Uni Gliding

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Journal Of The Adelaide University Gliding Club.

Vol. 9 No. 10

EDITORIAL

This is, in fact, a combined November and December edition as your relieving editor thought it best not to distract you from your exams.

I'm relieving because Andrew McGrath ("boo, hiss, split, splat") is applying his unique talents to organizing the State Sports and 2-seater Competition set for 25 - 28 January, 1985 at University Gliding Field, Lochiel.

Actually, it is our whole club that has accepted responsibility for putting on this competition. This means you.

This is a rare opportunity for you to gain experience in helping run a competition. You will also make invaluable contacts in the gliding fraternity.

There is an urgent need for more volunteers to assist.

Our club's reputation is on the line.

Andrew's telephone number is 356.2466.

I'll even loan you a 20c piece.

As you have probably heard, we have sold November Bravo.

She has served us well, but her 20 yearly (coming up in May) was seen as too daunting (and too expensive) by your committee.

Our new (to us) single seater is a Phoebus "C" about which you'll read further in this edition.

We have an article this month by a member who has packed and jumped parachutes both from helicopters and fixed wing powered aircraft (No, he hasn't jumped from a glider).

When the use of parachutes is discussed in a group of glider pilots one often hears expressed a view that goes something like this :

> I don't want to talk about it. I'd sooner not wear one. You'll be too low to use it when you need it anyway.

This is like saying a fire extinguisher is of no use against a conflagration.

No, a chute doesn't help when you stall in the circuit.

But in the case of the all-too-common mid-air collision, your ability to use your chute may let you live to tell about it.

We have had 2 separate mid-air collisions between gliders in Australia in the last few months. Each one resulted in a pilot dying.

The message is clear. You must keep a good lookout. You must also think ahead of your aircraft so as to avoid getting into a situation of conflict.

A glider pilot has good loose neck muscles from the constant swivelling of his head while flying.

He stays aware of the part of Murphy's Law that applies to keeping a good look-out i.e. THE AIRCRAFT THAT IS ABOUT TO HIT YOU IS PROBABLY ON OR NEAR THE HORIZON - JUST WHERE IT IS MOST DIFFICULT TO SEE!

David Conway is acting President of the Club until Nick Abbott returns from South America in March.

By Christmas, Mark Raftery will have taken over as treasurer.

Our new Air-Worthiness Officer is Dick Temple.

Contratulations to Dennis Medlow on his recent marriage (Is there flight after marriage?)

Our cover photo is of the Bocian.

The timely arrival of the legendary Don Hein has inspired a positive frenzy of activity to get the Bocian back into the air.

The Bocian needs <u>you</u> if she is to fly again soon.

Phone 261 4245 if you can spare any time at all for this vital project.

Has anyone seen the set of large sockets missing from Don's shed? Some drill bits have gone walkabout as well. (You can discreetly leave any of these things outside the door when you next visit the shed).

Our budget is <u>very</u> tight until the end of the year so any expenditure not authorized by the treasurer should be considered a donation to the Club.

We hope to have the Phoebus on field for the week-end of December 15th.

The new contact for flying is now Andy Rowan. (It is no longer Jenni Sleigh).

Phone Andy between 8.00 p.m. and 10.00 p.m. Thursdays on 352 5817.

See ya.

Bob McKenney.

REDMOND'S COLD FEET SAVE THE DAY.

It had been a good Saturday's flying.

We had a good (well, reasonable) meal at Lochiel Pub.

Two cars full of people (Dick's and Tim's) were on their way back to Adelaide.

Disaster!

Tim's car developed serious electrical problems. It soon became apparent that we had to pull over.

With Dick's car having left ahead of us, the position looked grim. We were only a few kilometres out of Lochiel. Adelaide seemed far far away. It would be a long night.

And then a miracle occurred. Dick's car pulled up just behind us.

But he should have been well ahead of us, oblivious of our problems.

But he wasn't!

The reason was simply that Redmond's advancing years had caused him to feel the cold in his bones (especially his foot bones).

Dick's car requires that you stop and lift the bonnet to turn on the heater. That is what he had done.

So he was behind us when he should have been well in front of us.

So a short (6 metres ?) tow rope was produced and we had a brisk (hair raising) tow back to Adelaide, arriving about 11.00.

Even Redmond serves some useful purpose once in a blue moon.

A MESSAGE FROM THE INSTRUCTORS PANEL

* BERGFALKE SPINNING :

We have received a copy of a letter from SCHLEIBE-FLUGZEUGBAU - G.M.B.H. to G.F.A. (That's right, they built the Berg!) confirming that full spins are O.K. in the Bergfalke 4.

As a result to A.U.G.C. limitation on full spins in the Bergfalke is lifted.

The Bergfalke picks up speed very quickly in a dive. considerable care should be taken not to develop excessive speeds during spin recovery.

In some loading arrangements the Bergfalke spin will develop into a spiral dive. Watch out for this and terminate the manouvre before overspeed occurs.

Since two seater spin training is now available to us again spin checking of all solo pilots will take place on an opportunity basis over the next few months.

* PHOEBUS C :

As you have probably read elsewhere in this newsletter it looks like we're parting with old faithful G.M.B. and moving into our first "Tupperware" machine - a PHOEBUS C.

At this stage total flying time by all club members in Phoebus C's is zilch. As a result until the instructors have had an opportunity to evaluate the machine and associated paperwork first hand it is safe to assume a conservative outlook will prevail regarding conversions and flying practices.

Since it has a retractable undercart (that's right - another lever in the cockpit) anybody who demonstrates sloppy circuit practices has got Buckley's chance of being converted. After all the treasurer wouldn't be pleased if someone did a wheel up landing in our new ship!

* WATCH THAT CROP :

Just a reminder to line up dead centre on the strip. Instructors will eat anyone who shows any sign of putting a wingtip near the crop.

* FIRE :

The fire season is with us again. Read and then act on the following :

- Keep fire fighting equipment filled with water, serviceable and on hand.

- Be careful that you don't start fires in long grass with vehicle exhausts.

- Already 4 pit bulls have a reputation for causing grassfires. Be on the lookout for this when the Bodies resurfaces.

ANDREW RUSH

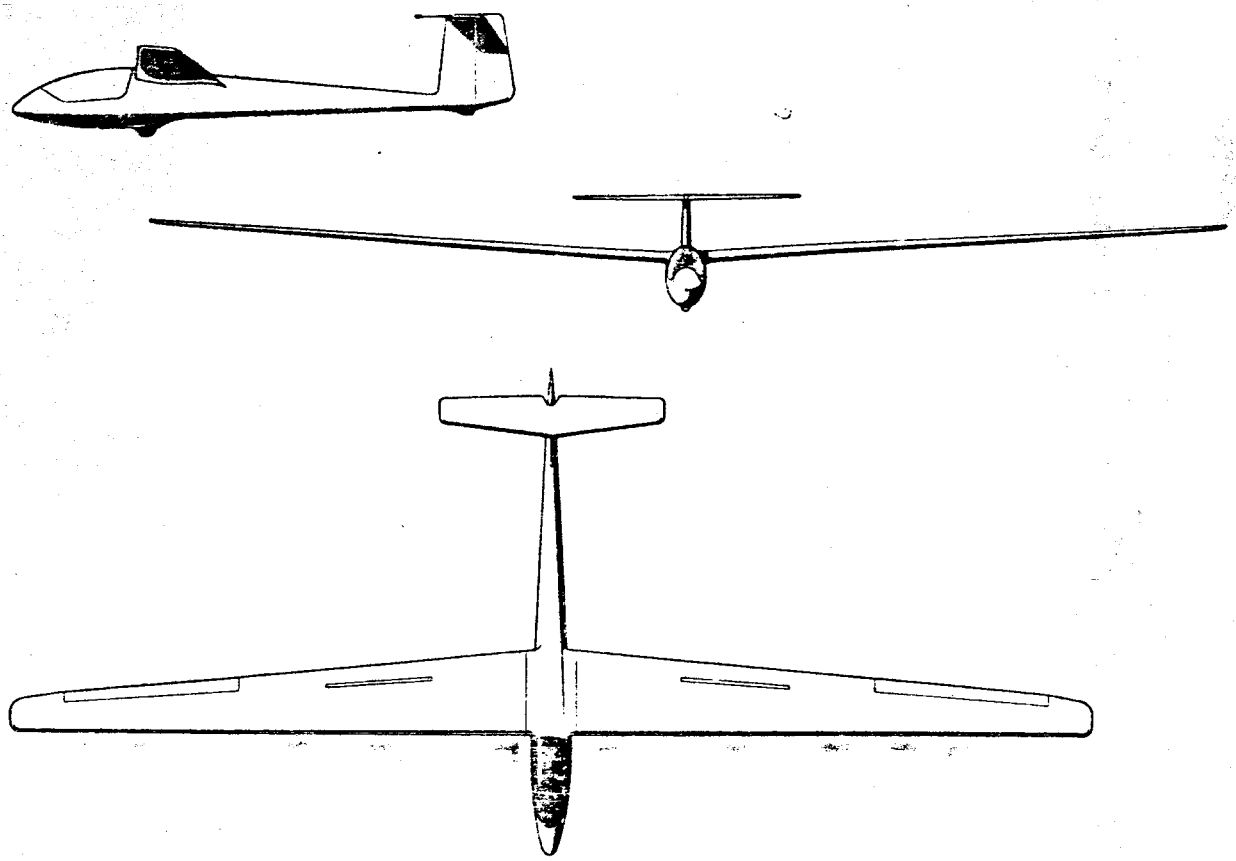
NOTICE

The new contact for flying is now Andy Rowan. (It is no longer Jenni Sleigh).

Phone Andy between 8.00 p.m. and 10.00 p.m. Thursdays on 352 5617.

NOTICE

TECHNICAL DATA



VERSION		B	C
DIMENSIONS AND WEIGHTS:			
Span	ft.	49.2	55.8
Length	ft.	23	23
Height of fuselage	ft.	2.79	2.79
Wing area	sq.ft.	141.5	151.17
Aspect ratio		17.10	20.55
Height of seat	ft.	2.65	2.65
A.U.W.	lb.	772	825
Wing loading max.	lb/sq.ft.	5.43	5.43
Ultimate load factor		12	12
LIMITING FLIGHT CONDITIONS:			
Allweather free flight	mph	124	124
Aero Tow	mph	112	112
Winch launching	mph	75	75
STRAIGHT FLIGHT PERFORMANCES:			
Stalling speed	mph	37	36
Min. sink at 50 mph	approx.fpm	128	108
Max. glide ratio at 56 mph	approx.	37	42
Speed at 197 ft/min. sink	approx.mph	71	75
Speed at 394 ft/min. sink	approx.mph	99.5	103
Rolling time at 53 mph from 45° to 45° banking	approx.sec.	3.5	4

Profile: Own, No. 403

MESSERSCHMITT-BÖLKOW-BLOHM

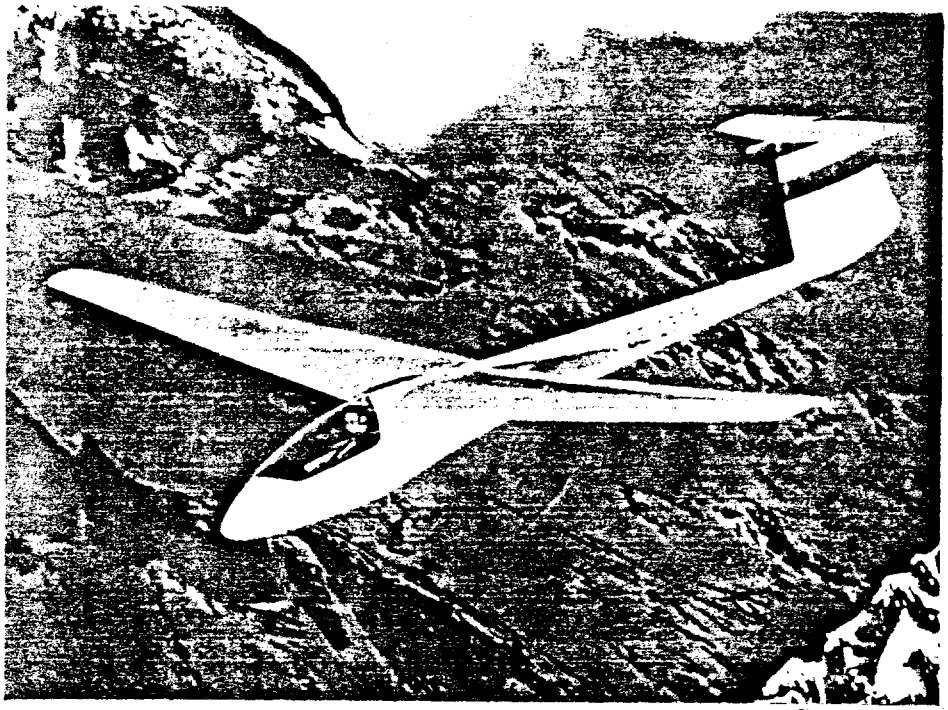


Foto Haidinger

PHOEBUS
HIGH-PERFORMANCE SAILPLANE

The PHOEBUS is a further development of the world's first fiberglass sailplane, PHOENIX. Since introduction of the PHOENIX in 1957, fiberglass construction has been adopted by most sailplane manufacturers resulting in a considerable increase in soaring flight performance internationally.

Distinctive attributes of the PHOEBUS are fine workmanship by versatile and experienced plastics experts, a mirror finish requiring no painting or special care, outstanding rolling maneuverability and flight handling characteristics, and the quickly and easily executed assembly and maintenance.

Minor repairs can be performed without difficulty by the owner. The high strength factor of 12 g's is assured to a temperature of 54°C (129°F).

Pilots as tall as 1.90 m (6 ft 3 in) are comfortably accomodated in the PHOEBUS cockpit. The headrest is adjustable through 11 positions.

All control surfaces are actuated by pushrods. Access to the control system, which needs little maintenance, is easily gained by removing seat pan and baggage carrier. If necessary, pushrods can be removed from the fuselage and wings by loosening single bolts. All assembly points are fitted with quick-disconnects, and the assembly can be accomplished by only three persons within a few minutes.

Equipment carriers for battery, oxygen installation, etc., are built-in and, regardless of the set of equipment selected for a PHOEBUS model, the affected part need only be set in place and screwed fast. This standardization eliminates equipment installation variations which could adversely affect strength, functional operation or center-of-gravity location.

One model of the PHOEBUS is available for the standard class and one for the open class:

Model B 49.2 ft. span, retractable undercarriage
Model C 55.8 ft. span, retractable undercarriage

Both models can be equipped with water ballast tanks and brakechute.

The PHOEBUS is approved for simple acrobatic flight.

The numerous successes of this both beautiful and aeronautically outstanding aircraft in national and international competitions, the large number of over 200 machines already delivered and the export to 12 countries are an impressive testimonial to the performance, the popularity, and not least the quality of workmanship of the PHOEBUS.

MESSERSCHMITT-BÖLKOW-BLOHM
Rotorcraft and Light Aircraft Division
München-Ottobrunn

REICHMANN'S DO'S AND DONT'S FOR CIRCLING IN THERMALS :

1. First sailplane into the thermal sets the circling direction for all later entrants.
2. Newcomer must fly such that already circling sailplanes are not inconvenienced: that is, work your way into the circle spirally from the outside.
3. Anyone displacing his circle must not hinder other sailplanes in the old circle.
4. If outclimbing another sailplane, the worse climber must not be hindered.
5. As a general rule, never fly closely right below another ship; the other plane has almost no escape route, particularly at low speeds.
6. Always observe your airspace and know who is where, when.
7. Attempt to fly such that the other pilots can always see you.

(From Helmut Reichmann's 'Cross-country Soaring'.)

LOW+SLOW=IN YOU G

"BAIL OUT!"

Right, so you did all the right things to avoid a collision.

Still, some idiot comes from above and behind to see you only an instant before he wrecks your wing with his, buckling it and sending you into a spin of the permanent kind.

Spin recovery doesn't work so you realise it's time to get off the bus.

When you find yourself in this position, your confidence - not to mention your chances of survival - will be considerably improved if you have given this matter of parachuting some prior thought and action.

Minimum Altitude

If you can clear the aircraft and pull the ripcord at 500 feet the chute should deploy in time to place you safely on the ground.

There are specially designed low speed models that are claimed to deploy from a lower altitude than this.

Conditioning for the Right 'Motor Response'

Experience shows that people tend to carry over into a moment of anguish habits which they have built up in routine day-to-day operations. What you allow yourself to do in calmer times you are training yourself to do when the adrenalin starts to flow.

This means that you always put on, adjust and check your parachute before you get into the aircraft. You never open the fastener on your chute harness until you have got out of the aircraft and your feet are on the ground.

You always open the canopy latch before you open the fastener on your seat harness.

The easy-to-remember mnemonic is CASH - canopy and seat harness.

If you get into the habit of doing it in that order every time you get out of the aircraft, the habit will serve you well at the moment of truth. (No one needs to tell you how near impossible it would be for you to find the canopy latch when you're rattling around in the cockpit like dice in a cup.)

Pilots in the bail out situation have been known to open the fastener on their chute harness while still in the aircraft.

Another mistake that has been made more than once is pulling on some part of the harness instead of the rip-cord handle. The way to avoid this is to actually look at the rip-cord handle as you reach for it.

The last thing you do when checking your chute after adjustme is to look down at the rip-cord handle as you reach across an slide your fingers through the rip-cord handle.

This insures that :

(1) your eyes and hand know where it is and

(2) the rip-cord handle is not obstructed by anything.

Moment of Decision

When you know it's time to bail out you should say so - out loud. This assists in giving your decision a deliberate irrevocable quality.

You just call out loudly "Bail out".

If you are one of two pilots in a twin, you should say this more than once (as you (1) unlatch the canopy and (2) release your seat harness).

Your Aircraft as Enemy

In the instant you say "bail out" that friendly little sailplane becomes your worst enemy and your parachute becomes your best friend.

After you have unlatched the canopy and released the seat harness, common sense tells you that you've got to push the canopy aside and stand up in the cockpit.

Just run out of the cockpit using your feet to push you and the aircraft apart.

You'll naturally need your hands to fend off the aircraft whi may try to hit you on the head.

The need for both hands in clearing the aircraft is one good reason for not reaching for the rip-cord handle until you have cleared.

An even more compelling reason is that exiting the aircraft with your hand on the rip-cord handle makes it much more likely that you will deploy your chute too soon - before you are clear of the aircraft.

Some pilots have died because, as the chute started to open, it was fouled by part of the aircraft.

For this reason your instructor will have told you to count after leaving the cockpit and before pulling the rip-cord handle.

Just remember that unless you're right at 500 feet, you've go more time than you need.

You're much more likely to pull the rip-cord handle too early than too late.

On Arrival at the Ground

Keep your feet and legs together with knees slightly bent (unlocked).

If you land in trees it is especially important to keep your feet together.

Look at the horizon at impact.

If there is any wind to speak of you'll want to release your chute harness as soon as possible after impact.

Parachutists have been killed when they impacted safely with the ground but were dragged along the ground to their deaths by high winds when they failed to release the harness.

If landing in water you should release your harness and slide out of it as your feet touch the water (not before!)

Reliability of Parachutes

Modern parachutes are very reliable.

A number of sport parachutists have made thousands of jumps without a single malfunction.

Good flying.