



Web Site www.ddsc.org.au OR www.gogliding.org.au

Chaotic

Darling Downs Soaring Club Summer Newsletter January 2008

Canopy Covers

Have you seen this man? Wanted in connection with attempting to cover all the DDSC sailplanes with protective covers.



Chad has recently made covers for ALL the club gliders that did not have canopy covers. Please use them and keep them clean. The best technique for removal is to roll them back toward the nose fairly compactly; its then not too difficult to put them back on even on your own and in a wind. New watering points have been set up in the east end of the hanger for the LS7 and Hornet, also by Chad. And soon there will be new wing walkers and tow-out gear for LS7 and Hornet; so a very big thanks to Chad.

CFI's report

It's always good to start with the achievements of the last month or two.

Congratulations to:

Mike Codling	World comps selection
Allan Barnes	World comps selection
Jenny Thompson	World comps selection
Ross Lovett	first solo
Peter Richards	Jeans conversion
Steve Clements	aero-tow, Puchacz and Grob conversions
Mike Codling	selection for George Lee's coaching course
Jo Davis	Air Experience Instructor rating
Karl Bodi	Jeans conversion
Ross Ginder	C certificate, initial cross country, Jeans conversion

It is good to see the end of the rain and have a chance to do some flying again. For some of us it has been a while since we did much flying. I hope you have had a look at my article in the latest Soaring Australia magazine which gives an overview of what we are trying to do. Once again the cunning plan is for DDSC to lead gliding in Australia. At DDSC we have many competitive advantages that other clubs do not have, I would like a contemporary training and development system that meets all our members needs to be one of those competitive advantages.

Thank you to all those who put in a lot of effort around the club over Christmas New year, with Chad deserving a very special thank you. Next time you visit the club have a look around at all the things that have been done and stop for a moment to think how much better off we will be and say thank you.

On a sadder note we say farewell to one of our long standing members from active flying duty. For those of you who weren't at the Christmas Party, we say farewell to Russell Bennett, who after 29 years as a club member and 24 years as an instructor, has decided to retire. Russell has made a massive contribution to the club over all those years. I hate to think how many days instructing he has done over the years, not to mention his contribution to airworthiness, competitions and the club in general.

Russell will be remembered for his structured and disciplined approach to flying and airworthiness and his straight forward philosophy of "just do it properly". Many of us have been fortunate to learn a lot from Russell. Under the technically correct exterior was someone who was very generous and caring toward his fellow pilots and club members and who would always help members. His contribution to the club will be sorely missed and we wish Russell well in his gliding retirement and hope he pays us a visit from time to time.

I will close with a comment about rostering and our daily operations. The reality is that we only have one instructor available most days. That person is usually assisted by a coach or an air experience instructor.

One instructor can only do so many flights in a day. To make life easier for

members and instructors, the club some years back set up the on-line booking system. Can I encourage all members to please make use of the booking system if you are going to fly with the duty instructor. I must stress that this includes currency check flights, annual checks, conversions and rating checks. The club policy is that those who book using the booking system get priority.

Those who don't book or think that "their" flight can just be "fitted in", may be disappointed. Equally, attending the morning briefing at around 9.00am is expected of all pilots who will fly during the day. This allows the duty instructor to plan the flying for the day and give fair time to all club members. If there are a number of training requests already in for a day it may be worth delaying your training to another day. We will be training and upgrading a number of new instructors and coaches over the coming months but this will take a little time.

Thank you to all those who have been volunteering to help the duty instructor on the busy days.

Ralph

47th Australian Multiclass Nationals Benalla, Australia, 12/01/2009 –

For now just the results:

Standard class

1. Peter Temple	ASC	7636
2. Tom Gilbert	Temora	7065
3. Tobias Geiger	GCV	6964

15-Metre

1. John Buchanan	Kingaroy	7942
2. Miles Gore-Brown	Kingaroy	6976
3. David Pietsch	Temora	6816

18-Metre

1. Graham Parker	ASC	7683
2. David Jansen	Kingaroy	7507
3. Bruce Taylor	Kentucky	7443

Open class

1. Paul Mander/ David McManus
6645
2. Dion Weston 6211
3. Gerrit Kurstjens 5744

Airworthiness – Barry Daniel

With a lot of help we have completed four club Form 2's in three months. The next two (RI & MV) are due in August. We would like to avoid further unnecessary damage so some of the minor outstanding jobs can now be attended to. Please treat the aircraft with additional care and attention to preserve them. Please note the following tips in particular:

Canopy covers: The cockpits and canopies deteriorate more rapidly in the sun, so please put the available covers on at every opportunity. This also makes the cockpit cooler and more comfortable for the pilots. Take special care to roll them on and off to aid handling and avoid getting them dirty and "scratchy". Do NOT leave the straps trailing loosely on the ground or the covers will be ripped when the straps get caught under the main wheel.

Pitot covers: The available pitot covers MUST be put on aircraft in the hangar. We continue to find wasps nests in the pitot heads, rendering the aircraft U/S and making more maintenance work for pilots. Be sure to put any tight fitting covers on slowly to avoid over-pressuring the ASI's.

Tail Dollies: Pilots have been getting slack in removing or chocking tail dollies especially in the hangar. We have recently had strong winds getting into the hangar and unnecessary damage could result.

Sun damage: Fabric gliders and the tugs in particular are prone to skin

damage from sun exposure. We have been asked to keep any unused aircraft in the hangar rather than leave them outside all day. This can also reduce the risk of damage from wind or collision during the day.

DI books: Please use them to record minor defects and any fixes to them. Only this way can maintenance be managed and a very useful history be recorded. In addition, could the Duty Pilot or other persons entering the hours for the day, double check the running total for the previous day before adding on the new hours and perpetuating errors. This would make the Form 2's and periodic maintenance (e.g. fifty hourly's) much easier and reliable.

Tyre pressure: Do NOT sign out a DI unless the tyre pressure is adequate. Considerable damage to tubes, rims, and structure has occurred from leaving aircraft tyres underinflated. Repairs are costly and have rendered aircraft U/S causing frustration and costing income. Slow leaks need to be put in the DI book and reported. They can be caused by damage from under inflation

Aircraft Captains

The committee has decided to re-introduce the positions of "Aircraft Captains" to the club to enhance the fleet serviceability for all. It is envisaged that an Aircraft Captain will take particular care of one aircraft only. This individual will monitor and report on the state of the aircraft and assist the Airworthiness Officer to maintain a higher standard of serviceability.

The typical Aircraft Captain would be any solo pilot who frequently flies the particular glider and therefore has a personal interest in the state of that

aircraft. No other qualifications needed. The pilot has the desired regular hands-on flying contact, letting him detect minor problems with instruments, maintenance, and paperwork earlier than most, including the AWO. The Aircraft Captain would hand over the role to another upcoming pilot when moving on or up the aircraft fleet.

The committee has prepared a guideline of items the Aircraft Captain should monitor and attend to whenever possible, and is seeking volunteers to act as "Aircraft Captains" for the various club aircraft. By taking on the role for your current aircraft, you will receive improved aircraft serviceability and the gratitude of all your all your peers, from whom you can solicit support.

If you feel you may be able to help with any of our seven sailplanes please contact the AWO (bcdaniel@optusnet.com.au or 33156665 or 0432 230350)

Editor -I will see if I can get the 'Aircraft Captains Duties' doc into the end of this chaotic. But I'm not sure how readable it will be? May need to be A4?

Mt Beauty from on high...



To: chat@ddsc.org.au
Subject: [chat] mountain flight

On the practice day for the nationals I took the opportunity instead of Jenny doing the task I got to fly into the mountains, following several other gliders who flew to Mt Kosciusko. I chickened out 60km short.

But flew to Mt Buffalo, Mt Bogong and the place in the first photo which Allan and Dave would be familiar with. The second photo is 100km east of Benalla looking towards Benalla.

Jeremy



Another rather bizarre photo made its way to the Chaotic editor's desk...

Dear Chaotic,

Last Friday things were a bit restless at DDSC, with not a lot of flying.

Most of us managed to hold it together, but a few flipped. After Chad spent many hours successfully modifying Jo's glider dolly, Chad and Mike then proceeded in 'road-testing' the modifications on the muddy track...

Sent: Friday, 16 January 2009 2:17 PM



Understanding SPOT

Message types

SPOT has three different messages it is able to send. Each message is tailor made by the owner of each SPOT.

Help:

This message is to let the club know that the pilot has outlanded and all is well. The message will contain the pilots name and possibly the glider rego as well as their position (lat and long co-ordinates) of where they outlanded. The message will continue to be sent every five minutes or so until the pilot turns off the SPOT because the device has no knowledge that the message has been successfully received.

Ops Normal:

This message is to let the club know that everything is OK and everything is Ops Normal. This does NOT mean that the pilot has outlanded. The message should contain the pilots name and possibly the glider rego as well as their position (lat and long co-ordinates). You should receive only one message from this button press. These messages are usually sent later in the day to give the receiver the knowledge of Ops Normal or possibly when a pilot is turning a turn point on a long task.

Emergency:

This message will go straight to the Spot manufacture who will then relay it to the Australian emergency services. The message should contain the pilots name and possibly the glider rego as well that fact they are flying gliders and that they will try to monitor the emergency frequency (121.5). It should also have contact details of the club or family.

What to do with Spot information in an outlanding

When receiving a "Help" message informing of an outlanding, the basic information is already given with the pilots name possibly the glider rego and their position but more information can be obtained if necessary. By looking on the SAR register some SPOT owners have their own spot shared page. By getting on the internet and typing in their page address a map can be obtained. This map is both a road map as well as a Google Earth map and can show a lot of useful information. Another way to access the maps page is go to the club spot email at DDSC.spot@gmail.com (password DDSCszd50). Some SPOT owners have set their devices to send an email to this address. Just click on the link to get forwarded to the map page.

Chad.

Additional info: sourced by the editor.

I browsed the FAQ at

<http://www.findmespot.net.au/FAQ.html>

This is the Australian importer so I am hoping the information is correct for Australia. On reading the FAQ the way the OK or Ops normal message is sent; the cycle could take twenty minutes as it actually sends three messages. Only one message will be relayed. When the OK/Check light stops blinking the cycle is

finished. The chance of success is high, but no feedback! To improve the chance of transmission, the Spot logo should see the sky.

WHAT WAS THAT?

Firstly an extract off chat, sent by Anton...

Hi all,

What was that??

As you remember we had four outlandings, couple of pilots returned using engines, some pretty experienced ones didn't even venture going cross country.

But... some early birds, namely, Allan, Barry and hopefully Andrew (didn't see his flight in OLC) have caught "convergence" climbing up to 14500' QNH running 100 km cloud streets and completing 500k+ XC flights.

*Could you share your experiences? How did it look? Was it luck or you could see very high Cu etc.? Judging from the traces it looked like you definitely had cloud streets. Allan run 100k at L/D 300+ in his LS1f (I'm not sure about the glider but I would buy that cloud street :)).
...Anton Grishin*

Editor - And I will add that about 17k W of Pittsworth I decided not to venture on to Milmerran as there was an area of large cloud development with what looked vaguely like small areas of sea breeze curtain cloud and then blue (largely). It seemed to me that there was probably a colder airmass the other side, so I turned for Jandowae. Shortly after that I decided I wasn't comfortable with the large areas of sink and very punchy rough lift that I had been encountering. So I headed back to DDSC. If I had recalled the rasp meteogram of the wind and the red line

on one of the thermal maps, I perhaps would have carried on toward Dalby/Chinchilla – but I was truly not feeling comfortable. I had my first flight for 6 weeks the weekend before and it was great, easy flying and cloud streets; I was just glad that this flight wasn't the first for 6 weeks...

Dave Holbrook.

Now Barry's account.

Last Saturday morning I pondered over the forecast for some time trying to plan a useful task. The BLIP maps and NOAA showed excellent conditions at Goondiwindi and Miles but poor conditions at DDSC with an easterly wind in the afternoon and a line of early deterioration sweeping westward as the afternoon progressed. My concern was that even if we got to the indicated 11,000 at Miles we might not get home from 3pm into the wind and "crap" conditions. Early afternoon, the BLIP maps showed a line of strong conditions north-south on a line just east of Goondi-Miles. I proposed Goondiwindi-Goomby Xing (500k) hoping to use the line planning to get back to Chinchilla at 10,000 to press into wind. Alan was talked out of going further west (~Taroom?) by the deteriorating BLIP map west of the line.

As usual we set out reasonably early (10am) (the early bird gets... :-)) with a low save for Alan and weak conditions generally but Andrew, Alan and I all reached the scrub line west of Milmerran within sight of each other and conditions picked up well to 8500ft. The run to Goondiwindi, into a mostly SW wind, saw disappointingly declining conditions. The forecast lift line was apparently well East of the forecast position, more aligned with Inglewood. We scraped out to Goondiwindi and then abandoned the

North track and worked back into the improving conditions to the East. Alan observed the distinct cloud line with blue skies west and Cu's from 7,000 to 12,000 to the East and recognised it as a convergence line.

Sure enough on the blue side lift was good (some patches were 6 to 10 kts) and going way beyond the cloud base in the moister Easterly side. We all enjoyed a long Northerly run climbing constantly for large distances within a kilometre of billowing cumulus on our right and sometimes below me. I wished I had a camera with me. When the visual line deteriorated around Dalby I stopped to circle in good lift climbing another 2000 to 13,000 then broke away to chase very high clouds forming in the north western half of the sky (Jandowie way) finding some with above 14000 cloudbase. I later flew south again getting some more lift and needless to say with the line passing just west of Dalby we had no difficulty getting home when the line dissolved.

To understand the driving forces that produced this convergence between a South Westerly and Easterly wind you best ask a meteorologist, but I believe the effect is similar to a sea breeze front. However I have never experienced a sea breeze front to compare with the strength of this convergence line.

Barry

Now Andrew...

It was definitely a convergence line, we were running to the west of the cloud, well defined but the best lift was in the blue to the west of little scraps of cloud forming over the scrub.

I nearly landed at Goondoowindi but Allan was higher and suggested Inglewood because he could see the cloud line. I was lower and behind him but he was reporting that the conditions were better further east, much as they had deteriorated as we went west.

I think Barry headed towards home while I followed Allan east, getting stronger and higher climbs until we were above cloud base before reaching the clouds. The line wasn't solid and the clouds looked quite ordinary but the good conditions were before the clouds.

I went around Inglewood then ran up to Jandowae North in quick time without much turning. The lower cloud marking the convergence line stopped about Dalby but the cumulus immediately north were clearly higher and it was here that I climbed to 14200' – a big improvement over 1800' when 165km from home near Goondoowindi.

I headed south along the convergence line again, leaving it at 11000' to head for Cecil Plains and home with a 100kt glide (in very still air). The winds when we left were NE, it was clearly SW the other side of the scrub (and convergence line) and while still NE the winds were much stronger on my return, making for a rough approach. We got away before the winds picked up and the clouds built enough to cause cycling, and it was fortunate we had chosen Goondoowindi as the first turn as it meant that to get home we had to cross the convergence line.

Those heading for Milmerran later had stronger winds, more cloud overhead, and it is likely that the convergence line had moved further west by then, taking the good conditions with it. There was a CB embedded in the cloud line, east enough of track to cause us no problems

but it would have made things difficult if you were below the clouds and to the east. I guess we were lucky, but by leaving early and having an ambitious task we were rewarded by being in the right place at the right time. That said I could easily have landed north of Milmerran on the way out, or at Goondoowindi, which would have put an entirely different slant on the day.

Our original task of Goondoowindi – Goombi proved too ambitious for the day, but in the end we all went further than planned and my 585km was a new longest flight for me. The unexpected good fortune we found makes this one of the best flights I have ever had – it is always special when you climb above cloud base. A logger failure meant that I couldn't claim the flight but I know what I achieved. Funny though, no-one really wanted to hear about it when we got back.

Regards,

Andrew Huggins

P.S. I took some photos with my phone, the field of view is limited but it might give an idea of the sort of cloud we saw.

Editor – photos are at the end of Allan's piece.

Now Allan

..On the way out to Goondi, we left the final clouds at the edge of the scrub. I was already thinking at that stage that it looked like a weak convergence line and this was reinforced by the evident change in wind direction as we headed for Goondi - the wind was noticeably SW rather than E - ideal conditions for convergence. What was a surprise was

that the best convergence was significantly west of the last line of cu's.

Bruce Taylor mentioned to me in Rieti that you could tell which side of a convergence line you were on by the feel of the air - if you are on the cold side, the air has a 'juddery' feel like driving down a cobbled street. He also mentioned that the best lift was usually well to the warmer side - and it certainly turned out to be the case on Saturday.

I found it was possible, after having found a good climb, to just head parallel to the edge of the cloud line and enjoy continuous lift or light sink at around 7-9000ft. About level with Cecil Plains, the lift was phenomenal and I circled up to 14300 under a higher cloudbase that had started to form to the west of the convergence.

Barry asked Andrew whether he needed his diamond height - at which point I started thinking about whether the same might be practical for me! 5000m = 16404ft, so I needed to get to 17000 to be sure of my diamond. With this in mind I headed NE from Broadwater toward an area of rapidly developing towering cu - maybe if I could work my way up the front of the cloud where the convergence was, it might be possible to get to 17000.

Unfortunately I could not find the convergence again, (I was actually well east of it at that point) and so I headed up to Durong where the cloudbases looked even higher. It was an illusion however and I could not manage more than about 12-13000. From there the run back to DDSC was uneventful, but spectacular, with final glide achieved at Jandowae North, and most of the glide conducted well above the lower cloudbase on the way home.

Overall it would have to rank as one of my most spectacular flights ever from DDSC - definitely in the top 3 anyhow!

Allan Barnes.

Editor - Well there we have it. Lots of lessons there – I note that the convergence line itself was not always visible to all. Personally, I think I had the chance to pick up on what was happening and if I'd been more inquiring – but I blew it!

Being observant and learning constantly what the sky around is indicating, and the unseen air is doing, is one of the challenges of free flying...

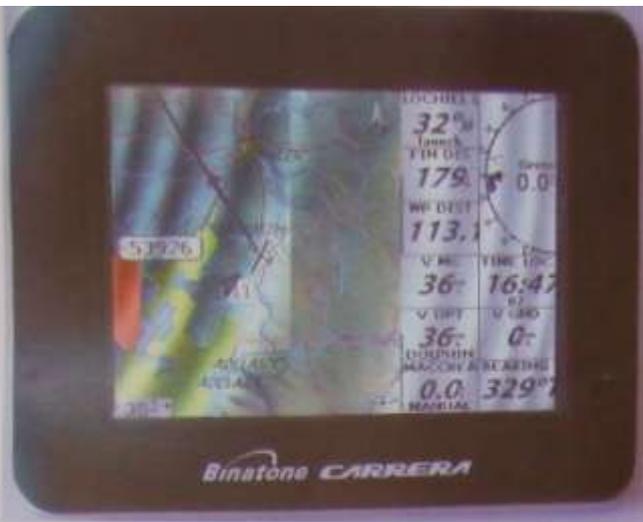


ROSTERS:

Are on second to last page.

Next page has an article from Gliding International, to subscribe to this excellent soaring magazine see www.glidinginternational.com or contact John Roake at editor@glidinginternational.com

How to turn a low cost in-car GPS into a comprehensive flight computer



A few months ago I was looking for a flight computer to use on my Hang Glider. While I could buy a good instrument purpose built for the task I couldn't justify spending more on an instrument than I had on my glider. I had recently purchased a Binatone Carrera X350 in car GPS navigator. I have used the open-source flight computer software XCSoar in the past and, was impressed at its functionality, so I decided to see if I could get XCSoar to run on the Binatone. After a few nights working on the project I managed to get the two to work together. The final solution just requires a few files to be copied onto an SD memory card. When the card is in the Binatone and the device is switched on it runs XCSoar. Remove the SD card and the device operates as an in car navigator again.

The project provides a low cost flight computer, with integrated GPS, that should be easy to mount on a glider panel. The device has an internal battery and additional power can be supplied through a USB lead. It comes with a 12V car adaptor which should make it straightforward to wire to the glider battery. The power consumption is reasonably low, I can run the unit with the screen at full brightness for six hours on 4 AA batteries. The screen is bright enough to see in most lighting conditions, and the touch screen works well for in flight just using a finger. There is a connector on the rear of the device for an external antenna if required. The device can also be used to find your way home from the airfield. The Binatone unit I used cost me AU\$200, the current Binatone models are down to about AU\$150 and a friend has this working on an AU\$100 no brand GPS he brought on ebay.

To download the files required to turn your Binatone into a flight computer, and for more information, follow the link on: <http://sahg.info/>

XCSoar is a free, fully functional flight computer software package. The major part of the display consists of a moving map that shows navigation, airspace, and other information. The remainder of the display consists of numerical outputs that can display a number of parameters such as speed to fly, bearing to next waypoint, height agl, etc. There are too many functions to describe here, if you are unfamiliar with XCSoar I suggest you download the manual and take a look. There is a PC version that you can download. The PC version can be used in conjunction with a flight simulator to familiarize yourself with the software.

For more information on XCSoar see: <http://www.xcsoar.org/>

The changes I made to the software have been added to the official XCSoar software, so future releases of XCSoar should be able to run on the device. It should also be possible to get the software to run on most other in-car navigators that run on windows CE, this may require more work though. If you do get this working on a different device please let me know and I will compile a list.

Authors Background: I was a glider pilot for a number of years, I am now a hang glider pilot. I enjoy flying cross country, especially competition flying. I have worked as a software engineer for over 20 years, I run a server at home that produces RASP Blipmap weather forecasts for my local area, and have been involved in various other soaring related software projects over the years.

February 2009

Day	Instructors	Tug Pilots	Duty Pilots
Sat 31st (Jan)	Jo Davis (Coach) Charlie Downes (L2) Bob Flood (AE)	Jeremy Thompson Des Cramer	Bob Flood
Sun 1st Feb	Tony Cavanna (L2) Paul Bart (AE)	Charlie Downes John Ashford	Graham Hennessy
Sat 7th	Jeremy Thompson (L2/Coach) Chad Nowak (L1)	Pam Kurstjens Des Baartz	Leonid Motin
Sun 8th	Jenny Thompson (L2) Paul Bart (AE)	Gerrit Kurstjens Lex McQueen	Paul Bart
Sat 14th	Mike Codling (Coach) Andrew Huggins (L3) Bob Flood (AE)	Andrew Straume Scott Merrick	Anton Grisin
Sun 15th	Denis Lambert (L2) Pearce Mitchell (L1)	Fran Ning	Richard Armstrong
Sat 21st	Jo Davis (Coach) Richard Hoskings (L2) Keith Allen (AE)	Gary McMahon Des Baartz	Bill Smith
Sun 22nd	Ralph Henderson (L2/Coach) Tony Cavanna (L2)	Gary McMahon	Roly Sundell
Sat 28th	Peter Bell (L3/Coach) Greg Valler (AE)	Brad Anstey	Greg & Michaela Valler
Sun 1st (Mar)	Charlie Downes (L2) Barry Daniel (L1)	Jeremy Thompson	John Hook

Aircraft Captains Duties

As with all duties around the club, the aim is not to do everything yourself, but rather to work co-operatively with others, seek their assistance, and share the knowledge, responsibility and enjoyment.

Place a note in the DI book with your name and contact details and asking to be advised of any minor defects or other matters that an aircraft captain should know about.

You will need a supply of tape and other cleaning products, for which the club will reimburse you.

Each time you are at the club

Check the DI book for any minor defects

Check the DI book for any inspections that are due soon, e.g. Form 2, 50 hourly etc.

Have a look over the glider for any obvious problems, especially low tire pressures

Record unresolvable problems in the DI book

Check the state of the pitot and canopy covers for serviceability and cleanliness

Consult with the airworthiness officer as required

With assistance, as often as practical

Carry out a very thorough DI

Wash the exterior completely including underneath

Seriously debug the wings, tail plane and fin

Clean and vacuum the interior

Carefully wash and polish the canopy

Check that the radio and instruments are fully operational

Report any defects to the appropriate person, and record in DI book

Resolve any minor defects in conjunction with the airworthiness officer or a Form 2 inspector

Remove the old tape, clean off the gunge and retape the wings and tailplane

At other times

Consult with the airworthiness officer on current work that needs to be done, and on the Form 2.

Consult with the trailer officer on any trailer maintenance and upgrades.

If the glider is going away to a competition or other event, contact the pilot and make sure they know where all the rigging gear is and check that everything is serviceable. This is great time to carry out any minor maintenance or improvements that have been deferred as you have a captive pilot who wants the glider to be in top shape.

When new issues arise that are specific to your aircraft, put a note on the chat line and/or in Chaotic.

When the aircraft is unserviceable, get the aircraft booked for the expected time it will be out of action, and monitor this.

Ensure any aircraft pilot notes and manual are available and current. (some are still being developed)

22 Jan 2009