



CHAOTIC

Monthly Newsletter of the Darling Downs Soaring Club

December 2003

President's Report

RAFGSA3: Our 17 British pilot friends finished their 22 day stay last week. The expedition was an outstanding success. There were only a few days of marginal weather, so they were able to achieve their goals and more. The last day was a beauty, with two 820km flights, one in the Duo (Martyn Pike and Alan Latemore) and one in the LS8 (Dave Postlewaite).

There are details elsewhere in this Chaotic, but here are a few of their achievements: All of them did at least one 500km task; one (Dave) did 6000km in 12 flights (i.e. averaged 500km per flight, including a 820km flight on the last day in the LS8!); total glider distance 50,000km (i.e. around the planet plus 10,000km); 750 glider hours.

It was a great pleasure to have these fellows at the club. Apart from their highly professional and dedicated approach to their flying, they were good fun to be with. Even the Rugby final outcome (we had a BBQ, then watched the match with them) was palatable.

John Knox arranged for Phil Smith (ABC Radio) to do an interview with the Brits. It was a good interview with Martyn Pike and Alan Latemore, who both came over very well.

Thanks to the many club members who assisted with the organisation. Especially Libby (keeping the bar stocked, catering two dinners, linen hire and changes etc), Bob Keen (lots of things as usual, including replacing sullage pumps), Alan Latemore (general assistance, weather briefings, task setting, check flights etc), Shane McCaffrey, Robert Hart, John Hook, and the tuggies (Jeremy, for one, drove up from Brisbane several times). Thanks Ralph for organising the lead up to the expedition, and for the custom labelled bottles of port for each of the visitors. Thanks also to the private owners who allowed their gliders to be used.

Flying Hours: We are now almost back in line with last year's hours, thanks to an improvement in club flying, and of course to the Brits. The year to date of 1033 hours in club gliders which is close to last year's.

Airspace: Jeremy Thompson, Charlie Downes, Peter Bell and I met with the Army Aviation Centre at Oakey to go through the draft agreement. The meeting was very positive, with a great deal of goodwill and understanding of our needs. The permanent nature of our agreement with them was readily acknowledged and has been drafted into the document. The document is currently being re drafted by their Steve Raywood to address some of the issues we had. It is worth noting that the Air Traffic personnel are separate from the Army organisation. Some of the re drafting is to make more clear to the controllers the intent of the Memorandum Of Understanding.

"See You" Software: The club has purchased this flight analysis software. For those of you who haven't seen it in use, it is impressive. It allows each flight to be relived very graphically, and allows comment on one's strategies for finding the best energy lines. Can be quite embarrassing as it reveals all! The club's Collibri's are ideal as they provide height as well as X, Y, & time.

Duty Pilots: We need to review the duty pilot roster process. I would appreciate your feedback. Some days, the rostered DPs don't turn up and it creates difficulties. Other days, both turn up and there is little to do.

Aircraft Bookings:

One of the reasons I first came to DDSC was that it had the glider booking system. Other clubs had a "first arrived at club first choice" system. Not too good when you have just driven 2 hours to find there is no glider. Since those days we have improved the system considerably with on-line bookings. However, we sometimes get the situation where there is a late cancellation (or a no show). This means that the glider doesn't get re booked, because it's too late to email "chat", and nobody turns up to fly it because everyone thought it was booked. We have a rule that the glider becomes available after 10am if the person who booked it doesn't turn up. But this doesn't help in the situation described above.

There are a few things we can do:

- Treat the booking as a commitment.
- If we have to cancel, do it early, and advise glider availability on "chat".
- If we cancel late, still advise on "chat" but also make a few calls and try to find someone who may have wanted to fly the glider.

Tug Replacement: It was decided not to proceed with the option of replacing CMN with a Cessna 188 ("Agtruck"). Please talk to Bob Keen if you are interested in the rationale. Thanks to Bob, Shane, Fran, John Moore, Robert Bradley for the work they did in evaluating this option.

Duo Discus: The Duo has done some amazing flights lately. And the feedback from those who have flown it is pretty consistent – what a beautiful glider to fly, and what a performer. My flights with Shane and Dennis brought it home to me how superb it is for cross country training, and for imparting/sharing knowledge and skills.

Happy and safe flying.

Richard Hoskings

Changes to Oakey procedures

1. During mid week flying when airspace has been released to the club and the tug aircraft has to leave DDSC and go outside the airspace to retrieve a glider and return to DDSC the following procedure has to be followed.

When the tug is approaching the airspace boundary inbound call Oakey clearance delivery on 133.35 and advise your position and level and the transponder code you squawking, that you are a gliding club tug aircraft inbound to DDSC. They should just acknowledge and advise that a clearance is not required.

This procedure is not required for gliders.

2. All requests for a clearance by aircraft by radio are to be made to Oakey clearance delivery on 133.35 (Not Oakey approach).

Oakey clearance delivery will take your details and advise your transponder code (if you have a transponder) and then pass you on to Oakey approach for clearance.

Jeremy Thompson

Why we don't fly near thunderstorms

Several years ago an ASK21 was airborne on a Trial instructional flight in Southern England, the weather was scattered cumulus cloud with a base of 4000ft over developing into thunderstorms.

The instructor became concerned about the presence of a developing cumulo nimbus cloud several kilometres away and decided to return to the airfield, he accelerated to 80 knots and turned towards the field.

At a height of 2500ft the glider was struck by lightning and parts of the airframe disintegrated. The right wing and the outer section of the left wing had come off and the fuselage had broken off behind the wing. Both canopies were gone.

Both pilots were dazed and deafened by the explosion, the instructor yelled to the student to bail out but the student was unable to hear his command.

The student had already decided to jump as he realised all was not as it should be, he successfully parachuted, landing on the roof of a service station. The only injuries were some hearing damage and minor burns.

The instructor also successfully parachuted and his only injuries were minor burns, hearing damage and a broken ankle received on landing.

The student was offered to finish the rest of his week long course free of charge but declined.

A lesson for us is with the use of emergency equipment, the parachute. Although it was the students first flight he had been briefed on use of the parachute and how best to exit the glider in an emergency.

The official investigation recommended that gliding manufacturers build in lightning protection for future gliders as most do not have any.

Jeremy Thompson

TRANSPONDERS and TCAS

Occasionally Transponders and the possibility that one day we may fit them to our gliders are discussed at the club. A little understanding of these and how they are used in radar systems will show the benefits that may come from their installation, and although it is not exactly gliding talk, it is certainly of interest.

Primary Radar. When people think of Radar, the type of radar they normally think of is called Primary Radar. This type of radar is made up of a very powerful transmitter that sends out many signals (pulses) in a narrow beam. Some of these pulses strike a target (aircraft) and are reflected in all directions. A few of these reflected pulses are received back at the radar site where they are then amplified so that they can be presented on a radar screen. This type of radar, although common, is limited in performance due to the difficulty in amplifying the weak reflected pulses. Some materials reflect electronic signals very poorly, eg fibreglass, and consequently aircraft made of this are often not seen on primary radar.

Secondary Surveillance Radar (SSR). This radar operates somewhat differently. There are three required components, the ground radar site, a Transponder equipped aircraft, and a ground receiver. The ground radar transmitter sends pulses in all directions and some of these pulses will strike the transponder-equipped aircraft, the aircraft transponder is triggered by these pulses and will then send a powerful set of pulses back to the radar site. As the signal sent back to the radar site by the transponder is a strong signal a powerful receiver amplifier is not required at the ground station. Consequently this type of radar has good range and doesn't require the powerful transmitter/receiver units that Primary Radar does. Another advantage is that it doesn't matter what materials the transponder equipped aircraft is made of.

So what is a Transponder? It is a type of Radar installed in an aircraft, which transmits signals in the form of pulses in all directions, when triggered by another Radar (eg Air Traffic Control Secondary Surveillance Radar, commonly called SSR, or another aircrafts TCAS). When the pulses transmitted by the aircrafts Transponder are received back at the ATC Radar site, the position of that aircraft can be displayed on a radar screen. High-end aircraft that are equipped with TCAS can also receive these Transponder pulses so their crews can "see" other traffic around them.

So why mention pulses? All Radars send signals in the form of pulses. In the case of a Transponder, it turns out that the pulses can be conveniently used as carriers on which all manner of information can be piggy-backed. If your aircraft has an encoding altimeter for instance, then altitude information can be carried back to the Radar site so that ATC can see the altitude of your aircraft, any change to that altitude and any rate of change (ie rate of climb/descent). Transponders send a strong signal; consequently SSR radar has a much greater range than the conventional "primary radar".

A short description of TCAS (Traffic Collision and Alerting System) will help us understand why crews, who have this equipment installed in their aircraft, show dismay on finding out pilots do not turn on their transponders.

Generally TCAS's can be found in commercial jets, top-end business jets and the larger turbo-props. That is aircraft that travel at high speed, have high cockpit workloads and have limited outside visibility. The TCAS equipment fitted to one of these high-end aircraft can receive the signals transmitted by an aircraft's transponder and "see" its' relative position and so take evasive action before a collision occurs.

How does it work? Simply it is a time based system in which the TCAS equipment continually transmits a train of pulses, which when received by a transponder equipped aircraft, triggers a response, which in turn transmits a pulse back to the TCAS. The TCAS measures the time difference between sending and receiving pulses and from this, can calculate the bearing and distance of the transponder equipped aircraft, its direction of travel, its ground speed and altitude etc. Obviously this information is used by the TCAS equipped aircraft for collision avoidance.

There are countries around the world where gliders routinely carry Transponders and the day may come when having some of the above equipment may be to our advantage. As I said at the beginning this is not exactly gliding talk but certainly aviation talk of interest.

Charlie Downes

The Go/No-Go Checklist

Before Flying, check

IMSAFE

Illness Are you well?

Medication Are you free from the effects of medication and drugs?
Stress Are you free from significant stress?
Alcohol Are you free from the effects of alcohol?
Fatigue Are you adequately rested?
Eating Have you eaten properly to work effectively?

CURRENT

Medical
Annual Check
Maps and Charts
Weather
Trailer and Crew (if X/country)

Source: Airservices Australia (modified for DDSC) via Jenny Thompson

Junior and Student Flying

We need to clarify definitions of “Junior” pilot and “Student Rates”.

Junior pilots are those aged 25 and under, and the term “Junior” is being used by the new Junior Movement in Australia.

As you know, our club was the proud recipient of the first Trophy from the Junior Movement, as a result of our encouragement of Junior flying, including our 50% glider charge rate for students.

Please note that the reduced rates generally only apply to Juniors who are full time students. I used the word “generally” because the Committee may need to consider special situations where the above rule should not or cannot be strictly applied.

We would welcome suggestions on how we can make the distinction consistent, fair, encouraging of junior flying, while somehow taking into account the “ability to pay”.

Richard Hoskings

DARLING DOWNS SOARING CLUB 1960-2003

Dennis McCaffrey Notes

PART 1

In about May 1960 we had a meeting to find if there was enough interest to form a Gliding Club; about 12-13 turned up.

The Club was mainly made up of ex R.A.A.F. Pilots, Fitter 2E and Fitter 2A, as well as others.

To mention a few who come to mind:

Lindsay Richards, Spitfire Pilot, who was the instigator of the Club, created a lot of interest amongst the rest of us. He gained gliding experience one weekend at Kingaroy with Max Howland & Co. He was an excellent pilot and came back with enough experience to teach us.

Sam Johns, Lancaster Pilot also went to Kingaroy to gain experience and came back to join our initial instructors. Also an excellent Pilot with a lot of hours flying, Sam was shot down on one raid over Europe. I am not sure whether he was a P.O.W. or escaped.

Peter Paull, Lancaster Pilot, CO of a squadron; Peter chaired our original meeting to form a Gliding Club. Peter was a member of the Jondaryan Shire Council. He was also one of the Tug Pilots in the Tiger Moth days.

Jack Caisley, Mustang Pilot, saw service in the Desert, North Africa. Jack, who had a business at Lismore, was also one of our original instructors. He used to catch the Fokker, arrive at Oakey about 2:00pm-2:30pm, instruct for the weekend, and go back Monday a very dedicated pilot.

Bert Kennett, power experience. Not sure whether he was in the R.A.A.F. He may have flown Wellingtons.

The Club was being formed so we decided to purchase a glider but as we had no money we decided to take out debentures. The cost

of a short-wing Kookaburra was £1,327. Fortunately for us, the Lismore Club could not take up the money for a Kookaburra Mark 3, so we had the option to take it and we did.

Rex Teakle, Lindsay Richards and Murray Shannon headed south to Adelaide. Edmund Schneider's in Rex's big Pontiac to take delivery.

As we had an order in for a glider, we had to have a winch. Kingaroy had one so the same weekend Lindsay and Sam went up to Kingaroy for experience. Rex Teakle and Peter Walker also went up with paper, rulers and cameras to get some idea of how to construct a winch.

This winch was built in record time – Chevy motor fluid drive coupled to a drum with the cable on it. The only trouble was, when it changed ratio, it hesitated too long and ended up with quite a surge which was a bit scary for a while (we nearly got whiplash).

Winch made, glider sitting on trailer, nowhere to launch. We were offered a big paddock on Bell's property which we used from corner to corner. I was standing there looking on when Lindsay said to me "Hop in, let's try this thing out".

The first flight in Kookaburra G.R.L. was 7 September 1960.

We operated in this paddock for two weekends. Also we had an application in for permission to operate on the Oakey Aerodrome, which we were granted on certain conditions. We were the first Gliding Club to be allowed access on a registered aerodrome which had a service.

We were allowed half of the old army area. Our Clubhouse (which is our Bunkhouse now), was acquired for the price of moving. The centre section of our Clubhouse was the Terminal Building for Oakey Aerodrome.

As time went on, quite a few of us were going solo. Rex Teakle was first club trained to go solo followed by myself.

Single-seaters were our next step. Harry Schneider was producing a 13mt Arrow one piece wing. We put an order in for one. August 1963 first Flight ES59 GNH. Maurie Bradney and myself flew it at the Inverell Comps.

In the years of 1962 and 1963 our club agreed to train up to 6 (six) pupils to solo standard from Brisbane so they could start a club called "Brisbane Club". The place was unknown at that time. Gatton was considered, as well as Toogoolawah and Beaudesert. The club finished up at Boonah. Al Thomas, A Gerber, Phil Wood, Brian Haseler, Fred Mitchell were some of the first members.

In the years of 1963 and 1964, a group of power pilots came down from Warwick for conversion to gliders so they could start a club at Massey Aerodrome, Warwick. The club was called Southern Downs Soaring Club. Jim Warner, Ted Stegal, Don Banks, John Best, I Watt were some of the first members there.

As our club was growing, one two-seater was not coping with growth; another two-seater was needed.

The word from down south was that ASW.K7 was very good - big and heavy to ground handle with a good performance, 27-1. We placed an order with Harry Schneider for £2,440, took delivery the first week in January 1966. It was packed in a big wooden box and delivered to Bellman hangar Oakey by Western Transport.

This aircraft was one of the best investments this club has every made. After 32 years of great service it was bought for \$5,000 and sold for \$15,000. As I was C.F.I. at that time I had the pleasure of test flying this lovely aircraft. Twelve months later we purchased another single-seater - the M100 31.1. It was quite a good aircraft but not as good as KA6.

In 1965 we had the choice of aerotow or winch with John Geddes Tiger Moth. Later on the club bought a Tiger Moth 1970 October club took delivery of ASW.15.

In 1972, a secondhand K7 G.B.I. was purchased from Germany at a cost of \$3,700 including trailer.

After 12 (twelve) years of operations, had we purchased 6 (six) gliders plus 1 (one) tug.

TO BE CONTINUED in next Chaotic!

Brit Stats

We have heard stories about the flights and the success of the expeditions. Here are some numbers to put it all into perspective.

If you are looking for further information on the trip <http://www.rafgsa.org/> gives a comprehensive run down.

Totals

	Hours	Distance
All Gliders	752.65	49,982
Club Gliders	305.45	17,709
Pilot Totals	801.6	53,745

Hours and Distance - Gliders

		Hours	Distance
IUR	Grob 103	16.80	828
WQX	Puchacz	4.02	100
KYT	Astir Jeans	10.75	114
GMV	H206 Hornet	55.80	3,641
GXV	Open Cirrus	24.50	642
XOW	LS7	58.02	3,593
GGH	Ventus B	69.08	4,479
GAW	Nimbus 2C	66.48	4,312
JSR	Duo Discus	68.37	5,757
ZBW	Ventus M2	36.68	3,201
XJS	LS6	17.15	1,304
GAG	LS8	78.77	5,595
FQL	Nimbus 2C	51.53	3,656
KYF	ASW20	45.57	3,182
FQR	Mosquito B	15.93	853
GSY	Kestrel	46.62	3,436
FQM	Hornet	28.38	1,827
WQR	DG101	47.98	2,513
GKO	ASW 20	10.22	949

Hours and Distance - Pilots

Pilot	Hours	Dist (km)
Mick Davies	60.68	4,458
Martyn Pike	41.32	3,670
Peter Kingwill	68.33	3,572
Colin McInnes	52.68	4,723
Guy Davidson	42.62	2,791
Brian MacKenzie	38.82	2,484
Nick Smith	74.18	4,676
Rick Jones	50.15	2,666
Andy Hill	21.05	1,233
Jim Mclean	33.78	1,999
Nick Aram	35.23	2,354
David Postlethwaite	74.73	5,923
Stuart Naylor	40.80	2,845
Tim Davies	44.65	3,200
Charles Cooper	44.38	2,345
Gareth Baker	46.62	3,309
Stuart Duncan	31.58	1,497

Housekeeping

Wetherspoon Hangar (North Section): Just a reminder that all of the gliders in this hangar are privately owned, as is all ancillary equipment such as glider trolleys. Some of these trolleys have appeared under club gliders in the main hangar, which is a nuisance for the private owners involved.

Pool Table in John Moore's Hangar: If anyone is interested in making an offer for this pool table, please contact me.

Tuggies

A reminder to all tug pilots to make sure all paper work is complete at the end of the day. This should include all times and maintenance release details.

The tugs lately have been left in a rather shabby state, covered in bugs and grime. As tug pilots we all have a responsibility to maintain them as well as fly them, this applies to all pilots.

A list of maintenance that can be performed by a tug pilot can be found on page # 61 of the GFA tow pilots manual. Anyone with questions about cleaning and maintenance of tugs, please ring me on 0429 639770.

Recently Oakey Approach has changed over to a new computer program for flight plans and squawk codes, apparently it is too hard to give us an i.d. code other than 1200, which does not separate us from other traffic.

Mid week operations only are affected, if leaving our airspace Gliders South Alpha, say to Dalby for a retrieve, then we must give Oakey Approach a heads up on 125.4 before reentering Glider South Alpha.

NOTE you do not require a clearance to reenter, they just want some warning that we are from DDSC.

Bob Keen

GUS MAUCH and the Wirraway.

After almost 60 years Gus Mauch reunites with the Wirraway, the aeroplane he spent most of World War 2 flying. Gus was an instructor for the RAAF and trained countless pilots who went on to see active service in fighters, bombers and other types during the conflict.



As a gesture of their esteem, members of the Southern Downs Aero & Soaring Club organised to fly Gus to Caboolture on Sat 29/11/02 to allow him to fly a restored C CAC Wirraway, VH-MFY. WIRRAWAY 695 was restored over some years by Sandora Aviation at Caboolture and is probably in better condition than when it left the factory.

It was obvious right from the start that Gus had forgotten little about this famous aeroplane. One of which even managed to shoot down a Zero fighter over New Guinea. Gus was able to point out various feature of the Wirraway to those of us present from the type of engine to the various flying speeds. Then it was off to the briefing room for a change into flying kit and the adventure of a lifetime.

You could see the years melt away as Gus approached the aeroplane, and by the time he was ready to enter the cockpit, he was almost like a young WW2 pilot again. If I can climb into the rear cockpit of a Wirraway with half the agility as Gus did when I am 80 I will be doing well! With Ed Field in the front, the Pratt & Whitney Wasp was started and with a heart wave they taxied away. As they roared past on the takeoff roll, an arm was seen protruding from the rear cockpit that may have had a clenched fist attached, or was he simply waving again?

Unfortunately I had to return to work at this point, so was not able to be present on their return. I can only imagine Gus' reaction after the flight, but I am sure that he would have been very pleased.

Reporters from the Warwick Daily News & Courier Mail were present so there will be newspaper articles to peruse also.

Many of us have known Gus for more years than we can remember. He has always been at Warwick whenever I have gone there. Gus, over the years, has trained an enormous number of glider pilots and power pilots, myself included. There can't be many glider or power pilots in south east Qld who haven't crossed paths with this elder statesman at some point in their flying careers

Robert Bradley

Mid Week Flying

I have had three replies to the article last month. None of these were spontaneous, they all came as an "add on" to an unrelated conversation. All were positive.

What I have in mind is independent, but mutually supportive, flying by appropriately rated pilots. This is not necessarily cross country flying, nor is it necessarily ab initio training courses, but it could be. Maybe people just want to build experience or to fly friends & family. It could be for a whole week, or part thereof. It would be informal. With the size of our club we should have a population of retired, partly employed, self-employed, flexi-timed or sickie-afflicted members sufficient to get this going. It is really the provision of launching and cross country retrieving facilities during the week.

For a few months the club has been promoting "courses" in the first week of each month. This has not happened, presumably because of lack of demand. I am proposing a similar concept, but with more flexibility. Tony Cavanna is organising just this sort of thing 1 - 5 December. I am envisaging this happening every month.

If you are interested, please email me or phone me on 3351 2083 or 0418 724 437.

Murray Knight

ATTN: To Whom It May Concern

Re: Juniors in your Club!

21st November 2003
Adam Woolley
P.o. Box 46
Benalla, Vic
3672

A Junior is defined as a person to whom is 25 years or less.

I am writing this letter to your club in regards to getting the Junior Movement happening in Australia on a much larger scale than what it already is, and I'm calling for your help!

Just recently I have been getting together with a number of keen Juniors in Queensland and now in Victoria, and have been holding many Junior Cross-Country Meets once a month at a different club each time. The Juniors have been getting a lot of support from absolutely everyone and would love to keep this new momentum going! At the moment we have a list of 35 known Juniors all over Australia and would love to better that number to hopefully promote Gliding as a Fun and Exciting sport for the youth of Australia!

At this present stage, we'll be holding the 1st ever, Junior Australian Nationals to be held in conjunction with the NSW State Comps in 2004/2005! We are also holding the 1st Junior State Competition held in conjunction with the Chinchilla Easter Comps, Qld 2004! All approved by the GFA as well! Although the biggest goal that we have at the moment is to send a Junior to the Junior Worlds in 2005, this has been discussed many times on our junior_soaring webgroup open to all Juniors, RTO's and National Coaches!

So I was wondering if you would be able to pass this onto a representative Junior to find out the below details on all the Juniors in your club, and send/e-mail them onto me.

Name, Address, Contact Phone Numbers, e-mail, Club, Hours, Achievements and Goals.

If you could help me out here it would be most appreciated.

Best Regards,

Adam Woolley
go_soaring@hotmail.com