titles.

Meeting place (on day of competition): Snowtown Roadhouse, 10am sharp, ph: 08 88652212. UHF communication channel 29.

The competition is to take place over six weekends. Flying site and tasks will be determined on the day by a rostered selection of three competition pilots.

Round 1 and 2:	30/31 October 1999
Round 3 and 4:	20/21 November 1999
Round 5 and 6:	11/12 December 1999
Round 7 and 8:	29/30 January 2000
Round 9 and 10:	19/20 February 2000
Round 11 and 12:	11/12 March 2000

Please call me with any queries regarding this schedule, ph 0418 824063 or 08 83873587 (h).

Ian Horne, Competition Director

#### VHPA Victorian Site Survey

In August this year we undertook a site survey to gauge the usage of sites located on Parks Victoria managed land (yes, we forgot to include Mt Donna Buang!) and some other sites we felt were of low usage (Werribee Gorge and Yarragon).

The results were both surprising and not surprising. Some sites were obviously well used and some surprised us by still being used at all! (Arthur's Seat, Berry's Beach and Yarragon).

The primary intention of the survey was to obtain empirical data to assist in obtaining a statewide PV usage licence, and simultaneously assist in allocating funds for site development works.

To give you some idea of usage the following was determined. If the average hangie or jelly were to go flying 100 times a year (the numbers are easier using 100), and only to the sites surveyed, and actually got a fly each time, then you would fly:

Receiving 30 HG, 24 PG & 2 WM responses, the data provided a snapshot from

Victorian	HG 1999	Avg times flown,	PG 1999	Avg times flown,	Total 1999	Overall
Site Survey	attendances	100 flights HG	attendance	100 flights PG	attendance	<b>Popularity Rating</b>
Arthurs Seat	9	3.04	4	1.76	13	2.49
Berry's Beach	2	0.68	5	2.20	7	1.34
Bell's Beach	52	17.57	47	20.70	99	18.93
Cape Liptrap	3	1.01	11	4.85	14	2.68
Eagles Nest	3	1.01	20	3.81	23	4.40
Flaxmans Hill	22	7.43	0	0.00	22	4.21
Flinders Golf	33	11.15	63	27.75	96	18.36
Johanna	16	5.41	5	2.20	21	4.02
Kilcunda	2	0.68	3	3.52	10	1.91
Mt Dandenong	17	5.74	2	0.88	19	3.63
Mt Mittamatite	15	5.07	3	1.32	18	3.44
Mt Buffalo	73	24.66	4	1.76	77	14.72
Portsea	37	12.50	26	11.45	63	12.05
The Paps	10	3.38	17	7.49	27	5.16
Werribee Gorge	1	0.34	0	0.00	1	0.19
Yarragon	1	0.34	12	5.29	13	2.49
Total	296	100.00	227	100.00	523	100.00

#### **Bogong Cup 2000**

A non-compulsory Aerobatics Competition is to be held on either 30 or 31 January during the Bogong Cup (25 January - 4 February 2000). This has been brought about by interest from a number of pilots trying to get some variation into our comps.

ALSO: The Fédération Française de Vol Libre, a French film crew, is going to film the Cup and assorted antics for international TV!

For further information and accommodation email <mountaincreek@netc.net.au>.

#### Blue Mountains Hang Gliding Club

The Blue Mountains Hang Gliding Club would like to remind pilots of the up and coming Corryong Cup 2000, 16-23 January. Places are strictly limited, call Steve Bell on 02 42941268. For the best fun comp of the season, come and have a crack

Richard Lockhart, President

approximately 10% of the pilot population.

To all those that responded, thank you.

Mark Pike, VHPA Site Development Officer

#### Litespeed wins Brazilian Nationals

Moyes Litespeed dominated the Brazilian Nationals. The first production Litespeeds went to the Brazilian Nationals in Andradas, obtaining first and second place.

#### Results

1	Joel Rebbechi	Litespeed
2	Nene Rotor	Litespeed
3	Andre Wolf	Laminar
4	Beto Schmidt	Topless
5	Guga Saldanha	Fusion
6	Pedro Matos	Laminar
7	Lincon	Laminar
8	Luiz Niemeyer	Laminar
9	Calais	Stealth
10	Ortega	Laminar

Joel flew a completely standard Litespeed, which easily passed US certification. Nene's World proto-glider was set to certified settings before the comp. Nene Rotor won the first three days of the comp, and Joel won the last three days. A Litespeed won 1,000 points every day of the comp!

Congratulations to Joel Rebbechi and Moyes!

#### **Launch Marshall Wanted**

Launch marshall wanted for Corryong Cup 2000 (15-22 January). Wages apply, call Steve Bell on 02 42941268.

#### Hill Flyers Club

Well, it's coming up to that time of year again when we celebrate the year's flying and all get together for the Christmas festivities. Following the success of last year's Hill Flyers Christmas Function, this year's function will again be held at the Club Restaurant (upstairs at the Swan Districts Football Club, Bassendean Oval, corner of Guildford and West Roads, Bassendean). All welcome, for further details contact Rick (08 9294 3962).

The Hill Flyers AGM will be held on the same night just prior to the festivities, and will include a summary of club events and activities held throughout the year. There will be great prizes, FAI badges, etc., awarded for the many pilot achievements throughout the year.

As you may already know, the CAA lowered controlled airspace over Noondeening last year to 4,500ft amsl. I've been working to get CTA back up to at least 6,500ft over the site. To this end we now have an agreement where we can get a release of airspace to 6,500ft in a five mile radius around the Noondeening launch, provided we advise Airservices Australia prior to our commencing hang gliding operations. Restrictions include:

- all pilots flying on the day to have a serviceable UHF radio,
- that a duty pilot be available who may be contacted (by mobile phone) by Airservices Australia for the period of the release of the airspace,
- and that the duty pilot be able to contact any pilot flying in the CTA.

The intention is to be able to organise a release of airspace on the Friday prior to a weekend 'fly-in' at the site. Otherwise take note that CTA over Noondeening is 4,500ft. No excuses for anyone being cleaned up by approaching turbo-prop commercial aircraft, for which the CTA was lowered.

Don't forget to check the hotline (08 9387 3258) for all the news, fly-ins, or to catch other pilots wanting to share transport, etc.

For those looking for some great coastal flying, there will (as usual) be a congregation of pilots gathering at the Shellies camping area for this year's Christmas/New Year break.

at Corryong!

### **Hang Gliding • Paragliding • Microlights**

The Hill Flyers Club meeting night is planned to change as of January 2000, to the last Thursday of the month instead of the current Wednesday night. This will meet Swan Districts requirements (our venue sponsors), while giving us the advantage of two happy half hours with discount drinks and bar snacks.

Merry Christmas to all and a Happy New Year... Happy New Millennium!

Rick

# Stolen Paraglider Gear Paragliding equipment stolen from the car on Friday 8 October at Sunshine Beach, Noosa, QLD. Please look out for the following:

Apco Bifutura tandem 42m<sup>2</sup>: Top purple, white underneath with "Ken Johnson Homes, Tin Can Bay" blue and red logo. Apco Santana 30m<sup>2</sup>: All blue with red line across, a few patches (some with same fabric, some with royal blue ripstop).

Firebird Apache tandem 40m<sup>2</sup>. Faded orange Apco Secura harness with airfoam backplate, black and faded purple.

Please contact Jean-Luc on 0418 754157 if you come across any of this gear.

#### **Cloudbase Paragliding Club**

The flying has continued to improve in WA as the weather warms up. A number of pilots took the club winch out to Wyalkatchem to join in the last weekend of the Western Soarers 'spring thermal week'. Dennis Smith and I both managed to get away twice each for short cross-countries. The best distance was a very fast and low 22km by myself on a windy Sunday morning.

The same weekend several pilots went down to Albany and kicked off the summer coastal soaring season with a lot of airtime. Several novice pilots clocked up six to seven hours each, including Sylvie who doubled her airtime in one weekend. Just in the last weeks of October Mt Bakewell has really started to work too. Dennis Smith and Jiri Hlavaty flew about 35km from there to the Northam Rd, the longest XC so far this season.

Several new sites have been established, thanks largely to Dave Humphrey's efforts. There are now easterly take-offs on Windmill Hill and Mt Nardie, and a SSW take-off from Ashley Morgan's place on Mt Bakewell. So far only the Mt Nardie site has

been flown, and only briefly. Please don't fly these sites without checking with Dave, until they are better established. The Mt Nardie site now has a log in and money box which applies to the new take-off and the old one, please use it. Bernie has also successfully flown the new beach site at Avalon, near Mandurah.

A safety officers meeting was held on 20 October to re-assess site ratings. The main changes have been to Mt Bakewell, which is now rated as intermediate (with site induction), and novice with advanced supervision. The same rating has been applied to Noondeening Hill for the summer at least. This should enable more pilots

to enjoy flying Mt Bakewell when the conditions are good, as they often are in the evenings.

The sites at Leighton Beach and Mosman Park have been rated intermediate with advanced supervision for the same reasons. The sites around Windmill Hill and Mt Nardie are now rated intermediate with site induction.

Mike Dufty, Secretary

#### **Moyes Litespeed**

Moyes announces the release of the new Litespeed, now finalised and in production.

12 months ago we made a commitment to make the best competition glider in the world, and make it available to customers. To achieve this feat, world renown hang glider pilot and designer Gerolf Heinrichs was contracted to head the project. Several design objectives had to be met.

- The glider needed to have light, predictable handling to make for easy, tireless control in heavy traffic.
- To achieve this the airframe weight needed to be reduced considerably. Sink rate performance and stall speed needed to equal or better other gliders.
- A tight, wrinkle free sail with minimum twist needed to be designed to achieve superior glide performance.
- Pitch stability and tumble resistance needed to be improved to allow pilots to fly on the limit without compromising safety.

To develop such a glider, many innovative design steps needed to be employed. The first step was to improve the airframe. Initial prototypes utilised complete 7075 airframes with revised geometry and construction, and almost standard CSX sails. To increase the safety a compensator was incorporated into the main inboard sprog. The compensator utilises the change in crossbar to leading edge



geometry from VG tight to VG loose. When the VG is released the sprogs rise linearly, making a difference of 10cm (4") between loose and tight VG.

email: SkyGodfrey@AOL.com

Initial prototypes proved to have lighter and more predictable handling, with an increase in safety margin. Weight had also been reduced, but initially there was only a slight increase in glide performance. This called for a complete redesign of the sail.

A team of three was formed, comprising Gerolf Heinrichs (aerodynamicist), Attila Bertok (computer programmer and engineer) and Andrew Berdo (Moyes sailmaker for 11 years). The team worked around the clock trying to complete a prototype for the Worlds. They researched what was aerodynamically the most desirable formation for a hang glider. Then by incorporating the latest sailmaking technology and cloths, the 'ideal' wing became a reality.

After three months the first prototype lifted off the ground. This was an exciting period, as the Litespeed was the first ▶





#### **Adventure 2000**

The ultimate paragliding tour of the century. Starting from Turkey, crisscrossing Europe and finishing in Spain. This hop-on- hop-off tour is the most economical way of exploring the best sites in Europe. This budget tour is expected to last six weeks (3 Jul - 13 Aug).

Cost: Give me a call.

**Coverage:** Turkey, Greece, Austria, Italy, Switzerland, France, Spain and Balkans (Subject to modifications due ever changing situation in Balkans).

#### **Autumn Adventure**

A full on paragliding adventure for hard core paragliding pilots in the south-western part of Turkey along the Turquoise Coast.

Come and indulge yourself by flying over the most scenic places on earth. Spoil yourself with a SIV course (advance manoeuvre clinics) over Oludeniz. Experience Turkish life style as a guest not like a tourist.

Besides flying, we enjoy activities like swimming in ancient Turkish baths, swimming in 36°C thermic swimming pools in rural Turkey under olive orchards, mud bath, and experiencing real Turkish life style.

This three weeks long (27 Aug - (c) 15 Sept) trip will cost \$A1,650.

**Included:** Transportation (in Turkey), retrieve, accommodation and food.

**Options:** Different plans are available for people who cannot come for the full three weeks or prefer to arrange their own accommodation and food.

**Extras:** SIV (advance manoeuvre clinics) at Oludeniz where Security in Flight video by Jocky Sanderson was recorded.

Contact Hakim Mentes as early as possible.

Mobile: 0412 617 216

Email: <a href="mailto:hmentes@ozemail.com.au">hmentes@ozemail.com.au</a>
Web: <a href="http://fly.to/WildTurkey">http://fly.to/WildTurkey</a>

Moyes sail fully designed on computer. The results were outstanding, initial comparisons showing significant increase in glide. Sink rate improved by 8% and the stall speed reduced by 2mph. This glider was capable of sustaining 83mph, and still had a usable glide at this speed. At top speeds glide was over 20% better than previous prototypes.

A finished glider was sent to complete testing and the biggest surprise came: The glider passed all pitch tests with an incredible margin. The sprog system was then lowered to a setting even lower than that of the Worlds prototypes! To our amazement the glider still comfortably passed stringent USHGMA pitch requirements. In fact, throughout strong negative angles of attack (important for tumble resistance) the glider produced a stronger more consistent pitch moment than ever seen on a Moves glider.

The Litespeed features a unique sprog and dive stick design, having both inner and outer dive struts suspended by a stiff cable brace. After testing 27 different combinations, the final construction proved to be more than four times stiffer, almost two times stronger, and 500g lighter than the proven CSX sprog system. With such a strong stability system working alongside the unique compensator system, the Litespeed's improvement in safety is phenomenal.

The Litespeed spar is designed by Gerolf Heinrichs and perfected by world renowned America's Cup yacht builder John McConaghy. The spar utilises pre-impregnated carbonfibre to ensure the best possible strength and structural consistency. Each spar is individually tested to ensure its quality. The spar has a revised design and layup schedule, which increases strength around the centre pins. Also new on the spar is a revised taper which eliminates airframe interference with the sail. The taper was designed to increase load absorption under negative G's, to allow maximum structural integrity in difficult situations.

#### **Litespeed Specifications**

 Model
 Litespeed 5

 Area
 155ft² (14.4m²)

 Span
 34ft 1in (10m)

 Nose angle
 130°

 Aspect ratio
 7.5

 Glider weight
 76lbs (34.5kg)

 Pilot hook-in weight
 80kg-120kg/175lb-265lb

#### **Personal Emergency Beacon**

An Australian designed, pocket size satellite emergency locator beacon is now available for sport aviation pilots.

The KTi Sat Alert will transmit a distress signal on both 121.5 and 243 MHz when activated. Signals can be detected by COS PAS/SARSAT satellites and over-flying aircraft monitoring distress frequencies anywhere in



Australia, PNG or NZ. If you're forced down in a remote area, over land or sea, this unit can accurately signal your position and enable rescue to take place.

KTi Sat Alert is

yellow, 11cm tall, weighs only 215g and comes with a carry case. It offers up to 96 hours transmitting time powered by super long life lithium batteries, has an easy test function and with field battery replacement capability, it is not a throw-away item. For more information call Ultralight Flying Machines in Melbourne.

#### Have a fly on Hangsim

Hangsim takes free-flying to new heights. Proprietary engine combines 3D terrain and airflow model for real wind & weather effects. Knock-out graphics created with DirectX 6 deliver see-everything detail.

When you're soaring over a mountain in a hang glider, how does the slope of the mountain and the strength and angle of the wind affect your flight? What happens when you hit a patch of turbulence over uneven ground? How does the sound change as the wind shifts beneath your wings? How does it feel when you take your glider on a steep turn? Hangsim (Wilco Publishing's new

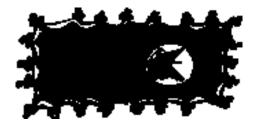
light aviation simulator) delivers these equilibrium-challenging sensations for the first time ever, replicating the flight dynamics of hang gliders, paragliders, microlights and sailplanes.

The title offers four different modes that allow players to build up from rookie status to full-blown competition. Free Flight consists of training flights in which you learn how to handle your craft. In Challenge mode, severe weather, cloud coverage, strong thermals and other effects can be added to test your mettle against Mother Nature. In Competition mode, you race against intelligent gliders who can wander the skies in search of a better thermal or ridge, fly singly or in formation, and adjust their flight strategy to the design of their craft. There's also a Just for Fun mode that lets you shoot other gliders down commando-style.

Hangsim will be sold at computer stores nationwide and carry an MSRP of US\$39. Minimum system requirements include a Pentium 166 with Windows 95/98, 100MB of free hard disk space, DirectX 6.0 or higher, a 3D graphics accelerator and a sound card. The game is set for October release Wilco is based in Belgium and can be reached on the web at www.wilcopub.com or via phone at +011 32 23313290.

## Hang Gliding • Paragliding • Microlights

## **HGFA Operations Manager's Report**



erry Christmas to all, and safe and enjoyable flying in the New Year. I will be having a few days off over the Christmas period, though in an emergency I can be contacted at my office telephone number (see HGFA Contacts at the rear of AG/Skysailor for the number).

I write this report from Canungra in sunny south-east Queensland, mid-way through the Canungra Classic (though it happens to be pouring outside at the moment). Again the Canungra Club have organised an excellent event. It is more than just a competition, it is a great week's entertainment, with many events organised around some good flying. The enthusiasm of the club members never ceases to amaze – keep up the good work guys and girls!

## Variations to Requirements of the Civil Aviation Orders 95.8

Last year CAO 95.8 was amended by the Civil Aviation Safety Authority (CASA) to remove the authority of CASA District Flight Operations Managers to allow flights to be conducted outside the requirements of the CAO. This was done because it was found that this delegation was not permissible under the Civil Aviation Act. This means that any pilot or club wishing to gain a variation must now make application for a specific approval which must be authorised by the Director of Aviation Safety in Canberra (in accordance with CAR 149).

This is not impossible, but it does take time to process (a minimum of 28 days). If a club or a pilot wishes to fly at a public gathering, operate in Controlled Airspace, or do anything else (within reason) that is precluded by CAO 95.8, application must be made to CASA through me. CASA ask that I process applications to ensure that the application clearly points out what specific exemptions are sought and to ensure that safe procedures are put in place.

Thankfully, with the introduction of the proposed new regulations (CASR 103 for sport aviation), this process will be somewhat easier. Part 103 will allow sport aviation pilots to operate in CTA with the approval of the Flight Service Unit that controls the specific airspace; and displays will be per-

mitted if they are carried out in accordance with CASA approved guidelines. The HGFA has already developed a display manual in readiness for the introduction of the new Part 103, which is due for implementation on 1 July 2000.

#### **CTAF Operations**

Recently the Porepunkah airstrip was "made" a CTAF. What this means is that all aircraft operating in the vicinity of the airstrip are recommended to carry and use a VHF airband radio on the Common Traffic Advisory Frequency (CTAF). The CTAF area was promulgated at the request of the local microlight and general aviation (GA) operators, due to the number of aircraft using the airstrip. The CTAF area is within five nautical miles of the Porepunkah strip, up to a height of 3,000ft agl.

Though radio carriage is recommended, hang glider, paraglider or microlight pilots without VHF radio are not precluded from entering a CTAF without VHF radio. However, if glider towing operations are carried out from any strip that may be used by GA pilots, it is a requirement that a VHF radio base station is set up and the CTAF or appropriate area frequency is monitored. This is to enable any inbound aircraft to be warned of the presence of towing operations. A towing symbol (in the form of a white "double" cross) must also be displayed adjacent to the primary wind indicator at the airstrip (refer to the HGFA Towing Procedures Manual).

If a CTAF airstrip is used by a regular passenger transport service (RPT), each and every aircraft must carry and use a VHF radio when operating within eight kilometres of the runway (HGFA OPS Manual Section 6.4.1). Obviously this does not apply at Porepunkah as there is no RPT service operating there.

When landing at any airstrip it is recommended that hang glider or paraglider pilots circuit inside other air traffic and land on the verge of the runway without crossing over it at low level (refer HGFA OPS Manual Section 6.3.3).

#### **Accident Reports**

No.1 Pilot:

Advanced hang

glider pilot

Experience: 100 hours

Exp. last 90 days: 22 hours Glider: High perf

*er:* High performance hang glider

Aircraft damage: Nil
Weather: Nil wind
Location: Outlanding

Pilot injury: Broken upper arm

#### Description:

During a cross-country task at a competition the pilot was forced to outland. He had a landing paddock chosen from some height and approached to circuit the paddock. During circuit he realised that there were several horses in the paddock and at the last minute decided to go for the adjacent field. He failed to clear the fence, clipped it with a wing tip, and spun to the ground, breaking his arm.

#### Comments:

From his hospital bed the pilot stated that he should have stuck with his initial choice of landing paddock. Suffering the consequences of an irate landowner is certainly preferable to breaking an arm. Obviously it is desirable to avoid stock and crops, but not at the expense of safety.

No.2

Pilot: Restricted

paraglider pilot

Experience: 15 hours

Glider: Standard paraglider

Aircraft damage: Several damaged lines,

small canopy tear

Weather: 8-10 knots,

mild turbulence

Location: Inland site

*Pilot injury:* Nil

#### Description:

The pilot approached to land in a small paddock and commenced figure of eight turns over trees downwind of the paddock. During the second turn he lost more height than anticipated (possibly due to sink or a little too much brake), levelled off and found that he could not make the landing and flared into the top of the trees next to the field.

#### Comments:

The pilot was able to get himself from the low trees unaided. When approaching a small paddock it is be beneficial to carry out a standard circuit around the paddock. This allows the circuit to be adjusted to allow for variations in the air and ensures that the paddock can be reached at all times. When using a standard circuit approach, if on turning onto the base leg the approach is too high, the "base" can always be extended and turned into a figure of eight if required. If low, the circuit can be closed up to shorten it and ensure the landing field can be reached.

Fly safely, Craig Worth Gliding 5

## 1999 Queensland FAI State

Darling Downs Soaring Club, 2-6 October

MITCH PRESTON (Little Petunia Crew Chief)

Any gliding competition is only as good as its executive committee. This is generally a given in the high octane world of lead sleds, 'weed cutter' finishes and taking that  $\frac{1}{2}$  knot climb at an altitude where most mortals are considering turning from base onto final. Queensland '99 ran like a well-tuned donk, and that can be attributed to the efforts of Peter Griffiths and John 'Butch' Buchanan, who in turn coordinated a willing band of volunteers.

riffo and Butch (to use their scientific names) demonstrated the correct mixture of diplomacy and firmness as each was required, which allowed competitors to get on with the job of safe, and in some cases very fast flying. The Darling Downs once again provided a most suitable backdrop for this year's airborne jousting. Locals looked forward to a brace of good days as the recent late winter weather had been supplying thermals in abundance. To see their faces lengthen as days one and two both surrendered to the gods of non-flying weather was enough to make even the most hardened of 'comp jocks' feel a pinch of sorrow. Starting a gliding competition with two 'no fly' days can perhaps be described as 'soarus interruptus'. To complicate matters for the organisers day 'one' did present a window of useable weather later in the day, by which stage pilots and crews had dispersed into the area for a variety of tourist activities. Day 'two' was just as capricious, as it started out in a benign fashion only to turn nasty between the first and second briefings. DDSC local Bob Ward had little opposition in declaring that starting a comp on a 'fluky day' was not a very good career move. An approaching trough brought a virulent little storm at 3:30 that afternoon; Bob's summation had indeed been vindicated. When the weather came to its senses the communal lift in spirits was most tangible. A surge of enthusiasm saw the fleet sent out on day 'one/three' into a lethargic airmass, which seemed reluctant to give up its cache of energy. The road west from DDSC was later in the day a thoroughfare laden with car/trailer combinations, as crew members set out to collect their fallen charges. Progressing through the week, the conditions improved somewhat although each day brought to the competitors challenges that saw more hitching of trailers and buying of 'cooling libations' designed to make pilots a little more tractable when eventually found. Conditions delivered good climbs to the 'thermal bloodhounds' (Bruce Taylor take a bow - the mythical one knots at Jimbour has cemented your place in the gliding pantheon) only to bring veterans like Harry Medlicott undone, although he was not alone, as his clawing away from down amongst the weeds along the banks of the

Condamine river
near Kupunn late on
day 'two' soon turned into a
group therapy event. Toward the
closing stages of the week the skies
created beckoning scenes that
disappointingly did not live up to
their true potential. This did not of
course stop the 'space shuttle drivers'

from extracting high energy performances in such conditions. Apart from the previously mentioned Bruce Taylor, people such as Hank Kauffmann, Butch Buchanan, visiting Swiss flyer Christian Hoestettler and rising star Matt Anglim found the good air on a regular basis and used it to post high speeds. Generally speaking it was not vintage Darling Downs weather, however what passes for average up there is often classed as 'pumping' elsewhere. A special thanks must be made to Harry Medlicott who not only competed each day but also provided his usual high standard of weather interpretations. Considering the complexities of the weather this was not an easy task to sustain. Gliding competitions have their fare share of 'bloopers' and QLD '99 was no exception.

Two events that deserve mention are as follows:

- a) The competition OPS director taking the wellbeing of his fellow pilots seriously, so much so that he landed out during the practice day in an attempt to inspect outlanding prospects (or so he said yeah right Butch...)
- b) 'Cuddly' Dudley Waters landing out in a large circular paddock (hmm...) that was home to the nemesis of all glider pilots, the Pivot Irrigator! Dudley landed close enough to the machine that even with its speed of about that of an injured snail he had to summon help in a

38 Australian Gliding • Skysailor December 1

# Championships

Schleicher K-21 by Stephen Nesser

brisk fashion to prevent his ASW 20 from getting an unscheduled wash and polish. He is now very suspicious of paddocks that are anything but straight sided. It may also be of some note to observe that Robert Bradley's feet were seen to be encased in some strange non-thong like covering, which was later identified as being a pair of shoes. Police are still interviewing shocked witnesses.

#### Results

Standard	15 Metre	Open (or self launching
		as it really was!)
1 Butch Buchanan	Bruce Taylor (in an LS8!)	Hank Kauffmann
2 Matt Anglim	Christian Hoestettler	Tracey Tabar
3 Tom 'Freight Train' Claffey	Trevor 'Little Petunia' West	Bob Ward

The winner for the loudest aircraft was ex-DDSC member Geoff Brown who performed a fly-past on Tuesday in the ultimate hotship, an airforce Hornet fighter. The clubhouse windows were still rattling 15 minutes later... One more observation; crewing at a comps is a little like the old services maxim of 'hurry up and wait'. For me the crewing chores were greatly relieved by the most kind invitation to share the ASH 25 as syndicate owned by Ian Barraclough and Geoff Sim. For two magical days I sat behind Ian as we negotiated the 'task du jour'. All that can be said about flying in an ASH is it's the most fun you can have with your pants on. To Ian, my sincere thanks once again for letting me share the fun, especially the part where we lit the iron thermal and motored away from Dalby aerodrome. A strange almost perverse sense of fun was consequently felt when shortly after some gliders came over to join 'that glider over there going up like a homesick angel'. For a moment I felt like David Copperfield (no not him, the other one – Claudia Schiffer's ex...).

## Gliding 5



CHRIS STEPHENS, Decentralised Competitions Officer

ules for the Baron Hilton Cup have been simplified and made easier to read and understand. However, flight verification remains rigorous.

This is a prestigious international competition with 10 days free soaring hosted by Baron Hilton at his famous biennial Flying-M Soaring Camp in Nevada as the reward for each regional winner and their crew. The reward includes all meals and accommodation, airfares and lots of alternative activities for the crew while the pilot is soaring. The Baron Hilton Cup is in fact the World Championship of decentralised cross-country competitions as the IGC have elevated it to the same FAI level as the other World Championships.

Pilots need to complete a triangular flight with a minimum flying distance of 400km by 15 March 2000 to be eligible. If the triangle is not an FAI one, a reduction of 12.5% will be applied. One point per kilometre is awarded then adjusted using the BHC handicap factor for the sailplane flown. Entries are made on the GFA Badge Claim Form by completing the Distance Section,







Top left: Nobuko and Chris Stephens

Left: Outlanding prospects were never good. Going up at 14kt

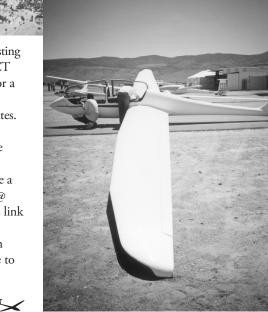
Below: Everyone had a check flight in a Grob on Day 1

Across left: One of the two pilot retrieve helicopters

attaching the required evidence, then posting all to me at PO Box W48, Wanniassa, ACT 2903. Include either your email address or a stamped self-addressed envelope for

acknowledgement and updates. The complete revised BHC Rules and Handicaps will be published soon. For your personal copy either drop me a line or email to <poboxw48@ dynamite.com.au>. I plan to link a combined Decentralised Cross-Country Competition and Baron Hilton Cup page to the GFA website with fortnightly updates.

Safe soaring.







Red or white? Ten nights of four star service was hard to take. Flying-M Ranch dining room



A visit to the historic wild west gold town of Bodi – well worth the visit!

The Ranch's backyard tent and pool for crew relaxation



## GFA Letters to the Editor

#### Back to a Small Format AG

Lying in bed one morning, I reached into the drawer of the bedside table and randomly picked up something to read. It was the December 1997 edition of Australian Gliding.

What a delight! It was small enough to be held in one hand without the pages flopping over so that they were hard to read, the paper was good quality without being so glossy that the reflections made reading difficult, and there were no watermark or coloured backgrounds to make the print disappear.

Furthermore, the content was exclusively gliding, which is my main interest. I was not bombarded with bad language or "Gung Ho" reports from the younger and more adventurous members of the other branches of recreational flying.

Don't get me wrong, I am full of admiration for those people and wish that I was young enough and nimble enough to enjoy their sport, because to be out in the fresh air with the wind in your face must be really flying, but I am not, and I would like to see our magazines go their separate ways. There is nothing to stop those that want to from joining as many organisations as they like, and reading as many magazines as they like too, but I long for the days of the monthly AG devoted principally to gliding as I know it.

The latest minutes of the NSW GA mention three alternatives for the magazine. My vote is to go back to the small size, with gliding content only, and issued monthly.

Regards, Jim Collett, Goulburn NSW

As the GFA celebrates its 50 years of operation it is perhaps time to review our current position and particularly ask ourselves whether our present organisational structure is what is needed for the new millennium. Currently we are close to crisis with membership down by a half from its peak.

The proposed merger with the HGFA was largely a response to declining membership.

Speak to hard working and dedicated GFA officials and they will complain of the apathy and unwillingness of rank and file members to contribute to GFA activities. Speak to the same rank and file members and the comments here are:

- Their GFA fees are no more than a levy which they must pay in order to fly.
- They are largely unaware of who represents them at GFA level.
- They consider the GFA undemocratic in that it appears the Executive is elected by the merest handful of pilots and that they are mostly disenfranchised by the tyranny of distance.

 Average club members consider the GFA elitist in that it spends a disproportionate amount of its discretionary expenditure and effort on a comparatively small aspect of gliding, namely, competitions and overseas representation.

At the recent Queensland State Competition 31 pilots voted unanimously for a motion calling for non-salaried executive officers of the GFA and State associations to be elected by optional preferential postal voting. In doing so there was not the slightest criticism of existing representatives and the move was seen as a means of strengthening the GFA structure and supporting those dedicated people to whom we all owe so much.

The intention is to present similar motions at other pilots meetings and depending on response to contact individual clubs. Hopefully the GFA and State associations will take notice and give consideration to structural changes.

My personal hope is that elections would take a similar form to AOPA and many comparable

organisations whereby a brief bio- graphy and the policy intentions of candidates are circulated in the national magazine, together with postal voting forms. In most cases the same people would be elected, but they would be given a personality and members would be far more likely to feel part of and participate in the affairs of the GFA if such a change occurred.

#### Harry Medlicott

Association for postal voting by members and any move to change/alter the articles has been defeated. The method of election of office bearers noted in this letter was proposed in the amalgamation proposal. All of the executive supported this method of election. The members have voted and the result is history.

State/Regional associations and Federal bodies are desperate for volunteer workers to take on administration roles. Every member of the GFA is encouraged to attend State/Regional association meetings and take on positions within these groups. There is no restriction to any participation by interested members to participation in GFA administration other than supplying time, effort and enthusiasm.

Discretionary and fixed expenditure and effort of the GFA executive is well documented in the financial reports presented to each member. In 1998/99 expenditure was:

Administration Expenses\$343,052Airworthiness Expenses\$68,252Operations Expenses\$78,625Sporting Expenses\$44,225

Beryl Hartley, President GFA \*

December 1999 Skysailor • Australian Gliding 41

## Soaring Calendar 5

#### **Victorian State Competitions** (the Friendly Comps)

#### 3-11 December 1999

Open class, Standard class, 15m/Racing class, Club class. Clubs are encouraged to participate and promote coaching of early crosscountry pilots.

#### **Basic Cross-Country Seminar**

#### 11-12 December 1999

At Gawler, contact Rob Moore, ph: 08 82588026.

#### Narrogin 35th Birthday, **Christmas Party and Pylon Race**

11 December 1999

At the clubhouse.

#### **SAGA Performance Week**

#### 12-17 December 1999

At Waikerie. Team flying and coaching for advanced pilots, contact Bruce Tuncks RTO/S, ph: 08 82527905.

#### **WA State Comps**

#### 2-15 January 2000

Narrogin. Contact: Dennis MacNeal 08 9246 9593, email: <mach11@hotmail.com>

#### SAGA State Competitions at Balaklava

#### 9-15 January 2000

Practice day: 8 Jan. Enquires to John Cheetham, ph: 08 8379 6747 or fax: 08 8379 6758 for information. For entry form and pilot qualification form see web page <www.bgc.asn.au>.

Entry fee: \$120. Full catering, camping and vans may be on site. Good chance for pilots to get practice if entering Barossa Glide.

#### Barossa Glide

#### Australian Club Class Championships

#### 17-28 January 2000

Gawler South Australia (Pre-world Club Class formerly Sports & 2-Seater Class) See September issue of AG for entry form.

#### Vintage Sailplane 2000 Rally

#### January 2000

Lake Keepit, NSW. The Vintage Glider Association is holding their rally at Lake Keepit, near Tamworth, NSW, in early January. Winch and aerotow available. For final details contact lan Patching, ph: 03 94381497.

#### Year 2000 Homebuilt Glider Fly-In

To be held at Lake Keepit in conjunction with the VGA Rally.

#### Horsham week Y2K

#### 5-12 February 2000 (inclusive)

Enjoy a great week of cross-country competition flying over one of the safest areas in Australia. Ideal for early crosscountry pilots through to champions. Limited camping available. Loggers strongly recommended. More information call Joe Luciani ph: 03 5382 5735.

#### **VSA Regional Committee meetings**

#### 24 February 2000

20 April 2000

At 19:30 at the Uniting Church Hall, 329 Dorcas Street, South Melbourne. 29 July 2000

AGM (venue t.b.a.)

#### **Gulgong Regatta**

#### 4-11 March 2000

All classes, gliders and pilots handicapped. Multiple pilots welcomed. Camping space available on airfield and plenty of accommodation in Gulgong. Enquiries to Christine Meertens ph: 02 94522777, fax 02 94530777 email: <hkmxor@msn.com.au>



Notification of events will be made in the Soaring Calendar up until the time of your event. Event information should include a description and the date of the event, location and contact details of the organiser. Contact details should include phone, fax numbers and email to gain maximum response from readers. (Ed.)



#### HANG GLIDER PILOTS

Quick conversion course

Christof Kratzner - World Champion Hang Glider Pilot 1999 FAI 2 - will be at Tocumwal most of the summer - come and meet Christof!

#### **CLUB PILOTS**

- Build your hours and extend your cross-country training experience.

#### Largest fleet in Australia waiting for you!!!

Motel Pool Spacious lawns Liberator lic. Restaurant

#### **AUSTRALIA'S MOST ADVANCED SOARING CENTRE**

Web Site: www.sportavia.com.au Email: info@sportavia.com.au

P.O. BOX 78, TOCUMWAL 2714 **N.S.W. AUSTRALIA** 

PHONE: (03) 5874 2063 FAX: (03) 5874 2705



Make Horsham\* Aerodrome your base for complete sailplane care and attention. Repair work and hangarage fully insured.

- ★ GFA APPROVED WORKSHOP ★ REPAIRS MAJOR/MINOR
  - ★ REFINISHING IN SUPERIOR GERMAN 2K OR FERRO
  - ★ INSPECTIONS/SURVEYS FRP/STEEL TUBE/WOOD

## Refinish Vacancy Available in Year 2000

Phone: Joe Luciani - 03 53825735 Hangar 03 53826777 Fax: 03 53821999 23 FARRAR AVE, HORSHAM, VIC 3400

Australian Agent for Mountain High Electronic Delivery Oxygen Systems.

\*The Good Country. Home of the Wimmera Soaring Club.

**42** Australian Gliding • Skysailor



# The Nautical Mile

The Nautical Mile(Nm) is one minute of arc on the surface of the earth and for practical purposes is 6,080 feet in length. For marine and aviation purposes one Nm per hour is known as a Knot.

his term arrives from the early days of marine navigation and was used by the likes of Cook and Bligh on their voyages to and from Australia. To obtain the speed of their ships they used a long rope with a series of knots in it, each marked with a strip of coloured cloth to aid counting. This rope was tied to a wooden bucket and the bucket was thrown over the stern and as the ship sailed on, the time was kept by a minute glass similar to a old-fashioned egg timer or hourglass. The number of knots in the rope as it paid out over the stem was counted against one turn of the minute glass and reported as so many knots. The navigator would use this in his calculations. (Question: How far apart would the knots be?)

#### Now to gliding:

In Australia we fly at Knots (kt) and measure our height in Feet (ft) our varios commonly measure in kt but sometimes in Feet Per Minute (fpm). For distance over the ground we measure in Kilometers (km).

In our glider with one of two types of varios (kt or fpm) we can establish a fairly accurate L/D through the air quite easily by dividing our airspeed of, say, 60kt by the rate of sink shown on the vario, say, 2kt. This gives us a L/D of 30:1. For varios showing fpm it is just as simple if we look again at 6,080ft = 1kt. When looking at the markings on the vario it is marked in divisions of 100fpm, which equals 6,000 feet per hour or near enough 1kt. Thus, say, 200fpm = 2kt so the L/D is just the same as it was for the vario showing kt. (You should now have the answer to the question above.)

There is no direct relationship of the Nautical Mile to the GPS. As glider pilots we use the WAC chart to navigate during our cross-country flights. The scale of a WAC chart is 1 in 1 million (1:1,000,000) or 1 millimetre represents 1km. However the WAC chart is marked out in Degrees (deg) December 1999

and Minutes (min) laid out to (in Australia) a standard known as WGS84. Whilst we must remember that one minute is one Nm (in longitude only except at the equator) we must also remember that we measure distance in km. Note: One Nm is 1.85km.

#### Before I go further, a little reminder...

...on the lines of Longitude (long.) and Latitude (lat.): Long. are the lines that go north and south through the north and south poles. The line marked '0' actually goes through Greenwich near London, England, and the lines number upwards eastward. In eastern Australia the lines of long. are in the 140 to 150+ range, but are lower in western Australia. Lat. are

a series of parallel lines around the earth. A large globe will show this in more detail.

However, just looking at a WAC chart will give you some idea. You will notice that it is both tapered and curved. This is because our lines of long. are converging towards the south pole (the only place where they are exactly parallel being at the equator). The lines of lat. being exactly parallel become smaller in diameter further north or south of the equator.

#### Now another little reminder:

The north and south magnetic poles are nowhere near our geographical north and south poles. The magnetic north pole is actually

in northern Canada. Because of this, when navigating you have to allow for what is known as magnetic variation. Currently in the eastern states of Australia this is about 11 East. When setting up a GPS, there is an option of using either True (geographic) or Magnetic. If you are used to a compass I suggest Magnetic. It really does not matter as the GPS unit will still navigate you to the place that you have entered the co-ordinates for.

Now for the subject of co-ordinates: firstly another little reminder. There are 360 lines of long. around the Earth, one for each degree of the diameter of the Earth and similar spacing for the lines of lat. Each degree is then sub divided into 60 minutes and again into 60 seconds. A close look at your WAC chart will confirm this, except for the seconds which are too small to show.

To establish a set of co-ordinates for a particular place is fairly easy. First you locate the nearest lines of long. and lat. to the west and north. You first measure the number

of minutes to the east and to the south. Drawing lines from these points will, at the intersection, give you a close enough location. You can guess at the seconds if you want to.

#### A little more on the subject of seconds:

There are two types of seconds, first the Geographical Second that we know is 1/60th of a minute (and we know that a minute is 6,080ft in length), making the second 101.3ft or 30.87m. Now there is the so-called Decimal Second that is expressed as thousandths of a minute. This makes each second 6.08ft or 1.85m.

If like mine, your GPS, when set to read WGS84 will not accept decimal seconds, the conversion is quite easy, just multiply by 60. An example:  $.567 \times 60 = 34$  seconds. The only vague reason for using decimal seconds apart from a slight increase in accuracy is that there just happens to be 1.85km to the Nm.

#### On the subject of accuracy:

It was noted in a recent issue of Australian Gliding that one particular gliding club is in apparently five different places, or at least their clubhouse, or whatever point they took their geographic location from. Also I recently overheard on the radio a pilot giving locations for competition start points. How can you possibly give reasonably accurate co-ordinates from the air? I guess though that as long as you can prove you went to the GPS-derived co-ordinates by using a GPS linked electronic flight recorder then you are OK. For record or badge flights, again, as long as you can prove the same way that you went there, then again you are OK, for it is by the stated co-ordinates on your claim form that calculations are done, even if it is out in the bush somewhere with no identifiable point (from the air).

Incidentally, the FAI in their far off offices have decreed that for calculation purposes the earth has a radius of 6371.0km but unless you have a understanding of spherical geometry, forget it and do like I did, buy the excellent (Australian) TaskSet computer programme. Then, like me, you can sit and plan your flights without hardly looking at a chart or doing a single calculation.

(Name and address supplied)

# The Kosciusko Experience!

PETER BOWYER

Kosciusko National Park really is a very beautiful place, quite unique to Australia. Sure, it doesn't quite compare to the Himalayan Range in height, but it's Ozzie through and through! On one of my very first trips to Bright (via the Snowy Mountains with my best mate Rob Schroettner) we dropped in to the Michelago Service Station to say "Hi" to Michael Spratt and have a quick coffee. On looking around the walls of the service station I noticed a photo of a paraglider on a mountain.

I asked Mike "Where is that? It looks fantastic".

He replied, "Abbott's Peak near Mt Kosciusko".

That's one site I've got to fly from, I thought to myself.

ince that trip I have driven past the west face of Mt Townsend and Mt Kosciusko more times than I can count. Looking along that west face I kept promising myself that one day I will fly from it. Some of you may remember a story I wrote a couple of years ago titled 'Geehi or Bust!'. Rob, Bega Bill and myself flew from Mt Elliot in Corryong to Geehi Airstrip and had a tantalising look at the main range, but it was too late in the day to even contemplate flying to, or crossing it.

My excuses for not flying from Kossy were getting thin after moving to Michelago 12 months ago, joining the Kosciusko Alpine Paragliding Club and having the main range of the Snowy Mountains just down the road (a little over an hour away). All I had to do was wait for the right weather forecast, call some friends, jump in the car and go. Simple? Not! What, with running my paragliding school and my Princess also wanting to come, it narrowed down free time. I really wanted to share the "Kossy" trip with Belinda who also loves to fly, but her work meant she only had weekends to spare, whilst I worked most weekends with some weekdays to spare. It seemed that another year was going to zoom past without flying from Kossy.

Then one evening I was at Michelago Station, having some home grown lamb and a quite beer in front of the fire with the Ryrie family. James ducked outside to get a prognostic synoptic chart from the fax machine – a daily ritual. "Look here, Pete, a big high right over the top of us tomorrow at 10am" said James. "That's it James, tomorrow's the day for Kossy. I'll get a TAF for the Snowies when I get home, just to confirm". James was a definite and jumped on the phone to gather some numbers. TD (Tony Davidson) was a yes, calls to Nigel Hack and Heinz Gloor followed. Plans were in place and the only thing left to do was break the news to Belinda: I was going tomorrow,

and she should take the day off work and come with me. I'll leave it there as the rest gets a little ugly! (I write this from the dog house with an extension lead running to my computer in my very cramped new room. It was worth it though!)

We all agreed on an early start. I raced home to charge radio batteries and check and pack my gear. Then I started thinking about the heavy snowfall we had at our house a few days earlier (850m asl), and became a little worried about too much snow on the main range. Another quick call to Nigel who lives and works at Thredbo assured me that there was some snow, but most of it had melted. I actually loved the idea of a snow covered take-off in Australia. It's something a little out of the ordinary, an added bonus.

We met at my place in the morning and headed off. After an hour or so driving we could see the main range in the distance and noticed that it was all white. Oh great, I thought to myself, a little snow would have been nice but not knee deep powder! We carried on and met Heinz at the bottom of the Gunbarrel chairlift in Thredbo as planned. He had agreed to drive us with all our gear to the top of Eagles Nest. "Guess what boys?" he said in his larrikin Swiss accent. "The road is closed and the chairlift only goes part way to Eagles Nest." Determined not to miss the opportunity we walked the rest of the way through the snow and ice up to the top where we recuperated over a coffee. Heinz told us that it didn't look good, too much snow. No way, I thought to myself. I turned to James, "Let's go, we can't lose. If it's not on (which is worse case scenario) we'll have had a lovely walk in the mountains anyway!" Just then Nigel walked over, "Let's go, we'll make it, it'll be fine!" We all decided to give it a go and monitor the conditions enroute. We headed off in the snow, not without a couple of us going for a little slide on the ice with our packs on. Geez! - and this was just the beginning.

For those unfamiliar with the track to Kosciusko, there is a perforated steel mesh walking platform elevated about a metre above the ground to prevent soil erosion. The snow was level with (or over) the mesh in most spots. It made for good walking (if only our packs were a little lighter). We made half way and stopped for a breather. It didn't take long for the wind chill to take affect on the sweat running down our backs, so we soon got going again. The views along the way were superb. We could even see the Tinderry Range at the back of Michelago, and Mt Pinnibar to the south west.

We ascended the last bit of icy track and arrived on the north west face of Australia's highest mountain (elevation 2,228m asl). The plan was to launch and glide north west as far as we could toward the back of Abbott's Peak (2,159m) straight into the lee side, land in the snow, pack up and hike up to the top of Abbott's Peak. The wind was approx 17+ mph from the north west. A tad strong if anything, as we were to glide headwind and had hoped for nothing more than a light breeze to assist launches. There were signs of high level stratocumulus coming in, otherwise a clear blue sky. The trend, more often than not, is for the wind to drop here late in the afternoon. However you can never be sure in the mountains; the weather changes so quickly and is predictably unpredictable. After a group briefing we agreed that if conditions did deteriorate after we had launched and committed to the walk up Abbott's Peak, then we would no longer be able to walk out before nightfall. This was a serious decision, not to be taken lightly. However I was quite confident with the weather and very determined. The unanimous decision was to get going and not waste

any time. We immediately started to spread our gliders out along the face, just down from the peak beside the walking track.

Nigel didn't muck around; he was building a wall and ready to go before some of us had pulled our gliders from their bags. He popped it up, a few steps under the glider, turned around and stepped off. I was interested in his progress as the wind strength felt well and truly soarable. Certainly we were higher than usual with thinner air density, but I was still sure it would be soarable. It wasn't! Close to the ridge Nigel made several passes, but sunk out and quickly headed out on glide into the lee-side of Abbott's Peak. One after the other we quickly followed. The air was relatively smooth with a few little bumps. A fox running flat out across the snow glanced up as it passed. It must have been thinking, "Yikes, they're big eagles!" I glided on and whipped out the camera for a couple of photos, but quickly put it away as I approached the LZ. I anticipated a little turbulence or even a tuck (you tend to do that gliding into the lee). Surprisingly the air was very smooth right down to the snow – a perfect touchdown.

Pack up was quick and we wasted no time starting the uphill slog to the next stage of the trip. Walking through deep snow up the side of Abbott's Peak with asthma and an old leg injury was tough. You would place a step, and just as your full weight was applied it would go straight through the snow. My legs tired quickly and by the time we reached the top I was completely exhausted. Heinz led us straight to the launch area, saving valuable time. We didn't spend too long soaking up the surroundings and resting, as the weather conditions appeared to be changing. We agreed Heinz would go first. Just as well, we'd have had to chain him to a rock to stop him!

The wind strength was the same at Abbott's Peak as it was on Kossy. We all got ready, setting up on the two makeshift launches, one slightly higher than the other. The launches were covered in thick snow and ice amongst strategically placed line-cutting rocks. The ice was a real hassle as it formed little hooks over my comp lines as they melted into the snow. After building a wall Heinz advised us to trample the snow and ice where the lines lay to break the hooks away.

Heinz was ready to go and ripped the glider up in true Heinzstyle. A nice launch, he headed directly for the landing strip in Geehi. It was getting a little late and during the pre launch briefing it was decided to head straight for the airstrip. I watched the glide Heinz was getting and was impressed with the buoyancy of the air. He actually maintained height for about 30% of the glide, then flew out of the buoyant air down to the LZ. TD was next to launch in his new Nova Xact. He built a nice wall, pulled the glider up and turned around, getting a helping push from Nigel to clear the rocks. He was away, and initially tracked straight toward a landing zone a little closer than Geehi as a precaution. However there were no problems and they both arrived over Geehi airstrip with plenty of height. James and Nigel followed, both displaying beautifully executed launches.

It looked fantastic with everyone flying toward the horizon. I was surrounded by an amazing panorama and whipped out my camera for some priceless photos (although they never do the scene justice!). When I snapped out of it I realised I was the last to launch, and hoped my comp lines wouldn't cause any problems. I built a wall and stuffed the butterflies back into my stomach. I inflated the wing but a stabiliser line snagged on a rock. I aborted the launch. Still feeling exhausted from the walk up, I gathered the escaping butterflies to concentrate on a clean take-off. It was getting late, and with images of being stuck on the take-off alone overnight there was no room for error. I built another wall, popped the glider up again, and another line snagged. Then the line pinged and released its hold on the ice. I was away and flying, never so happy to get off a launch.

My reward was a magnificent view of the west face of the main range - Mt Townsend, Kosciusko and Abbott's Peak. The air was beautiful; very smooth, not a blip of lift on the vario but quite buoyant. So I relaxed and enjoyed the experience. The whole flight took 20-25 minutes, mostly tracking toward the airstrip. I noticed a strong wind gradient as there was almost no wind at all lower down. I arrived over the airstrip with plenty of height, and pulled a spiral to get a photo of the wing against the backdrop of the main range. Everyone else was already packing up on the airstrip, and the retrieve cars were coming down the road from Thredbo. I set up my final approach, a nice touchdown and it was all over. Just like that! I've finally flown from Kossy and Abbott's Peak, and in good company to top it off! The look on the faces of everyone at the airstrip said it all. Grins from ear to ear all round!

I would like to take this opportunity to thank our drivers and photographer for their support. Allan Duff is a Thredbo local and bushwalking enthusiast who accompanied us on the walk to Kossy and managed to capture the trip with some brilliant digital images. We all thank you, Allan!

#### **Notes**

Mt Kosciusko, as most would appreciate, IS NOT an official flying site. The NSWNPWA are concerned about litigation and don't want pilots just showing up and going for a fly. There is a protocol to follow if you would like to fly at this site. There has to be some kind of control as an accident at this early stage would put an abrupt halt to it all. I would like to see many other pilots share this experience, and if we go about it the right way we will all be able to. In good conditions the launch itself would rate as a reasonable one and quite safe. Mind you, most of the rocks were covered by snow! From top to bottom is 1,704m agl, with the glide to Geehi airstrip (455m asl) being approximately 4.5-5km out over some fairly large gum trees. It wouldn't take too much headwind or sink along the way to destroy your glide figures and invite panic.

Heinz Gloor, local paragliding instructor and proprietor of the appropriately named Eagles Nest Restaurant at Thredbo is the main contact for anyone wanting to fly this area. YOU MUST contact Heinz (ph: 064 576019) to fly here. Local knowledge and advice are a must to fly safely in this area, as the weather can change very quickly. Appropriate search and rescue arrangements must also be in place. Basic survival equipment would include appropriate clothing, food, water, first aid, UHF radio's, Epirb, etc. No I'm not being dramatic, if you manage to hurt yourself out there you're in trouble!

Unfortunately no photos were supplied with this article, but we may still see them in a future issue (?).

December 1999 Skysailor • Australian Gliding 45

## HGFA Events Calendar

#### Australia

#### **Paragliding Flatlands**

#### 4-8 December 1999

Hay, NSW. We're chasing those late spring/early summer flying conditions that have produced world record distance flights at this time of year. If you want a great flying week of bettering your PBs & can only afford 3 days off work, then this is the comp for you. Blow away the winter cobbies & kick off your summer soaring season. Join us for the whole 5 days or register just for the weekend. Note that comp may be extended up to the following Saturday if the weather does a wobbly on us, but we're due for a good run. Tasks will be race to (downwind) goal & open distance for big air, big distance. Open, Standard Class & Women's prizes. No cameras needed. GPS recommended, but not essential. Tow endorsement required (contact organiser if you need one), minimum restricted rating, radio & tow bridle required. Organise yourselves into teams of 4 per tow strip with a driver. Ring me if you need a team. Sanction: B Grade. Entry fee: \$125 by 24 Nov, \$140 thereafter. Entries to: Rob Lithgow, Adventure Airsports, 2 Kirkmore Ave, Jan Juc, VIC 3228, ph/fax: 03 95262895, email: <rklithgow@gsat.edu.au>

#### Corryong Fly-In

#### 26-30 December 1999

Meet 12-1pm at the Elliot bomb-out. Free entry. Free camping by the river. Int to Adv rating. Ph: Greg Smith 02 42680589.

#### East Coast Sport Aviation Fly-in

#### 26 December 1999 - 1 January 2000 Maitland, NSW

Due to the unfortunate washout of the October long weekend fly-in, the Royal Newcastle Aero Club (in conjunction with the Windsock Flying Club) will be hosting a bigger and better re-run at Maitland Aerodrome (YMND S32 42.2 E151 29.5). All types of sport aviation are invited to attend, with the only criteria being that:

- The aircraft must be registered with CASA or one of the sport aviation bodies such as AUF, HGFA, ASRA, etc;
- 2) The pilot must be licensed to fly the aircraft;
- 3) A VHF radio must be carried and used. The Hunter Valley has a very scenic flying area, both in the valley and over Newcastle and Lake Macquarie. There are many local attractions such as champagne balloon flights, award winning vineyards, Col Paye's war birds at Scone, tiger moth restoration at Luskintyre, Newcastle Harbour and beaches, Lake Macquarie (the biggest saltwater lake in the southern hemisphere), and Williamtown RAAF base "fighter world" museum to name but a few. Camping will be available within metres of your aircraft. Toilets, showers, BBQ, swimming pool and catering are available on site, as well as a licensed club and restaurant. Aeroclub GA aircraft are available for hire to licensed GA pilots. Bus trips to the vineyards and other attractions will be available for those interested. Some seminars/ forums on aircraft building, engine maintenance, etc will be run on site at no charge. Come and see the old millennium out, and the new one in, in beautiful surroundings doing the thing you love best flvina!

#### Laurieton Christmas Fly-in

#### 27-31 December 1999

The Mid North Coast HG & PG Association will run this fly-in at the resort town of Laurieton. Cash & prizes to the value of \$3,000 will be up for grabs & there will be nov, int & adv sections for the prizegiving. PG & HG are welcome. Contact: Trevor Kee ph: 02 6586 4800 or Lee Scott ph: 02 6556 5265, email: <info@highadventure.com.au>

#### **Hay Flatlands Hang Gliding Nationals**

#### 3-13 January 2000

Hay, NSW. Practice day: 3 Jan. Registration: 3 Jan at the New Crown Hotel/Motel, Hay commencing at 7pm. Welcome briefing to take place at 9pm. Sanction: AAA. GPS scoring used, GPS mandatory (Garmin or Aircotec). Entry fee: \$180. Minimum 4 pilots per strip. Entries close 24 Dec 1999. Min. pilot requirements: Restricted, tow endorsed, HGFA member. Other min. requirements: Airworthy HG, parachute, instruments, tow gauge, rope, releases, driver. Monetary prizes in excess of \$4,500 total awarded to winners in the Skyfloater & Racing Classes. Open Class will receive trophies only. Emphasis at this year's comp will be placed on shorter courses with 2 or more turnpoints allowing pilots to enjoy the night life of Hay, instead of some isolated farmhouse out in the boondocks! Min. course time will be approximately 2 hours. If you're interested in a low pressure flatlands comp with great prizes send entries to: Dynamic Flight Pty Ltd, 32 Willoby Street, Beaufort VIC 3373 or email us for further info: <dvnamic@ netconnect.com.au>. (Info booklet sent upon receipt of entry fee.)

#### Corryong Cup Hang Gliding Competition 15-22 January 2000

Registration & practice day: Saturday 15 Jan.
Requirements: int-adv rating with inland experience, camera, altimeter, UHF radio, recently repacked parachute, 1:200,000 Wagga Wagga & Tallangatta topo maps, current HGFA member.
Strictly 60 pilots. Entry fee: \$80 incl. T-shirt (specify size), sticker, film, presentation night, BBQ during competition, numerous prizes & trophies.
Categories: Open (all competitors) & Entry level (open crossbar & int gliders). Entries to: Steve Bell, ph: 02 4294 1268, email: <spbell@ 1earth.net>.
For the best fun comp of the season, come and have a crack at Corryong!

#### **Paragliding Corryong Cup**

#### 22-29 January 2000

Corryong, VIC. Sanction: AA. Entry fee: \$110 (\$140 after 20 December 1999). Maximum of 40 entries accepted. GPS only (no films will be accepted). Requirements: GPS approved by Comps Committee, HGFA membership and a minimum of 50 hours inland flying experience & reserve parachute. Recommended: UHF radio. For further information see <www.cnl.com.au/users/djm/2000pgcorryong. html> or contact David Mills on <djm@cs.mu.oz.au> or ph: (03) 57282668, 0411 513404.

## WA State Soaring Competition 23-29 January 2000

Wyalkatchem, WA. Registration day: Saturday, 22 Jan. Competition: 23-29 Jan (Reserve: 30 Jan). This inaugural competition will combine both the sports of HG & PG in a single competition. The emphasis will be on providing competitors with

a challenge, whilst maintaining safety & fun. Also contested will be the Andrew Humphries memorial trophy (teams event). Requirements: tow endorsed, parachute, radio, driver & tow vehicle, team T-shirts (a traditional thing), sense of humour, maps, camera (databack not necessary), GPS (optional). For further info & to register online via <www.iinet.net.au/~navi> or by emailing the organisers at <mark.thompson@telstra. com.au>, ph: 08 94913076 or <Daryl. Speight@ kbjv.com>, ph: 08 93200864.

#### Bogong Cup Hang Gliding Competition

#### 25 January - 4 February 2000

Tawonga/Mt Beauty, VIC. Sanction AA/AAA plus FAI Category 2 event. Prize money: \$5,000 over 3 classes - Topless, Kingpost, Floater plus daily and fun prizes. Min. experience is an Int rating. GPS turnpoint and timing. All normal competition requirements apply. Entry fee: \$150, incl. Bogong Cup T-Shirt, presentation dinner dance & all maps. Cheques payable to: "Bogong Cup", payment may also be made by major credit cards. Registration: 25 Jan 2000, 10am to 10pm, Mountain Creek Lodge, Tawonga. Contacts: Phil Lahiff ph: 03 57544247, fax: 03 57544860; email <mountaincreek @netc.net.au>. Mailing address: Mountain Creek Lodge, Tawonga, VIC 3697 and John Adams ph: 03 57544945; email < jcadams@ telstra.easymail. com.au>). Note: Mt Emu road has been repaired!

#### 2000 Paragliding Nationals

#### 12-19 February 2000

Bright, VIC. Sanction: AA. Entry fee: Only \$110 (\$140 after 10 Jan). Films \$5 each, processing & checking \$15 per film per pilot. Requirements: HGFA membership, a minimum of 50 hours inland flying experience, reserve parachute & either a GPS or fixed lens (not zoom) camera for flight verification. Recommended: GPS approved by Comps Committee strongly recommended & UHF radio. For further information see <www.cnl.com. au/users/djm/2000pgnats.html> or contact David Mills on <djm@cs.mu.oz.au> or ph: 03 57282668 or 0411 513404.

#### 2000 NSW Hang Gliding State Titles

#### 19-26 February OR 18-25 March 2000

Due to a date clash with the PG comp, the HG dates will be either 19-26 February or 18-25 March. The preference is for February. Firm dates available next issue, or contact Billo. Registration: Imperial Hotel, 10 Mar. Sanction: AA. Entry fee: \$120 incl. films, T-shirt & presentation dinner. Requirements: int-adv with inland experience, UHF radio & parachute, GPS recommended (if it still works in 2000), databack camera optional but recommended. HGFA rules & scoring apply with GPS turnpoint & timing verification. Fee payable to: NSW HG State Titles, 50 Park St, Charlestown 2290, email: <BOLIVE@hahs.health.nsw.gov.au> or ph: 02 49213804 (w).

#### Big Sky Manilla Paragliding Open 2000 4-11 March 2000

Sanction: AA & CIVL category 2 (for international ranking). Over \$3,000 in cash & prizes for Open, Int, Nov & Female classes plus day prizes.

Registration: Manilla Town Hall HQ 3 March 7-9pm. Max. 120 pilots. Requirements: GPS (Garmin or Aircotec), UHF radio, reserve, adequate thermalling experience. Entry fee: \$140 (\$170

after 21 Feb) incl. posted info pack (if not on email), hill transport, map, prizes, trophies, T-shirt, presentation night (dinner & band). Pilots must organise their own retrieves. Wind techs welcome. Info & entry by ph/fax/email (credit cards accepted). Contact: Godfrey Wenness, ph: 02 67856545, fax: 02 67856546, email: <SkyGodfrey@AOL.com>. Full pilot information is on our club web site <www.gri.une.edu.au/mss>. If paying by post (cheque/money order made out to "Manilla Comps" The Mountain, Manilla, NSW 2346.

#### 2000 Victorian Hang Gliding Open

12-18 March 2000

Corryong, VIC. Contact: Wesley Hill, email: <whill@ nm.com> or ph: 0408 305943.

#### "Flatter than the Flatlands" Birchip 2000

#### Easter 2000 holidays

Birchip, VIC. The Flatter than the Flatlands hang aliding competition for next Easter, will be 5 long glorious days of flying due to ANZAC day falling on the day after Easter Monday. Apparently this is something to do with the eclipse. Entries open on 15 January 2000 (note this has changed from previous years). Further information and updates are available on the official website at: <www. users.bigpond.com/warwick.duncan>

#### Paragliding State of Origin Series 1990-2000 Easter 2000 Weekend

Manilla, NSW, The PG State of Origin Series is a joint initiative of the Canungra Hang Gliding & the Sydney Paragliding Club. It is a state-based team event where low airtime pilots are encouraged to stretch their wings a little & fly those first few XC km under the watchful eye of their more experienced compatriots. As in previous years the event will be held in Manilla over the NSW Labour Day weekend & the following Easter weekend. Contact either Deirdre Skillen (NSW) ph: 02 9877 0279 or Mark Plenderleith (QLD) ph: 07 32786274 for more information. Alternatively check out the events at: <www.uq.net.au/~zzdcrook/psoos/ psoohome.htm>

#### "Grampians Adventure Flying Holiday

10-16 April 2000

Grampians, VIC

"The Lore of Flight" adventure flying Grampians based holiday is 7 days of scenic flying and Navex's. Fly or tow to the 4,000ft RWY and park your aircraft right next to your accommodation. Accom. & all meals from \$325 pp. This holiday is open to all pilots, and all aircraft types. Accommodation is limited, so for more information ring Peter or Anne McLean, ph/fax: 03 5797 2159; email: <lore@ycs. com.au>

#### Yea Adventure Fly-In

#### 29-30 April 2000

Murrindindi Aviation Group Inc. is holding the 3rd Annual Yea Adventure Fly-In. Fly into Yea, VIC, on Sat. & join the aviators for some fun. Sat. night dinner & entertainment at the airfield Fire Station Hall. Sunday we will be doing more local flying to some of the 10 airfields in our area. Food & accom, available both days. For more info call John Norman ph: 03 57972972 or Peter McLean ph: 03 57972159.

#### **Overseas**

#### South African Open **National Hang Gliding Championships**

12-18 December, 1999

Graaff-Reinet, Valley of Desolation. Thermal Riders HG Club would like to extend an invitation to all HG pilots around the world to come to South Africa. Graaff-Reinet is a rural historical town, situated on the edge of the Valley of Desolation, which is in the eastern part of South Africa. The nearest airline routes are Port Elizabeth (291km), Cape Town (787km) & Johannesburg (822km). The flying site is located at the town in the Karoo Nature Reserve. All interested pilots should preregister with the organiser (details below) by 20 Nov 1999. Entry fee: R300, provides for administration, 35mm film with development, maps. posting of results & a T-shirt. Transportation, retrieval & accommodation are excluded. Most local pilots make use of the accommodation provided at the Police Academy Hostel (competition centre) at a rate of around R40 per night excluding meals. Camping is also available at the college. Bookings for rooms can be made with the organiser. Contact: Bennie Du Plessis email: <bennie.duplessis@postino.up.ac.za>, ph: +082 3755218 (mobile), +27 124203615 (w), +27 126622098 (h), fax: +27 12362 5218.

#### Mauna Kea Fly-In

#### 27-31 December 1999

Celebrate the new millennium in style & come & ioin us on the Big Island of Hawaii, HG & PG pilots welcomed. For more information contact Achim Hagemann ph: +808 9686856, email: <tofly @ excite.com> or write to Advanced Air Technologies, Attn. Achim Hagemann, P.O. Box 797, Mtn. View, Hawaii 96771, USA.

#### New Zealand PG Nationals 2000

23-30 January, 2000

Wanaka, South Island, NZ, Contact: Bryan Moore, 19a Achilles Place, Wanaka, South Island, NZ, Ph. +025 2815950 (mobile) or +64 (3) 4431013 (h) or email <high@xtra.co.nz>.

### **New Zealand Hang Gliding Championships**

12-19 February 2000

Wellington, NZ. Pilots are invited to fly in the NZ National comps. The Wellington area offers a variety of user-friendly sites to suit conditions, varying from mountainous to flat valleys. Accom. is at "The Ranch", hostel type accom. in the Southern Wairarapa. Entry fee: estimated at \$110. Accom. cost is \$15pn. There will be an Int & Open Class, as well as day & spot prizes. For more info contact: Grant Tatham ph: +06 3797322, email: <tathams@xtra.co.nz> or Trevor Leighton ph: +06 3088464 or email: <TREVOR.HELEN@xtra. co.nz>

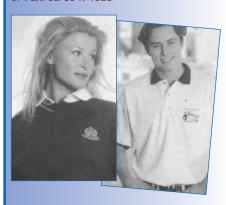
#### Women's Hang Gliding Worlds

18-30 June 2000

To be held in Greece. Contact HGFA office on ph: 02 69472888.

### HGFA merchandise

Available from the HGFA, PO Box 558, Tumut NSW 2720 Phone: 02 69472888 or Fax: 02 69474328



- \$30 Polo shirt with embroidered HGFA logo in navy, green & white (sizes 16 to 24)
- \$50 Rugby top with embroidered HGFA logo in navy, green & grey (sizes 16 to 24)
- \$15 Cap (cotton or corduroy) with HGFA colour logo in red, black, navy or green



- \$1.50 HGFA Car sticker (no postage required)
- \$6 Embroidered Badge
- \$30 HGFA Hang Gliding Training Video
- HGFA Competitions Manual no charge
- HGFA Towing Manual no charge
- \$45 1998 Hang Gliding Grand Prix Series
- \$5 HGFA Pilot Training Workbooks
- \$15 Beginning Coaching (Australian Sports Commission)
- \$35 Better Coaching (Australian Sports Commission)
- \$35 Hang Gliding or Paragliding training video
- \$10 HGFA Operations Manual\*
- \$15 HGFA Operations Manual Binder\*
- \$5 HGFA Log Book\*
- \* Replacement Prices only These items are issued free with initial Full Membership
- \$5 Postage and Packing (Bulk orders sent C.O.D.)

## Schools in Australia

#### ACT/NSW



#### **Tarago Flight Park**

 $2\frac{1}{2}$  hours from Sydney

- Introductory Courses
- Full License Courses
- Refresher Courses
- Ground Towing
- Aerotowing Courses
- Courses
- **Cross-Country Tours**
- Cross-Country Courses

The last weekend of each month is an open towing weekend. All pilots are welcome and tow endorsements can be obtained.

Agents for Moyes & Airborne • Demo gliders available Call Tove on 02 4849 4516 or 015 269376.

Canberra Hang Gliding and Paragliding Centre, chgpgc@goulburn.net.a

Email address: chgpgc@goulburn.net.au



MOTORISED PARAGLIDING SCHOOL AERIAL DISPLAY SPECIALISTS

Bookings phone

#### 0412 013 134

Paramotor & Paragliding Courses, Endorsements, Promotions, Certification, friendly sales and service.

9 Cumberlege Crescent, Pearce, ACT 2607 Phone & Fax: 02 62867337 Mobile: 0412 229499

> Email: mikebrady@netspeed.com.au Mike Brady Chief Flying Instructor

#### **New South Wales**



### SYDNEY HANG **GLIDING CENTRE**

Stanwell Park

Hang Gliding Courses, Refresher Courses, Instructional Tandem Flights and Gift Vouchers.

Equipment and Accessories. Available 7 days.

To arrange your booking or to test fly a glider Call Chris Boyce (02) 4294 4294. www.hanggliding.com.au

#### **New South Wales continued**



## **High Adventure Airpark**

Australia's internationally renowned training centre

Located on 460 acres just  $3^{1}/_{2}$  hours drive north of Sydney, offers courses in Hang Gliding, Paragliding and Microlights ALL YEAR ROUND!

- Our Live in Novice License courses for Hang Gliding and Paragliding start from \$990-\$1,490 with unlimited days of instruction until your license is received. Our Microlight license courses start from \$2,500 and all Flight and Theory instruction is done on site, With the training hills and hangar just a walk away from your accommodation.
- Now with over 15 flying sites consisting of both inland and coastal soaring, covering every wind direction, we can ensure that you cover all the aspects of the license skills needed to get into the sport confidently and quickly. You can also be confident that the equipment you learn on will be the newest and latest available.
- We sell all major brands of Microlight, Hang Gliding and Paragliding equipment and aircraft
- Aero and Winch tow endorsements are available!
- · Conversion courses for Hang Gliding, Paragliding and Microlight pilots available!

Check Out our Web site on www.highadventure. com.au and email us on highadv@midcoast.com.au HIGH ADVENTURE AIRPARK

You'll pay a little more to fly with us but you will with Qantas also! Call us on 02 6556 5265

#### AIR SUPPORT HANG GLIDING & PARAGLIDING



As well as training, we also offer many ranges of gear, including custom made AIR SUPPORT harnesses. Enquire for brochures and price lists for new or 2nd hand gear.

Call on 02 94502674, 0412 273552 (8am-8pm).

#### **New South Wales continued**



- Manilla has more flyable days per year than anywhere else in Australia! (300+ in fact!)
- Mt Borah is one of the worlds most consistent all year round sites with 4 large launches catering for nearly every wind direction.
- Paragliding license courses a week of quality tuition using the latest techniques & equipment for only \$850 (inc. accommodation).
- . Thermalling and cross-country courses all year
- HG to PG conversion courses it's easier than you
- Importer of ADVANCE paragliders, FLYTEC instruments, HANWAG footwear and most accessories - we sell only the best quality European made equipment.
- Mini Paraglider Kites also available great fun for

So come flying with Manilla Paragliding, where the person who shows you the mountain, owns the mountain!

Phone Godfrey Wenness on: 02 6785 6545 or fax: 02 6785 6546 email: SkvGodfrev@aol.com "The Mountain", Manilla, NSW, 2346.

#### Victoria

#### WINGSPORTS

Flight Academy

- Paragliding courses

  - Paramotor courses
- · Hang gliding courses
- Tandem flights
- Inland and coastal
- Cross-country courses Equipment sales
- Towing courses
- Located in stunning holiday destination, on the Great Ocean Road, 2 hours from Melbourne's Westgate Bridge.

Wingsports, 1 Evans Court, Apollo Bay VIC 3233 Hans van Santen 03 5237 6486 Fiona Waddington 0419 378 616.

#### BYRON AIRWAVES

Hang Gliding School

- · Lessons & full instruction available.
- 20 years hang gliding experience with training all
- · Learn to fly safely and accurately with all skill levels catered for.

Phone Brian and Anne on 066 290354, mobile 014 615950, email: byronair@hotmail.com

48 Australian Gliding • Skysailor

## CLASSIFIEDS

#### Victoria continued

#### Dynamic Flight

#### HANG GLIDING SCHOOL & FLIGHT PARK

1<sup>1</sup>/<sub>2</sub> hours from Melbourne

We offer a full range of services including:

- · Restricted License Courses
- Introductory courses
- · Tandem instructional Flights
- Towing Endorsements
- Introduction to XC Flving & tours
- Equipment Hire

We sell new and used gliders, spare parts and accessories for:

- Moves
- Airborne
- Icom
- Aussie Born
- Bräuniger
- Flytec

Thinking of updating? Trade in your old glider with us. Rohan Holtkamp P/F 03 5349 2845 - M 014 678734

### **ULTRALIGHT** FLYING MACHINES

Use your hang gliding flying skills to fly a 3 axis control ultralight. With our "wind in the face" fleet of CASA legal 3 axis Drifters we can show you another type of sport aviation flying.

We use robust Drifter and Skyfox aircraft that are:

- · Crosswind landing capable,
- · Comfortable to fly, not cramped,
- No fatique, joy stick controlled,
- and a lot of fun to fly!

Why not check us out. We fly from Sunbury airfield, only 20 min drive north west of Melbourne. Trial instruction flights only \$59. Cheap accommodation available.

> UFM, Sunbury Airfield, Sunbury 3429 (03) 9744-1305, (03) 9431-2131

http://www.iconworks.com.au/ultralight/index.html birrell4@eisafree5.com.au

#### South Australia

#### ADELAIDE AIRSPORTS

Sales, Service and Instruction

- · Hang Gliding
- · Tandem Hang Gliding
- Sky Floating
- Microlights

Agents for Moyes, Airborne and Wills Wing.

Larry Jones - Judy Manning Ph: (08) 85563030, Fax: (08) 85574113, Mobile: 0408 815 094,

Email: skyfloat@terra.net.au Website: www.terra.net.au/~skyfloat

#### Queensland

### **Rainbow Paragliding**

Rainbow Beach is one of the world's best coastal soaring sites, with year round flying, situated 2.5 hours north of Brisbane and 12km south of Fraser Island. Surrounded by amazing beaches and national parks.

Rainbow PG offers the opportunity to experience winter flying from a selection

of well established coastal and inland sites. Paragliding licence courses: Learn to fly in the safety of soft sand and smooth air. Ten days intensive: \$980. Accommodation available from \$10 a night. HG to PG conversion. Tandem flights and licence.

Paramotoring tuition, sales, hire and flying excursions to Fraser Island.

Surfing, sailing, canoeing, horse riding, etc.

So come and fly Rainbow magic! Jean-Luc Leiaille

Ph: 07 5486 3048, Mob: 0418 754157

Fax: 07 5486 3288

Email: intheair@ozemail.com.au www.ozemail.com.au/~intheair PO Box 227, Rainbow Beach, QLD 4581

#### **Classified Rates**

The magazine now has a policy of charging for classified advertisements. The rate is \$15 for up to 8 lines (40 characters per line); with longer ads charged at \$4 per extra line. All classifieds MUST be paid for at the time the ad is placed. Please direct ads, together with payment, to the HGFA office (credit card payments may be made by phone).

#### Hang Gliders and Equipment

#### **New South Wales**

Air Support pod harnesses one orange, one yellow. Suit pilot 5'8" medium build. Both in very good condition, \$200 each. Ph: Alan 02 99849669.

Fun 190 nov. by Airborne, factory new, test flown only, \$3,950. Ph: Mark 02 43511400 (w); 02 43521483 (h).

Fun 190 nov, 10 hours, good first glider. Also pod harness (5 hrs use, 6'2"), reserve chute, Sjostrom vario. Suit new buyer, \$4,200. Will sell items separately. Ph: Peter 02 49875059.

Mosquito Motor Harness EC, 8 hrs TT, complete & spare propellor, \$4,800 ono. Sting 166 int, GC, \$1,600. XS 142 adv, Moyes XS2 adv, GC, \$800. Can help with delivery. Ph: 02 65597762.

Moyes Mission 170 int, VGC, including speedbar, wheels, spare basebar & kite manual, plus older style cocoon harness. Ideal beginner kite, \$950. Also Icom IC40 UHF FM transceiver, charger, remote mic

& earphone, as new, \$300. Ph: Kevin 02 47544508.

Pod harness (Forrest Park design), blue, in very good condition, suit 5'6" to 5'8", \$100 ono. Also, PA chute, never used, always repacked, \$300 ono. Ph: Richard 02 45751883.

#### Queensland

Xtralite 147 adv, beautiful cond, only flown 90 hours, mylar with yellow/purple, UV bag incl. US\$1800 ono. XT 145 nov/int, as new, only 10 hrs use, blue/red, US\$2,500. Also for sale: chute/d.bag, Brauegier Vario, f/face helmet, D/ Scott Racer harness & T/wheels. Ph: David 07 55778490; 0411 333221.

#### Victoria

Blade 132 adv, good cond white/yellow, \$1,400. Dimension Evolio harness, good condition, suit pilot 5'5, \$400. M2 harness, blue/grey, 1 season old, suit pilot 5'10 avg build, \$700. Flytec vario 3030, VGC, \$450. Renschler varios, \$450-900 depending on model. Ph: Carol 0417 311 360.

Blitz 146 adv, white main sail, kevlar scrim leading edge, agua & purple undersurface, speed king post & speed basebar, 2 spare uprights (soft edge). Good cond, asking price only a mere \$800. Ph: Marc 03 51330085.

Moyes XT 165 int, less than 5 hrs old, scrim LE, speed bar, wheels etc. Moyes harness. \$2,500. Ph: Darren 0408 576 198: 03 9576 1339 (h).

Shark 144 adv, VGC, approx 100 hrs. Lilac & white U/S. Tight, clean sail, \$2800 ono. Also Aussie Skins flying suit, EC, fit 5'10 to 6', average weight pilot, black with purple shoulders, worn once (too big), \$180. Ph: Tony 0418 336 369 (m); 03 9304 3114 (h); or email <tonyanjorj@bigpond.com.au>

#### Tasmania

Moyes XT 145 int, fluoro green & orange undersurface, white top. Pod harness. Suit smaller pilot, \$1500. Ph: Michael 03 52376486.

#### **Paragliders and Equipment**

#### **New South Wales**

Graffity Sport M DHV 1, as new, \$1,200. Sensor L Perché DHV 2, VGC, \$1,400 ono. Ph: 02 65597762.

Continued next page

## CLASSIFIEDS

#### Paragliders continued

#### Victoria

Edel Quantum S NCIS, 55-75kg, lilac/yellow, 20 hrs, EC, comes with Edel Hero harness \$3000. Also, new unused Edel reserve, will sell separately, \$500. Other gear also available. Ph: Andrew 03 95604760; 0413 522416.

Firebird Navajo 28 10A,2B,1C, low hrs, EC, purple & white, perfect coastal ship for XC pilot. \$500 ono. Firebird Sitting Bull harness EC, very comfortable with exc. back protection, \$350 ono. Bräuniger Alti PIII vario, incl. ASI, averager, c/w original Flight Deck, \$300 ono. Ph: Richard 03 51444313 or 0411 068120, email < sunari@ netspace.net.au>.

#### **Trikes and Equipment**

#### **New South Wales**

Airborne Edge Executive 582 T2-2646, 135 hrs, electric start, custom trailer, full covers, wing covers, full instruments, GPS, radio, 3 helmets, additional custom made 48 litre fuel tank giving total 6 hr fuel range, carry bags for touring, trainer bars, ballistic chute. All in excellent condition with up to date inspection reports from Airborne. Replacement cost well over \$30,000, will sell \$20,000 neg. Ph: Alan 02 99849669.

Mainair Sports Mercury T2-2767, Alfa Delta Wing, 503 engine, 350 hrs, \$7,500 ono. Helmets, radio & intercom neg. Ph: Kevin 02 65434116.

Quantum 912 T2-2912. One of only two in Australia with Rotax 912, 4 cylinder, 80 HP, 1211cc, four stroke, Only 85 hours on a 1,200 TBO engine. Landing lights, duel strobes. kingpost aeriel, VSI & ASI, glove boxes, IVO prop and spinner, UD, AP, pannier bags, GPS, compass. Rotax 912 flydat and electric fuel pump. Always hangared and only setup 4 times ever. The best performing trike in Aust bar non Aust. Selling to finance new business. New 912 price with these options \$52,000. Will sacrifice, was for \$34,900 now \$32,900. Ph: Drewe 0412 356271.

#### Wanted

Moyes Max or XT, with harness, chute, helmet, etc. Ph: Nigel 08 97911014; email < nigel@ gateway.net.au>

#### **Other**

#### Free flying magazines:

**Cross Country Magazine subscriptions Carol** Binder 0417 311360.

#### Sailplanes

#### **Single Seaters**

LS3 UKC 770hrs, 405 landings, Ferro gel, Dittel 720 ch radio, Blumenauer vario, National 425 chute (3 years old), Thompson trailer. With ground handling gear. No prangs. Ph: Mick Honfi 02 68822000 (w), 02 68823841 (h).

LS77 XJJ Excellent condition. 340 flights, 1,000 hrs, no prangs. Complete package incl: GPS, logger, covers, Komet trailer. \$52,000. Ph: Bob Powell 0409 840071, fax 03 94399869.

NIMBUS 2 VH-GOG Ground handling gear, chute, oxy, factory trailer. Make an offer. Ph: 07 38122029 or 1408 195337.

PIK20D WQQ available hull & basic instruments or full Cambridge logger system. Ph/fax: 07 54717639.

PZL55 XQT less than 100 hrs. Cambridge L-Nav. Icom 20, covers, trailer, towing gear, parachute. \$65,000. Ph: Adam 02 62889683 (h) or 019 440467, fax: 02 62889641, email: <amalarz@ effect.net.au>

**HORNET GSF** available hull & basic instruments or full Cambridge logger system incl. oxy. Ph/fax: 07 54717639.

STD JANTAR 41A KYX Low hours. Has to be seen. Profiled wings finished in 2 pack with winglets. Well instrumented panel, Peschges VP2 vario, Icom A22 brand new. Under the Jantar 3 one piece canopy, all ground & trailering aids, wing covers. This great performer, a dream to fly, comes in excellent trailer. No expense spared to finish this glider, \$26,000 ono. Ph: Laurie: 03 55811914 (h) or Joe 03 53826777 (w), 03 53 825735 (h).

STD CIRRUS BH-GOP 1,035 hrs, Cambridge M-NAV, Narco 360ch radio, no gelcoat problems, q/h gear, enclosed trailer, fresh Form 2, P>A> Slimpack, \$24,500 ono. Ph:

Don Chessor 02 42611941 email: <dchessor@ cyberelectric.net.au>

SZD 55 XQT less than 100 hrs, Cambridge L-Nav, Icom 20, covers, trailer, towing gear, parachute, \$65,000. Ph: Adam 02 62889683, fax: 02 62889641, email: <amalarz@effect-net. au>

SZD 55 Standard Class glider 410 hrs, 135 landings. Excellent condition. Large pilot weight range. PZL instruments. Aero & winch hooks. \$57,000. Ph: 03 58821132.

VENTUS UKM Snav, Dittel 720, rebuilt trailer, T-hangar Lake Keepit all in exc. condition. 1/3 share, \$19,500 ono. Ph: 02 67852137.

#### Two Seaters

K7 Good condition, major inspection completed Oct 97, complete with dual instruments, electric vario and VHF radio. For genuine sale. All reasonable offers considered. Ph: 0418 696157 or 02 69627210.

Puchatek KRA Nose wheel, wingtip wheels and 760 channel radio with back seat controls. 500 hrs & good condition.

Ph/fax: 07 54717639.

#### **Motor Gliders**

G400 Motor Glider 17m. Fully rebuilt trailer. Based at Camden airport, incl. T-hangar with water & solar charger. Motor 200 hrs left on 300 hr motor. B 100 coupled to Garmin 90. Very good looker. Ph: Neville Page on 0419 653380, best offer.

DG400-XJZ AF 1,550 hrs, 190 E hrs, 17/15m. Wing, fuel & water tanks, BEA-Automatic prop. retraction, fully equipped incl. Dittel 760 channel radio, headset, S-NAV, ACK Beacon, Cobra trailer. Large T-Hangar at Camden A/P, c/w water, solar. All in excellent condition never damaged always hangared, \$69,000 1/2 share, Ph/fax: Frank 02 44543955.

LS3-17 TOP WQT Excellent 17m performance, refinished, comp sealed. Fully self launching, long range tanks, an absolute delight to fly, All ground handling, parachute, good trailer (hardly used), heaps of extras. Reduced to \$59,000. Call for details & video 03 95983265 email:<daveb@primemover.com.au>

SWIFT MOTOR GLIDER 150 hrs. The most versatile ultra-light glider available? Semienclosed tricycle undercarriage. Motorised with 28hp. Koenig gives 550fpm climb rate. 3-4 hours powered endurance, yet soars beautifully engine off (electric start). Flaps set cruise between 60 & 90kph. In 45 minutes convert to world's highest performing foot launchable towable glider, glide 25:1. Fully or semi-enclosed cockpit options. 2 seat cockpit available from Aeriene. Ballistic back-up chute system. Car top transportable rigid box for wings and tow bar mounted frame for power unit no trailer required. All this

for \$25,000. A new Aeriene motorised swift costs over \$40,000 not including transport to Australia! And it looks stunning. Ph: John 0418 941281.

SUPER X GO award winner at Avalon 99. Rotax 912, 400 hrs, 320 eng. hrs always hangared, dual instruments, KLX135 GPS, radio headsets, 6"x4" GPS Skyforce, mint condition \$185,000 or 4 people at \$46,250 each. Barry or Nicki 02 4636 6314.



MOTOR SAILPLANE 12m Monerai with 2 stroke and folding prop in as new condition. Recently completed and complete with many extras & enclosed trailer, \$22,000. Ph: 02 99587311.

#### Instruments and Equipment

BORGELT INSTRUMENTS. INSTRUMENTS ARE OUR FULLTIME BUSINESS, NOT A SIDELINE. OUR 22ND YEAR IN BUSINESS. We design, manufacture & supply quality soaring instruments & equipment & provide experienced professional advice. VARIOS + Flight computers (with GPS); WinPilot Moving Map; Flight recorders – JOEY, VOLKSLOGGER; Parachutes by NATIONAL, TE Probes. Exciting new industry leading instruments available this summer. Ph: 07 4635 5784, fax: 07 4635 8796, email: <mborgelt@tmba.design.net.au> see our web page: <www.ozemail.com.au/~mborgelt>

MICROAIR radio & boom mic deal contact lan McPhee, ph: 02 66847642, fax 02 97770331, Box 657 Byron Bay 2481. Over 900 radios have been sold worldwide and I have made over 360 boom microphones so that must tell a story.

CAMBRIDGE Three great deals including free GPSLCD or Palm-Nav Software (value \$US375) or \$US100 to \$US400 factory trade on old Cambridge gear and 2-seater L-NAV slave at half price. Barograph (GPS-NAV) calibrations now available. Enquiries: lan McPhee, ph: 02 6684 7642.

CAMBRIDGE L NAV, vers. 5.7, 7 months old, 2 yr warranty \$2,500. WINTER mechanical vario, 80mm, 18 months old, \$400. Ph: Luke Dodd 08 9330 2023 email: <LKDodd@bigpond. com.au>

TOST spring to complete wheel or WINTER colour code to 57mm 3 hand altimeter. Over 25 years of service. lan McPhee, ph: 02 66847642.

SCHEMPP HIRTH Grob and Glasflügel spares from stock only. Bulk Spruce and Birch Plywood, Mecaplex canopies; Limbach parts. Edmund Schneider P/L PO Box 1154 Gawler 5330. Ph/fax: 08 8522 2978.

#### Tugs

BEAGLE AIRDALE 180hp CSU TT 1,580 hrs good hours to run on Eng & Prop. 4 place aircraft with new fabric & tow hook. \$36,000 Ph: Geoff King 02 6977 4424.

#### Sundry

COMPOSITE COMPONENTS FREE SERVICE. Make sure your new toy doesn't become a financial embarrassment. Have it assessed by Joe Luciani before you buy. Ph: 03 5382 6777.

**GERMAN SOARING CALENDAR 2000** Order now from Mike Cleaver, 9 Trehame Place, Melba ACT 2615 Ph: 02 6259 2592 (h) or 0412 980886, \$33 each plus \$5 postage per parcel.

#### **Positions Wanted**

TUGGIE ON THE LOOSE. Experienced tug pilot, one-time Level 3 instructor. Retired but too busy to tow a full season, available short term for competitions, relief, etc. Geoff Neely Ph: 0419 563233.

#### Wanted

Motorised hang glider or paraglider, hang glider floater or large motorised sailplane. Ph: 02 99583254.

From: "Adam Malarz" <amalarz@effect.net.au>

Bob Thomas promised me to insert my advertisement in the November and December issues of the AG & Skysailor. Since my cheque (\$30) was never cashed I do not have any confirmation that he did include my ad. Could you please tell me about the final outcome?

#### **Gliding Publications**

#### **AUSTRALIAN HOMEBUILT SAILPLANE**

ASSOCIATION: James Garay, 3 Magnolia Ave, Kings Park VIC 3021. Ph: 03 93673694, www. geocities.com/capecanaveral/hangar/3510

FREE FLIGHT: Bi-monthly journal of the Soaring Association of Canada. A lively record of the Canadian soaring scene, and relevant international news and articles. \$US26 for 1 year, \$47 for 2 years, \$65 for 3 years. Suite 101, 1090 Ambleside Drive, Ottawa, Ontario K2B 8G7, Canada. Email: sac@sac.ca

SOARING: Official monthly journal of the Soaring Society of America Inc., PO Box E, Hobbs, N.M. 88241 USA. Foreign subscription rates: \$US43 surface delivery; \$US68 premium delivery. Annually.

SAILPLANE AND GLIDING: The only authoritative British magazine devoted entirely to gliding. 52 A4 pages of fascinating material and pictures with colour. Available from the British Gliding Association, Kimberley House, Vaughan Way, Leicester, England — annual subscription for six copies £17.50.

SAILPLANE BUILDER: Monthly magazine of the Sailplane Homebuilders Association. \$US29 (airmail \$US46) to 21100 Angel St., Tehachapi CA 93561 USA.

TECHNICAL SOARING/OSTIV: Quarterly publication of SSA containing OSTIV and other technical papers. Annual subscription 70DM. OSTIV c/- DFVLR, D82234 Wessling, Germany (BRD).

GLIDING KIWI: Official bi-monthly publication of the New Zealand Gliding Association, edited by John Roake. Specialises in up-to-date overviews of the world soaring scene and Omarama the N.Z. base for many of the current world records. \$A44 annually. (Send A\$25 for 12 months back issues). New Zealand Gliding Kiwi, Private Bag, Tauranga, New Zealand.

AIRBORNE MAGAZINE: Covering all facets of Australian and New Zealand modelling. The best value modelling magazine. Now \$21 p.a. for six issues. Plans and other special books available. PO Box 30, Tullamarine, Victoria 3043.

#### **Advertising Index:**

Advance Paragliders	32
Aeros	33
Airborne Avionics	29
Airborne Fun	BC
Airborne Products	IBC
Arcus – Swing Paragliders	12
Cambridge Aero Instruments	16

#### CORRECTION:

The Cambridge advertisements in May and July 'Australian Gliding' had the wrong number for lan McPhee.

The correct number is 02 6684 7642. We apologise both to lan and our readers for the error.

ioi uie eiioi.		
Chamberlain Knights	2	
Composite Components	42	
GFA Form 2 Notice	9	
GFA Sales Department	IFC	
HGFA Merchandise	47	
Lake Keepit Soaring Club	29	
Luke Dodd	IBC	
Manilla Paragliding Open	IBC	
Microair Electronics	17	
Parafunalia	35	
Schools in Australia	48	
Sportavia Soaring Centre	42	
Sydney Skysailors	35/45	
Ultralight Flying Machines	17	
Wild Turkey Adventures	36	

December 1999 Skysailor • Australian Gliding 51

## HGFA Addresses

All correspondence, including changes of address, membership renewals, short term memberships, rating forms and other administrative matters should be sent to:

#### Hang Gliding Federation of Australia

**Executive Director:** *Ian Jarman* Administration: Margaret Steinhardt PO Box 558, Tumut NSW 2720, ph: 02 69472888, fax: 02 69474328, email: hgfa@tpgi.com.au

President: Rohan Grant 188 Bathurst St, Hobart TAS 7000, ph: 03 62311112 (h), 0419 344011.

Treasurer: Robert Woodward PO Box 6260, Adelaide SA 5000, ph: 08 8232 5405 (w), 08 82977532 (h), fax: 08 82237345.

email: benchpos@dove.net.au Secretary: Tim Cummings PO Box 116, Canungra QLD 4275, ph: 07 55435093 (h), 0418 778422, fax: 07

55434493, email: tim@eis.net.au. Vice-President: Keith Lush 5 Fortune St, Sth Perth WA 6151, ph:

08 93679066 (w), 08 93673479 (h), fax: 08 94741202, email: keith.lush@hds.com.au **Board Members:** 

#### Rohan Holtkamp

RMB 236B Western Hwy, Trawalla VIC 3373, ph/fax: 03 53492845, 014 678734, email: dynamic@netconnect.com.au

Michael Zupanc (CIVL Delegate)

6 Sibyl Street, Southport QLD 4215, ph: 07 55325895 (h), 0408 662328; email: zupy@ ozemail.com.au

#### Peta Roberts

PO Box 256, Helensburgh NSW 2508, ph/fax: 02 42943941, 0412 009952, email: epicon@ ozemail.com.au

#### Steve Ruffels

Bright VIC 3781, ph: 018 570168, fax: 03 57501174, email: eagle@netc.com.au Michael Eggleton

27 Knightsbridge Ave, Belrose NSW 2085, ph: 02 99754114.

#### Operations Manager: Craig Worth (Safety & Operations Committee, Pilot

Development & Training Committee) PO Box 71, Hallidays Point NSW 2430, Ph/fax:

02 65592713, 0418 657419, email: hgfaops@ midcoast com au

Microlight Public Relations: Paul Haines Ph/fax: 02 42941031.

For information about site ratings, sites and other local matters, contact the appropriate state associations region or club.

#### States & Regions

#### North Queensland HG Association

12 Van Eldik Ave, Andergrove QLD 4740; Pres: Graeme Beplate 07 49552913, fax: 07 49555122, email: sitework@mackay.net.au; Sec: Ron Huxhagen 07 49552913.

#### **New South Wales HG Association**

Sec: Steve Hocking, 19 Gladswood Gdns, Double Bay NSW 2028, ph/fax: 02 93274025, email: nswhga@s054.aone.net.au

#### Victorian HG & PG Association

PO Box 400, Prahran VIC 3181; Pres: Phillip Campbell 03 53343034; Sec: Andrew McKinnon 03 95631162; SSO: Rob Van Der Klooster 03 52223019.

#### **ACT HG & PG Association**

PO Box 3496, Manuka ACT 2603; Pres: Michael Porter 0415 920444; Sec: John Wilson 0419 600636; Trs: Craig Hopkins 02 62862488 (h), SSO: Peter Dall. Meetings: 1st Tue/month 7:30pm, "Sky Lounge" Yamba Sports Club, Phillip.

#### Tasmanian HG Association

PO Box 163, South Hobart TAS 7004; Pres: Brett Tooker 03 62503506; Sec/Trs/ State Co-ord: Stephen Bayley 0408 154156.

South Australian HG Association

1 Sturt St, Adelaide SA 5000; ph: 08 84101391, fax: 08 82117115. Pres: Stuart McClure 08 82973452; Sec: Mark Tyminski 08 83766117, email mark\_tyminski@nag.national.com.au; Trs: Gary Stockton 08 82702910.

#### **HG** Association of Western Australia

PO Box 82, South Perth WA 6151; Admin: Graeme Wishart 08 94449505; PG Rep: Julian McPherson 08 93881584 & David Humphrey 0418 954176; HG Rep: Michael Derry 08 92840750 (h) & Keith Lush 08 93673479 (h), 08 93679066 (w); Trike Rep: Graham McDonald 08 93649226 (h), 0418 910841; Trs: Phil Wainwright 08 92424483.

#### Clubs

#### NEW SOUTH WALES

Blue Mountains Hang Gliding Club Inc Pres: Richard Lockhart 0418 130354, email: flytation@mailandnews.com; Sec: Alan Bond 02 98995351, 9 Finchley PI, Glenhaven NSW 2353: Trs: Dolores Sempreboni, SSO: David Middleton 02 4736 2605; Newsletter:

David Phillips 02 9456 252, email: dphi@jna. com.au; Meetings: Last Wed/month, 7:30pm at the Blue Cattledog Tavern, St. Clair.

Byron Bay Hang Gliding Club Inc Pres: Bill Bailey 02 66853626, bill@omcs. com. au; Vice-Pres: Andrew Polidano 02 66843510 andrew@byron-bay.com; Sec: James Samuel 02 66804336, freefly@mullum. com.au; Trs: Shirley Lake 02 66858147, lois@ linknet.com. au; SSO: Chris Rollins (HG) 02 6689 7217, Brett (PG) 02 66876907. Meetings: 1st Wed/month 7:30pm, Bangalow Bowling Club.

Illawarra Hang Gliding Club Inc

Pres: Mark Ryan 0412 424 760; Sec: Tim Causer 02 4294 8110, email: timcau@ ozemail.com.au; SSO: James Nathaniel 02 42627677 or 0413 737077

#### Kosciusko Alpine Paragliding Club

Pres: Roger Lilford 06 2815404 (h); Sec: Lisa Ryrie 06 2359120, 06 2359060; SSO: Heinz Gloor 02 64576019 (w), 02 64567171 (h).

#### Manilla SkySailors Club Inc http://gri.une. edu.au/mss

Pres: Brian Shepherd 02 67852182; Sec/Trs: Felix Burkhard 02 67751050, mailto:// felixb@xyon.com.au; SSO (HG): Patrick Lenders 02 67783484; SSO (PG): Godfrey Wenness 02 67856545.

Mid North Coast Hang Gliding Association Pres: Lee Scott 02 65565265; SSO: Dale Davis 02 65597716.

#### Newcastle Hang Gliding Club

Pres: Tascha McLellan 02 49278867 (h), 1800 653935 (w), email: tascha.conrad@hunterlink. net.au; V-Pres: Jason Turner 02 49408665 (h), 015 636384; Sec: Karl Kindl 02 49677711; Trs: Tony O'Connor 02 49529146, SSO: Coastal - Jason Turner 02 49408665 (h), 015 636384, Inland - Al Giles 02 49430674, John O'Donoghue 02 49549084. Meetings: Last Wed/month, Souths Leagues Club. Northern Beaches Hang Gliding Club Inc Pres: John Clark 02 99972842 (h); Sec: Mike Warner 02 94521217 (h), 02 95573188 (w); SSO: Mike Eggleton 02 94517127, Park 02 94502674, Glenn Salmon 02 99180091. Stanwell Park Hang Gliding and Paragliding Club

Pres: Rob de Groot 02 42942173, fax 02 42943788, rdegroot@ozemail.com.au; Trs: Karen Lederer 02 42942273, 0411 362273.

#### Sydney Hang Gliding Club

Pres: Dick Heffer 02 93872613; Sec: John Trude 02 98873371; Trs: Greg Wilkinson 02 98184704. Meetings: 2nd Mon/month, Moyes Factory Loft.

#### Sydney Paragliding Club

Pres: Rob Fakes 02 42942273 (h): Sec: Duncan Cross, 48 Cormiston Ave, Concord NSW 2137, 02 97435128; Trs: Dave Worthington 02 9665 1465; SSO: Mark Mitsos 02 42949065. Meetings: 1st Mon/month, St George Leagues Club. Kogarah.

#### University of NSW Hang Gliding Club

Pres: Daniel Faber 02 93150727, email: dfaber@kensocoll.unsw.edu.au; Sec: Jon Ingles 02 93150571, email: jingles@kensocoll. unsw.edu.au; www page: www.vision.net.au/ ~gbeng/Hang\_Gliding.html

#### QUEENSLAND

#### Cairns Hang Gliding Club

Pres: Brod Osborne 07 40534686 (h), 07 4051 5555 (w); Vice-Pres: lan Graham 07 40954466; Sec: Lance Keough 07 40912117, 31 Holm Street, Atherton QLD 4883; Trs: Kasanda Brease 07 40532586 (h), 07 40512438 (w). Canungra Hang Gliding Club Inc

Pres: Shauna Purser 07 66793404, shaunapurser@yahoo.com; Vice-Pres: Andrew Horchner 07 38707709,

0412 807516, afactor@gil.com.au; Sec: Richard Glassock 07 55435057. 015 120874. richardg@ qldnet.com.au, PO Box 41 Canungra 4275; Trs: Fran Ning 07 55773260, ning@ ausinfo. com.au; SSO: Glen McLeod (HG) 07 55435716, John Botting (PG) 07 33002049, bottings@bigpond.com

#### Capricorn Skyriders Club Inc

Pres: Brian Hampson 079 226527; Sec: Geoff Craig 079 923137; Brian Smith 079 287958.

#### Conondale XC Flyers Club Inc

13 Cottman St, Buderim QLD 4556; Pres: Bruce Crerar 07 54451897; Vice-Pres: Shane Gingell 07 32851668; Sec: Mark Savage 07 54416423; Trs: Annie Crerar 07 54451897; SSO: John Blain 07 54948779; Visiting pilot contact: Graham Sutherland 07 54935882. Gladstone Hang Gliding Club Inc.

16 Far St, Gladstone QLD 4680; Pres: Colan McGree 0413 941134; Sec/Trs: Natasha Atkinson 07 49726840; PR: Brian Duffy 07 49922676; SSO: Geoff Craig 07 49923137, Paul Barry 07 49922865, prbarry@tpgi.com.au Rainbow Social Flyers Club

PO Box 206, Rainbow Beach QLD 4581. Pres: Andy Abbott ph/fax 07 54863771 or 0419 897005; Sec: Kevin French 07 54863773; Trs: Kachina Rye; HG SSO: Alan Goldsworthy 07 54864280; PG SSO: Jonathan Allen 07 54748169

South East Queensland Hang Gliding Club Pres: Peter Beard 07 33487150, email: Peter\_ Beard@msn.com.au

#### Sunshine Coast Hang Gliding Club

PO Box 227, Rainbow Beach, QLD 4581; Pres: Gary Allen 07 549440543; Vice-Pres: Duncan Whyte 0418 714618; Sec/PG SS0: Jean Luc Lejaille 07 54863048/ 0418 754157; Trs: Michael Powell 07 54425970: SSO: HG SSO: Tony Giammichele 07 33584101.

Townsville Hang Gliding Association Inc Pres: Gary Rogers 077 538565 (w), 077 79264511 (h); Vice-Pres: Peter Scarfe 077 721766 (w), 077 212666 (h); Sec/Trs: Brad Cooper 077 792853 (h), fax 077 815230; SSO: Graeme Etherton 077 724467. Whitsundays Hang Gliding Club

Pres: David Nash 07 49531817; Sec: Ron Huxhagen 07 49552913, Fax: 07 49555122. email: sitework@mackav.net.au

#### VICTORIA

#### Dynasoarers Hang Gliding Club

Pres: Peter Hannah 03 52632335; Sec:

John Norton; Trs: Rod Trevor 03 52811209; SSO: Ted Remeika 015 841107; Rob van der Klooster 03 52223019, hrt@ deakin.edu.au; PR: Warwick Spratt 03 52531096. Meetings: 1st Fri/month, Bay View Hotel, 2 Mercer St, Geelong. Eastern Hang Gliding Club

Pres: Geoff Tozer 03 97583250 (h); Sec: Andrew Medew 03 98227861, 16/25-29 Brougham St. Box Hill VIC 3128; SSO: Harry Summons 03 59646055 (h), Lance Sheppard 03 59623570 (h), M/ship: Mark Jeffree 03 59689015 (h). Meetings: 3rd Wed/ mth, Montrose Town Centre Meeting Room, Cnr Swansea Rd & Mt Dandenong Tourist Rd, Montrose.

North East Victoria Hang Gliding Club Inc Pres: Ted Jenkins 03 57551753; Sec: Lisa Basler 03 57501252; Trs: Bill Graham 03 57501828; SSO: Geoff White 03 57501244. Meetings: 1st Tue/ month, Alpine Hotel, Bright. www.home.aone.net.au/gilbert/ nevhc.htm

Sky High Paragliding Club

Pres: Hakim Mentes 0412 617216; Vice-Pres: Carolyn Dennis 0417 515626; Sec. Fabrice Millet 03 95961321. Meetings: 1st Wed/month 8pm, Retreat Hotel, 226 Nicholson St, Abbotsford.

#### Southern Club

Contact: John Reynoldson 03 95970527. Meetings: 1st Tue/month, Middle Park Hotel, Canterbury Rd.

#### Southern Cross Paragliding Inc

Pres: Gary Clarkson 0419 319948; Sec: Nicole Matthews 03 57501884, 018 450626, email: nicolematthews@hotmail.com Meetings: Last Wed/month.

#### Southern Trike Club

Pres: Mark Howard 03 97511480, 0418 533731, fax: 03 97511584; Vice-Pres: Dave Wentworth; Sec: Ben De Jong; Trs: John Amor. Meetings: 2nd Tue/month 8pm, Jakes Nightclub, 23 Church St, Brighton.

Western Victorian Hang Gliding Club Pres: Phillip Campbell 03 53343034; Vice-Pres:

Andrew Hume 03 93760907: Trs: Sandra Holtkamp 03 53492845; Sec: Rachelle Guy 03 98092974; SSO: Rohan Holtkamp 03 53492845. Meetings: Last Sat/month, The Golden Age Hotel Beaufort.

#### WESTERN AUSTRALIA

#### Avon Valley Hang Gliding Club

Pres: David Drabble, 08 93071816, wescoast @iinet.net.au; Vice-Pres: Rob Stevenson 08 92211338; Sec: Stephen Hoeffs 08 95275782; Trs: Michael Derry 08 92840750.

#### Cloudbase Paragliding Club Inc

Club message bank 08 9487 5253; www.cygnus. uwa.edu.au/~madmike/paraglid.html; email: cloudbase@paragliding.org Pres: Dave Humphrey 08 9574 5440, 0418 954176, paradive@avon.net.au; Sec: Michael Dufty 08 9382 3036, 0417 923741 madmike@ cygnus.uwa.edu.au Meetings: Last Wed/month, 8pm at the Sportsmans Association, Woodsome Rd, Mt Lawley.

Geralton & Midwest Hang Gliding Club

Pres: Des Hill 08 99216219; 231 Third Street, Geralton WA 6530.

#### South West Microlight Club

Pres: Brian Watts 0412 552363; Vice-Pres: Don Wilson 08 97641007; Sec: Paul Coffey 08 97251161; CFI: Brendan Watts 0408 949004. WA Hill Flyers Club

Contact: Rick Williams 08 92943962 (h), 015 057961. Meetings: last Wed/month at 7:30pm at the Swan Districts Football Club, Guildford Rd, Bassendean.

#### Western Soarers Hang Gliding Club

Pres: Sam Blight 08 93363738: Trs: Nav Brennan 08 93397991: Comp coordinators: Gordon Marshall 08 94519969, Nav Brennan.



- Supplied with antenna, leads, AC adapter, mounting bracket software and manual
- Suitable for club pilot or private owner

### LX COLIBRI GPS Data Logger

An ultra-compact logger, which does away with the need for a separate barograph, turnpoint camera(s) and handheld GPS! The LX COLIBRI does it all.

- Smallest logger on the market, 98 x 59 x 35mm.
- Operation 10-24V, 100mA current drain.
- In-flight Navigation screen displays BRG, TRK, SPEED and DISTANCE to turnpoint.
- Wind calculation, strength/ direction shown.
- 100hr record memory at default recording interval.
- Internal database for 600 turnpoints, 100 tasks.
- Comprehensive task statistics viewable on screen.
- NMEA Output to drive flight computers.
- RS232 Port for connection with PC.
- ENL, Engine noise level sensor for motorgliders.
- Recording Interval around TP and on task independently selectable.
- IGC Approved for badges, records, competitions.
- In-flight Operation: 7 button keyboard for ease.
- TP rounding confirmation Audible Alarm.
- Event Button for thermal marking etc.
- 12 month Warranty. Many more excellent features.

#### LUKE DODD Australian Agent

Ph: (08) 9330 2023 Fax: (08) 9383 6426

Email: LKDodd@bigpond.com.au



Tourism New South Wales

AME EFFICE HANWAG KOM GARDEN Manilla Shim Council & Dig Sky Regional Tourism



