



CHAOTIC

Monthly Newsletter of the Darling Downs Soaring Club

July 2004

President's Report

Financial Year Ended: We ended the year with around \$100,000 in the bank and 2108 hours in club aircraft. This is 106 hours down on last year. But the combined club and private total of 3573 hours is up 413 hours on the 3160 hours flown last year. Significant factor affecting hours were the RAGSA visit, and the extreme wet weather in December and January. Hours are shown in graph form at the back of this Chaotic.

Incorporated Association: Thanks to Brian Hoffmeister, we've finalised the transition to the incorporated association. The transfer of assets is now complete. As part of the process, we need all DDSC members to agree, in writing, to become members of the association. If you have not yet agreed to do so, would you please complete the enclosed form and either fax it to 07 3377 6701 or mail it to DDSC, Minserv, Level 1, 1 Swann Rd, Taringa Qld 4068. If you are coming to the (hopefully brief) General Meeting on 24 July, we'll have forms there also. Saturday 24th July is our Xmas in July Party, and we are hoping for a short meeting before this to finalise the process. Thanks very much Brian, for your quiet, systematic and efficient efforts in getting this task done. Here is the meeting notice posted on Chat: "A General Meeting of the Darling Downs Transitional Soaring Club Incorporated Association is to be held at the Clubhouse at 6.30pm on Saturday 24 July 2004. The business of the meeting will include: The change of name from Darling Downs Transitional Soaring Club Inc. to Darling Downs Soaring Club Inc.; The appointment of the Management Committee; The appointment of an Auditor."

New Tug: Bob Keen and Shane have located a potential Pawnee for our second tug. They have done a lot of driving around to check out potential tugs. We need to get the second tug urgently to keep up with demand, and as a backup. This struck home to me this week when SWR had to go in for maintenance, and Bob and Shane had to work long hours on repairs to the cowling to get it back to us for the weekend.

Form 2 Time: Once again, thanks to Shane, John Hook, Russell Bennett and Bob Keen for their work on GMV (6000hourly), XOW and RI.

ABC Australian Story and Glenn Todhunter: The show will air on the 2nd of August on the ABC.

Nationals Working Bee: Message from Bob Keen: "We have chosen Saturday the 7th of August for our working bee at the Dalby Aerodrome. Can all those attending send me confirmation of their attendance? We will require some hand tools, such as hacksaws, pipe wrenches, spanners, trenching shovels, etc etc. Thanks, Bob."

Great Winter Flying - Where Else but DDSC? When I'm touring around the skies in June, I count my blessings that we can keep soaring during winter! Here is an extract from my rushed note to the Chat line on 15th June: "What a weekend! Approximately 90 launches. Good soaring conditions. The canteen bell rang continually. Armand Daiga went solo again – Congrats Armand! Our 4 Townsville visitors racked up a stream of conversions (aerotow, glass 2 seater, glass single seater) and went away very happy chappies. (Grant Harper, Lee Cox, David Reitsma,

Brett Kettle). It was great to have them at the club. Bob Flood and Lex bought into the DG100. Alice is airborne again. Shane test flew her. Robert flew her to Watt's Bridge. BBQ for our Townsville friends Sunday night (thanks Libby and Irene!). Lots of good cross country flights. Grant Harper and Jo (GGH, XOW) went west yesterday. John Moore and Libby went touring in the DG500. Paul Bart (XOW) and I (GMV) paid a visit to Dalby airstrip on Sunday when a western airmass came through and changed our plans. Quite a few PAX flights. Hoffy did 35 tows on Sunday, Lex did 25 yesterday. Tony C instructed flat out all day yesterday."

And there's more: "Sunday 4th July was a beautiful soaring day! It started out overcast, then overcast and windy, then not overcast, then not windy, then perfect. Cloudbase 7000ft QNH. Best climb I had was 4.5kts on the averager. Mostly less than that. Soaring conditions from 11.30am (scratchy for an hour or so) till after 4pm. The single seaters were well utilized yesterday also. Congratulations to: Alan Midwood and Neil Muspratt for their conversions to the LS7. To Ivan Popek for his conversion to the Hornet. To Armand Daiga for his first single seater flight (KYT) since recommencing his gliding career. To Peter Weatherspoon for gaining his AEI rating. It was great to see Lex flying his new glider (WQR)."

Peter Bell: Congratulations to Peter Bell who has been promoted to Level 3 Instructor.

Happy and safe flying.

Richard Hoskings

Notice of General Meeting

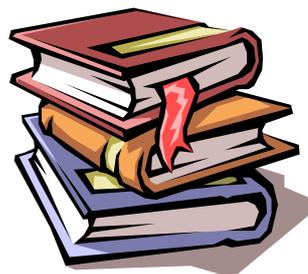
A General Meeting of the Darling Downs Transitional Soaring Club Incorporated Association is to be held at the Clubhouse at 6.30pm on Saturday 24 July 2004. The business of the meeting will include:

- The change of name from Darling Downs Transitional Soaring Club Inc. to Darling Downs Soaring Club Inc.
- The appointment of the Management Committee
- The appointment of an Auditor

Jenny Thompson

Extracts from Flight Rules (date unknown but c1967)

Darling Downs Soaring Club
P.O. Box 37, Jondaryan



'When operating from a field covered in dry grass, fire fighting equipment should always be available. Where a field is stony, steel shod skids invariably strike sparks, and fire danger is ever present. A fire extinguisher is on hand at the control point. Remember also that tarps or bags to beat out flames, dry earth is also good.'

'All pilots shall familiarise themselves with current notices (notice folder at the Control Point) before flight.' (Not a bad idea!)

'No member is allowed to attempt thermalling before completing five solo flights on each conversion to aircraft type.' (!)

'As a general rule, and in addition to cross-

country requirements, flying times will be:-

'0730-1030 Test flights, ab-initio revision,
training and checking of pilots
1030-1530 Local soaring, soaring training
1530-Last light Ab-initio training
1030-1530 Ab-initio's ground training'

"When rigging aircraft, a wing should never be laid straight on the ground. It should be edged forward as it is placed down so that twigs, plants etc. are flattened and so prevent the fabric being punctured'.

c/o Russell Bennett

More from 'The Archive' in the next edition.

The Unrecognised Glider Pilots

One of the ironies of the early development of the glider, and subsequently the aeroplane is that the theories of fluid dynamics were well known long before man started to seriously contemplate building a flying machine. However, those building the early gliders, from which the aeroplane evolved, were far removed from these theories, and consequently they laboriously re-invented the wheel.

Another irony is that those generally lauded for the early development of gliding, had very limited success and never solved the most important mystery of all i.e. that of control. Control, performance, and credible theory came from a source generally not recognised in gliding circles around the world - the Wright brothers.

Those active in the experimentation of the art of flying agreed that in building a successful aeroplane, the problem "... was threefold (a) to build wings of sufficient lift, (b) to build an engine of sufficient power and (c) to balance and steer the machine in flight."

From the time of "...the founding genius of aeronautics, George Cayley", to Otto Lilienthal, and to the later inventors such as Octave Chanute and Samuel Langley, it was known that sufficient lift would come from the curvature of the wings.

And as the internal combustion engine was very much in its infancy at the time, it was thought that the non-availability of a suitable engine would prevent people from flying. Consequently all experimenters except the Wright brothers spent their energies on the development of engines, thinking that gaining control of a flying machine would be simple, and to a degree automatic.

Only the Wright brothers believed that *control* was the major impediment to success. After the mysteries of control were known the addition of an engine would quickly allow people to fly like a bird.

So why should we in the gliding community give more recognition to the Wrights? Well, Wilbur had an interest from an early age and read of the gliding exploits of Otto Lilienthal, and although his and Orville's end play was powered flight, they had no doubt that the understanding of the aerodynamics would come from the building and flying of gliders. This led to them becoming by far the most successful builders and pilots of gliders through time, until they left the flying scene around 1911. And through their progressive development of control in the three axes, they gave the world practical concepts, which are still used today.

Over the years whilst building their store of knowledge through gliding they:

- Built the first successful wind tunnel, and carried out numerous controlled experiments to develop aerofoil sections for their proposed wings.
- Realised early that the couple

between the centre of gravity and the centre of pressure was critical for controlled flight in the fore and aft plane. This led to them being the first to invent the elevator (they called it a horizontal rudder).

- Invented and applied wing warping thus giving the world the first ever control over bank angle, and permitting for the first time the ability to carry out turns or maintain straight flight.
- As a result of their experiments with turning they discovered what we now know as aileron drag, and to overcome this they invented first a fixed rudder and then a hinged rudder attached to a fixed fin. This of course, allowed for perfectly balance turns.

To carry out their gliding experiments the Brothers needed to find a suitable location with the appropriate winds and gentle slopes. They decided on the Kill Devil Hills at Kitty Hawk in North Carolina (more specifically the outer banks of this region).

Flight-testing at Kitty Hawk was confined to a small window of opportunity during late summer and early autumn when suitable winds blew onto the sand hills of the outer banks. In 1900 at Kitty Hawk on their first day of free flight they recorded a glide of 400ft.

In 1902 after a flight of nearly half a minute duration and 622 ft distance, Orville wrote;
“We now hold all the records! The largest machine ever handled...the longest time in the air, the smallest angle of descent, and the highest wind!!!”

Over the following years during their short excursions, they progressively increased this distance to glides of 800 to 900ft. Their evolving system of control, for the first time in history, allowed a glider to be flown successfully through the gusts and turbulence experienced when launching off

slopes. Long before they thought of installing an engine, balanced “S” turns were being performed at Kill Devil Hill. Their time in the air, and distances flown, were the best to date.

“Only a tiny handful of humans had known the sensation-Lilienthal, Percy Pilcher, Chanute’s assistants-but none for so many seconds or with such confidence of the ability to remain in balance and to land safely”.

The Brothers were the first to cross the verge. Famous inventors such as Sir George Cayley, Octave Chanute and Samuel Langley never participated in their very limited practical flying experiments. They had their assistants do the unsuccessful dirty work. Others (Otto Lilienthal, Percy Pilcher) died in accidents attempting to fly in gliders that had no chance of success due to their uncontrollability.

It is possible that Wilbur was the first (certainly amongst the first) to perceive thermals. On clear days he deduced birds were climbing in “columns of air rising from sun-baked sand”. On another occasion the brothers noticed a falling feather had reversed directions, and rapidly rose out of sight. “It apparently was drawn into the same rising current in which the eagles were soaring, and was carried up like the birds.”

On one occasion in 1910, in a Wright Flyer, Orville found that he could not descend from 1500 ft. He had been caught up in a broad thermal. He remarked, “a most thrilling” sensation. In the autumn of 1911 he took a new glider to the sand dunes of Kitty Hawk and set a world gliding record of nine minutes and forty-five seconds. This stood for ten years! Fifty years later in the 1960’s flights of only three to four minutes were still common place and one would go for a days gliding and never exceed the world record of 1911.

The Wright Brothers had undoubtedly

advanced gliding from the embryonic, uncontrollable and highly dangerous pursuit of the 19th century, to an exhilarating, scientifically predictable and safe activity. For this they should be recognised in the gliding fraternity.

Note: Quotations and data have been taken from To Conquer The Air by James Tobin PhD and other credible publications.

Charlie Downes

Incorporated Association Reminder

As most will know, we agreed to form an incorporated association and transfer the Club assets to that association. The transfer is now complete. As part of the process, we need all DDSC members to agree, in writing, to become members of the association. If you have not yet done so, would you please complete the form at the back of the Chaotic and either fax it to 3377 6701 or mail it to the address shown. If you are coming to the General Meeting on 24 July, we'll have forms there also.

Brian Hoffmeister

2003 - 04 Events Calendar
as at June 2004

Date	Event	Place	Contact
Sat 24 th July 04	Xmas in July	McCaffery Field	Irene thomo@burcom.com.au Or Libby libbymat@optusnet.com.au
Sat 7 th August 04	Nationals working bee	Dalby	Ralph Henderson rhenderson@austarmetro.com.au
Sat 7 th August 04	Instructors Meeting	McCaffrey Field	Jeremy Thompson Libelle@optusnet.com.au
Sat 14 th August 04	General Meeting	McCaffrey Field	Richard Hoskings Richard@hoskingsresource.com.au
Sat 4 th Sept 04	Instructors AGM	McCaffrey Field	Jeremy Thompson Libelle@optusnet.com.au
Sat 11 th Sept 04	DDSC AGM	TBA	Richard Hoskings Richard@hoskingsresource.com.au
Sat 25 Sep – Sat 2 Oct 04	QLD State Championships	Kingaroy	Doug Flockhart doug@ozgroup.com.au
Mon 4 – Fri 15 Oct 04	Multi Class National Championships	Dalby	Ralph Henderson rhenderson@austarmetro.com.au
Mon 18 th – Fri 22 nd Oct 04	Caboulture Pilots' Week	McCaffrey Field	Russell Bennett randvbennett@optusnet.com.au
Sun 24 th – Sun 31 st Oct 04	Kiwi Visit	McCaffery Field	Ralph Henderson rhenderson@austarmetro.com.au
Fri 25 th March – Sat 2 nd April 05	Queensland Easter Competition	Dalby	David McManus David_mcmanus80@optusnet.com.au

	Day	Instructors	Tug Pilots	Duty Pilots
July	Sat 3 rd .	T Cavanna J Grosser	L McQueen P Kurstjens	Neil Muspratt
	Sun 4 th .	M Codling B Daniels	Jeremy Thompson	Keith Allen Ben Bezuidenhout
	Sat 10 th .	J Thompson C Downes	J Geddes D Baartz	Bob Flood Graham Hennessy
	Sun 11 th .	P Bell L Matusczak	Jenny Thompson	Hugh Hoffmeister Andrew Straume
	Sat 17 th .	R Henderson R Hoskings	A Garrone F Ning	John Davies David Ferguson
	Sun 18 th .	D McManus B Hoffmeister	D Cramer R Keen	Peter Davison John Moller
	Sat 24 th .	R Hart B Keen	M Robertson J Knox	Chezhan Hall
	Sun 25 th .	A Garrone R Hoskings	R Bradley B Ward	Joan Robinson Sara Tromp
	Sat 31 st .	J Thompson J Grosser	B Hoffmeister	Mark Hartmann Robert Percy
August	Sun 1 st .	M Codling B Daniels	P Kurstjens Jeremy Thompson	Jo Davis Koji Masuda
	Sat 7 th .	R Henderson R Hoskings	D Baartz J Geddes	Michael Russell Roly Sundell
	Sun 6 th .	P Bell L Matusczak	D Cramer F Ning	Steve Harris Alan Midwood
	Sat 14 th .	J Thompson C Downes	L McQueen B Keen	Richard Armstrong Paul Bart
	Sun 15 th .	R Hart B Hoffmeister	R Bradley	Charles Gillmore Gordon Gillmore
	Sat 21 st .	J Thompson A Wetherspoon	J Knox Jenny Thompson	Brian Rolfe Ron Walker
	Sun 22 nd .	A Garrone B Keen	M Robertson B Hoffmeister	Greg Valler Michaela Valler
	Sat 28 th .	T Cavanna J Grosser	A Garrone	Bob Flood Graham Hennessy
	Sun 29 th .	M Codling B Daniels	B Ward	Keith Allen Ben Bezuidenhout
September	Sat 4 th	T Cavanna J Grosser	D Baartz J Geddes	Chezhan Hall Neil Muspratt
	Sun 5 th	M Codling A Wetherspoon	P Kurstjens B Keen	Hugh Hoffmeister Andrew Straume
	Sat 11 th	R Henderson R Hoskings	L McQueen F Ning	Mark Hartmann Robert Percy
	Sun 12 th	P Bell L Matusczak	Jeremy Thompson D Cramer	John Davies David Ferguson
	Sat 18 th	J Thompson C Downes	J Knox Jenny Thompson	Michael Russell Roly Sundell
	Sun 19 th	R Bennett B Hoffmeister	M Robertson B Ward	Peter Davison John Moller
	Sat 25 th	R Hart B Daniel	A Garrone G Kurstjens	Steve Harris Alan Midwood
	Sun 26 th	A Garrone B Keen	R Bradley B Hoffmeister	Joan Robinson Sara Tromp

Postal Address - Darling Downs Soaring Club PO BOX 584 Toowoomba QLD 4350

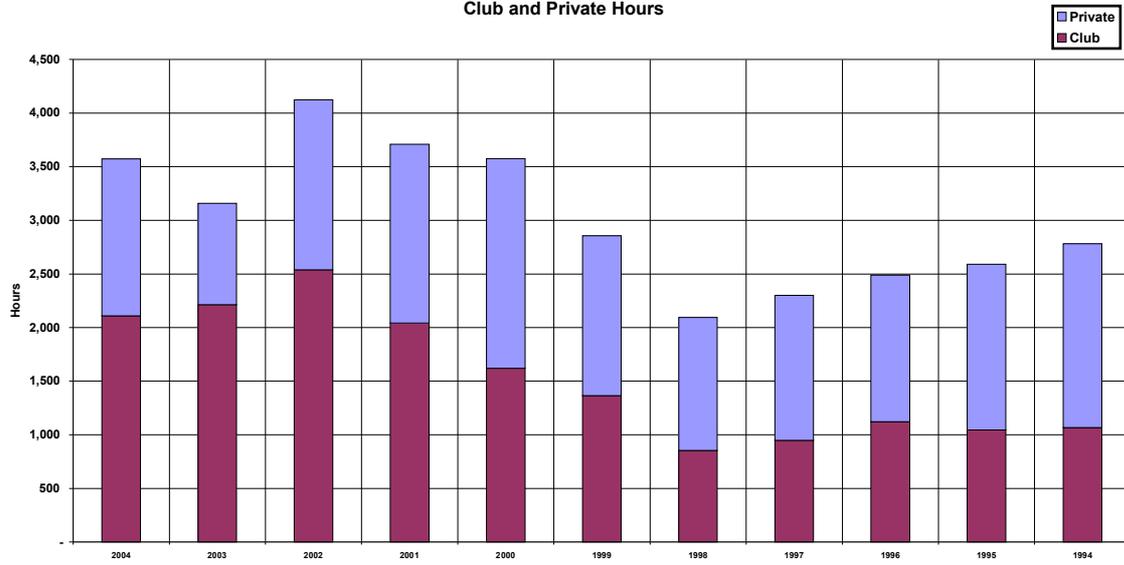
Airfield – McCaffrey Field Mason Rd Bowenville 4404

Clubhouse Telephone (07) 4663 7140 Fax (07) 4663 7228

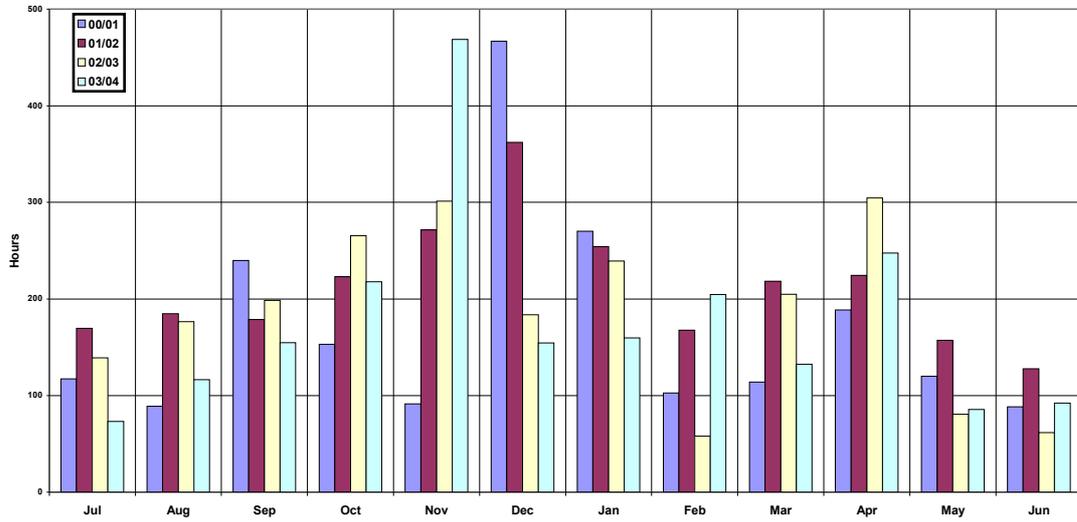
Website – www.ddsc.org.au email - info@ddsc.org.au

Newsletter – chaotic@ddsc.org.au

Club and Private Hours



Club Two Seater and Single Hours by Month





a great Queensland

**3 months to go till the
Jimbour Wines
Australian National Gliding
Championships**

4 – 15 October 2004

www.ddsc.org.au www.jimbour.com

Yes the nationals are only three months away. The entry form is in this month's Soaring Australia and the entries are coming in already. Our expectations of a big nationals continue. With the support of our sponsors, we are confident of hosting the best nationals for many years.

With only 3 months to go we need to finalise who is available to help with what will be an exciting event. A number of people have already indicated that they will be available, which is great. However we need a few more people yet, and that is the purpose of this article.

We need 10 – 15 people on site each day to make it all work. What do all these people do?

First up in the morning a temp trace flight is done. Then weather information is downloaded from the web and the met person puts all this together and provides a forecast for the day including start and finish of convection, likely thermal strengths and which parts of the task area are likely to give the best conditions.

Then the task setting committee go to work to come up with the tasks for the day. All this information is then put on a daily briefing sheet and copies printed for every competitor.

Briefing is just that, a brief meeting, typically about 10 minutes including yesterday's winners, weather, tasks, griding and any other information.

On the way to the grid some of the gliders are weighed to ensure that maximum weights are being complied with. The grid marshal helps to get everyone lined up.

Then the tuggies and the rope runners take over. Tow times are longer than normal as most gliders are at maximum weight.

A few hours later the fleet returns, hopefully. All scoring is done by data logger and all loggers are downloaded. This takes a while and needs a couple of people. Flights are verified and scored and the results posted in the bar, where others are busy serving cold drinks for thirsty pilots. The results are posted on the website and distributed to media outlets.

Everyone breathes a sigh of relief and gets ready for another day.

So there are a few jobs to do and as usual many hands make light work. Some jobs require computer skills, many others don't. There is something for everyone. Some help will also be needed with preparations in the week before the national.

Two weeks off work is a long time for some people, so if you can only help for one week that is fine too. Equally if you are flying as a pilot pair you may have time to help out on your off days. Or you may be able to help out over the weekend.

If you can help out at all please contact:

Bob Keen mobile 0429 639 770, home 4663 9770 Smokeymail@bigpond.com or

Ralph Henderson mobile 0409 596 579, home 3843 6178 rhendrson@austarmetro.com.au.

Ralph Henderson

The Secretary
Darling Downs Transitional Soaring Club Inc
Level 1
1 Swann Road
Taringa QLD 4068

By Fax: 07 33776701

I am a member of the Darling Downs Soaring Club and hereby agree to become a member of the Darling Downs Transitional Soaring Club Inc.

.....
Name

.....
Signature

.....
Date