

Uni Gliding

Volume 16, Issue 2

February, 1991



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An official publication of The Adelaide University Gliding Club Inc.

Editorial

Welcome to the penultimate issue of Uni Gliding under this editorship. As you may have noticed, this issue is devoted to introducing the AUGC to new members who have joined during O-week, to whom we extend a warm welcome, and to those people who are thinking about joining, who we encourage to read further.

Why join AUGC?

The central goal of the Adelaide University Gliding Club is to get students up to Lochiel and gliding as inexpensively as possible, while maintaining an efficient and safety-conscious operation. Gliding as a sport is both exhilarating and rewarding, and with AUGC, gliding is well within a student's budget. Qualified instructors will take you through your pre-solo training, after which opportunities exist for high performance aircraft conversions, aerobatic training, cross-country flying and local and interstate competition flying. Elsewhere in this issue are many articles outlining how our operation works, so I won't duplicate their efforts here.

There is, however, another side to the Gliding Club: the social aspect. Every year a Social Convenor is elected to the Committee whose task is to organize various social events for AUGC members. With almost 200 members in 1990, this meant that these events were very regular! There is an annual dinner, numerous barbecues, film nights, cocktail parties and sports nights to name but a few. On the more serious side, there are monthly General Meetings to keep members up-to-date on the affairs of the club and to present lectures on various aspects of gliding theory. The first few of these meetings are detailed later in the newsletter. Complementing these are the Committee Meetings, usually held two weeks after each General Meeting, where matters affecting the general running of the club are discussed. These meetings are usually held in the home of one of the Committee members, but all members are welcome to attend.

Finally, but perhaps most importantly, there is regular airworthiness work going on at the Club's private workshop at West Beach. The Club owns and maintains all its own aircraft, and gliders are required to undergo regular safety inspections which are organized by airworthiness-qualified club members. This work requires plenty of people to help out, however, and all members are expected to join in to get aircraft back in the air. Remember - while the aircraft is at West Beach, neither you nor anybody else can fly it!

So, if you've already joined AUGC - congratulations! You have joined one of the largest and most successful clubs in the Sports Association; a club which we believe, between the cheapest gliding in Australia and regular social events, offers the best value for money to students. If you haven't yet joined, we hope this newsletter will convince you that gliding is for you. If you're unsure, join anyway! Your \$5 membership gets you this magazine, published monthly, and three free 'air experience' flights.

Try it out!

A Welcome from the President

As this is the O'Week edition of Uni Gliding, I extend a warm welcome to all the new members who will be flying with us this year, and hello again to all the old faces.

For those of you who have never flown before...

What can the club do for you? Well, to start with, the Adelaide University Gliding Club can get you in the air and in command of an aircraft more cheaply than anyone else in Australia. After training in twin seater aircraft, the student can progress to higher performance single seater aircraft, to flying cross-country, to flying passengers, to competitive flying, to becoming a flying instructor and learning to maintain the aircraft that you fly.

What you can do for the club? Gliding is a team effort. Each plane in the air requires the efforts of several people on the ground to get it that way. We fly inexpensively because maintenance is performed by club members, not by expensive professional shops. All members participate in the normal operations of getting the planes out of the hangars, driving the winch, holding wings, and putting planes away.

On to more mundane matters...

We forgot to mention this last month, but **Brenton Hill** went solo just before Christmas. Since then **Louise Pearsons** went solo at the end of the year and **Steven Hill** has become the first solo for 1991. Congratulations all!

In January, the AUGC contingent went to the National Sports and Two Seater Championships in Mildura. On the way, we all enjoyed fine hospitality and lots of LS3 conversions at Renmark.

Back at home we now have a cross-country logbook at the Clubhouse. So whenever you go cross-country write down the details in the book.

The Bergfalke's annual inspection has been completed. We got it finished in two weeks and it only missed one weekend's flying. Thanks to everybody that helped out.

See you up there,

Peter Cassidy
President AUGC.

Information for New Members

How does a glider fly with no engine?

A glider is simply an aeroplane without an engine, and as such has all the controls and instruments of a powered aircraft (with, of course, the exception of a throttle and other engine related equipment). It should be realized that it is not the engine that keeps an aircraft in the air: it is the wings. An engine simply adds kinetic energy to the system. In a glider the kinetic energy is created from gravitational potential energy. This is just a complicated way of saying that a glider turns its height into the speed necessary for flight, instead of turning fuel into speed. Thus, a glider flying freely in still air is always travelling slowly downwards.

If, however, the air is not still, but is in fact rising faster than the glider is sinking, then the glider will be carried upwards with the air. This is known as **Soaring Flight**, and if the rising air is consistent enough, a pilot is able to remain airborne as long as desired. Coming down again is much easier: if the aircraft is flown out of the rising air, it will slowly sink back down, travelling some 30 feet forward for every 1 foot down.

How does a glider take off?

There are a number of ways of getting a glider airborne. The most commonly known method is to tow it behind a powered aircraft on a couple of hundred feet of rope. This has the advantage that the glider can be towed to any height desired, and across country to any desired point of release - for a price. The upkeep and fuel of such a powered aircraft makes this technique (known as "aerotowing") prohibitively expensive for most university students.

We use a much cheaper and actually safer method known as "winch launching". Here, a large engine mounted on the back of a stationary truck is used to wind in cable at a high speed, pulling the glider into the air like a kite. Using this technique, an average launch gets the glider up to about 1,200 feet, although given the right conditions, heights in excess of 2,000 feet have been obtained. At the top of the launch, the pilot may unhook the cable from the glider simply by pulling a handle, but if he fails to do this for any reason, the hook will open automatically as soon as the cable starts to pull from behind.

How safe is gliding?

Gliding is a very safe sport, the most dangerous part of a day's gliding is the car trip to and from the airfield.

Before a glider is permitted to fly on any day, it must undergo a careful inspection by a qualified inspector, and every year it must have a very thorough inspection, for which it is necessary to completely disassemble the aircraft.

What is the A.U.G.C.?

The Adelaide University Gliding Club was formed back in the mid-1970's to provide flying and flying training at a cost acceptable to most students. The club is an incorporated body, and owns four gliders: two of which are twin-seaters for training purposes and the other two are single seaters for more advanced solo pilots.

Information for New Members

The A.U.G.C. operates from an airfield near Lochiel, some 130km north of Adelaide. This site has several advantages: it is a good sized paddock, with two airstrips each about 1500 metres long and it is alongside a ridge ideally suited to ridge soaring. The airfield also contains two hangars in which all our aircraft are stored, and our clubhouse.

There is normally flying on every day of every weekend, though it is advisable to ring the contact person (listed on the back page) to check. During semester breaks and the Christmas vacation period, there is often a flying camp organized whereby flying continues throughout the week. Accommodation is provided in the clubhouse which has all the luxuries of home, including beds, ovens, fridges, hot showers, etc.

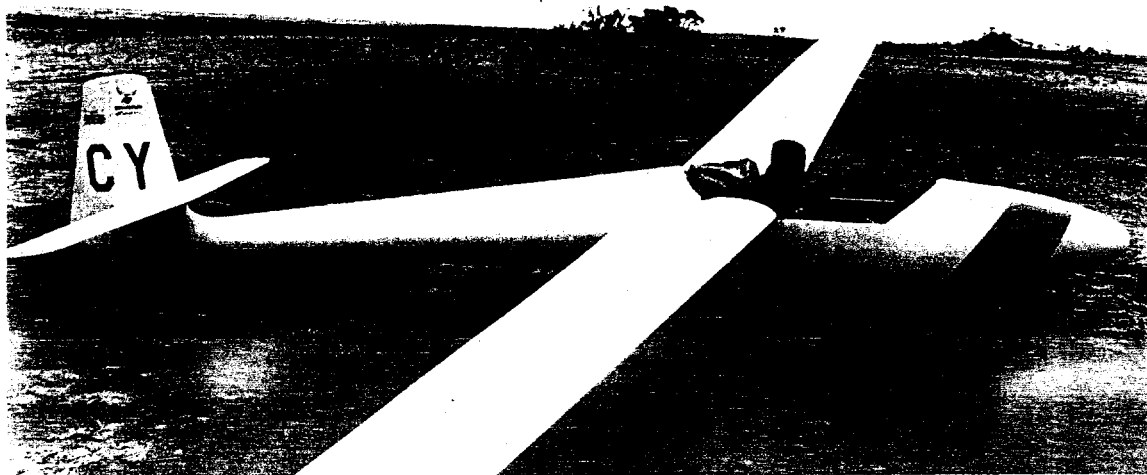
How can I learn to fly with the A.U.G.C.?

The A.U.G.C. has a number of fully qualified gliding instructors, and two training aircraft. The trainee sits in the front seat of the aircraft and the instructor has a duplicate set of controls in the back. Some aspects of flying can be taught on the ground, but most of the training is done airborne. In the early stages of training, the instructor will be doing almost all of the flying from the back seat, while the pupil gets used to the feel of the controls in the air, practising turns, flying straight and level, and so on, with the instructor always ready to help if any difficulty is encountered. Gradually, the student is introduced to the more complex aspects of flight, like launching and landing. Eventually the student will be doing most of the flying and the instructor merely supervises and provides encouragement. When the instructor feels that the student is proficient enough, the student will be allowed to fly the two-seater solo.

How much does this all cost?

The A.U.G.C. is the cheapest gliding club in Australia. Membership is only \$5 for a member of the Sports Association (all students already are). Flying is charged by the minute in the air, plus an additional amount for the launch.

- Twin-seaters: 15c a minute
- Single-seaters: 20c a minute
- Launches: \$2.00
- Accommodation: \$2 a night



How To Go Gliding

The beginning...

Every Thursday night the nominated contact person stays home between 8pm and 10pm waiting for your phone call. He (or she) sorts out who wants to fly on what days and which people need transport from where.

But I don't have a car...

The club contact person organizes a car-pooling system that operates from two locations. Everyone travelling from Adelaide to Lochiel meets either at the Victoria Drive side of the University Footbridge at 7:00am or at the Caltex service station at Bolivar on the Port Wakefield Road (on the left, just a little way past the White Horse Inn) at 7:30am.

The people waiting at the Footbridge will be picked up and taken to the other meeting point at Bolivar. Once there, everyone packs into a couple of cars and the rest of the vehicles are left at Bolivar. Each passenger pays the owner of the car \$4 for the trip to help cover petrol costs.

We normally arrive back in Adelaide any time between about 8pm and 11pm.

I have a car, but where is the airfield???

A map has been made up showing you how to find the airfield. There are signs placed at strategic places along the way once you reach the town of Lochiel to minimize the chances of people getting lost (which is really quite difficult to do!).

What should I bring with me???

You can expect to spend a fair amount of time out in the fresh air in the middle of a wheat paddock. When it's hot then it's really hot and when it gets cold you certainly know about it. So if it looks like it's going to be hot, bring sunburn cream, a hat, sunglasses, insect repellent etc. If it's going to be cold then rug up. Something waterproof would be a good idea in winter.

Finally...

On your first day (and a few after that) you should expect to feel a little confused as to the reasons behind the activities going on around you. Asking someone is one of the quickest ways to learn and a good way to avoid just sitting around waiting.

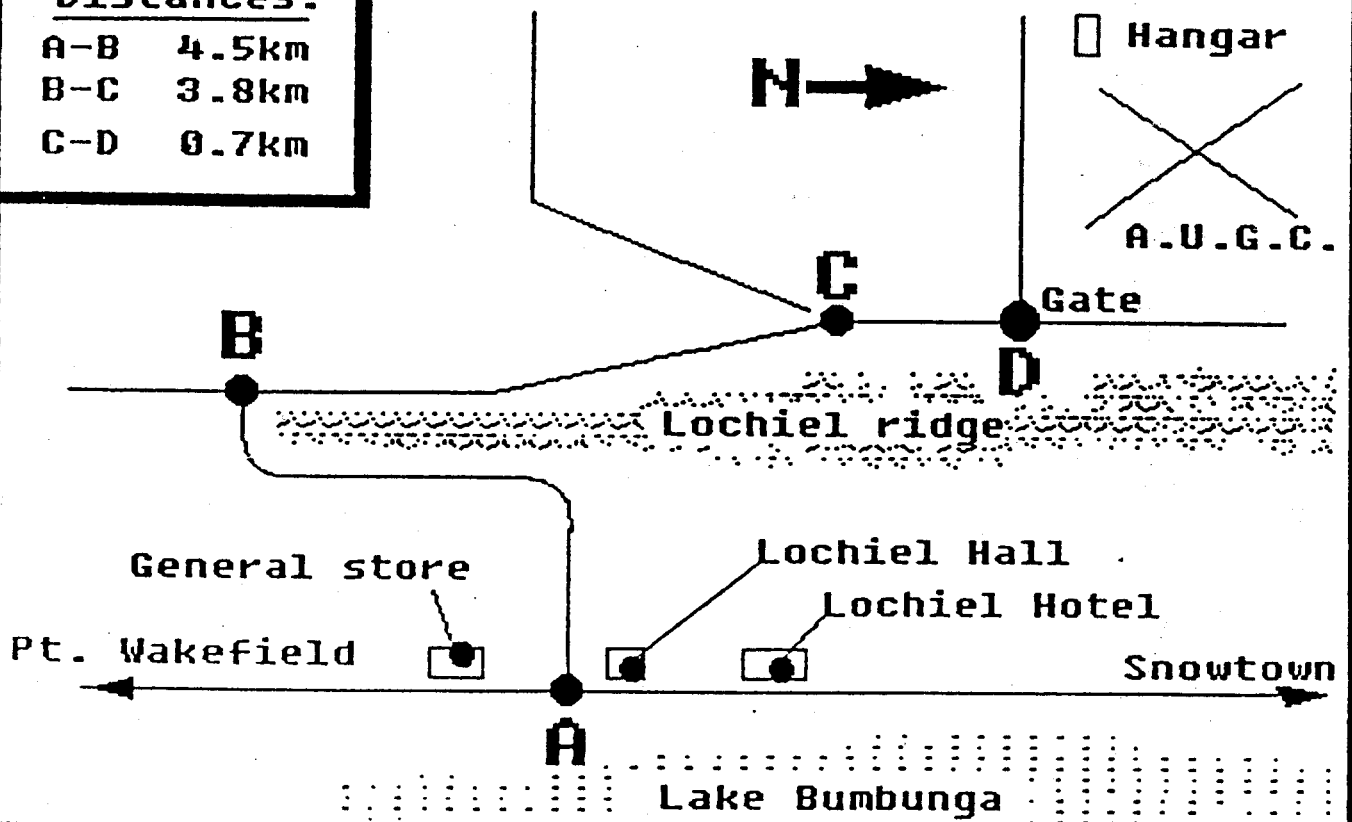
Most important of all...

The contact person is **Bradley Gould** who can be reached on **381 2072**.

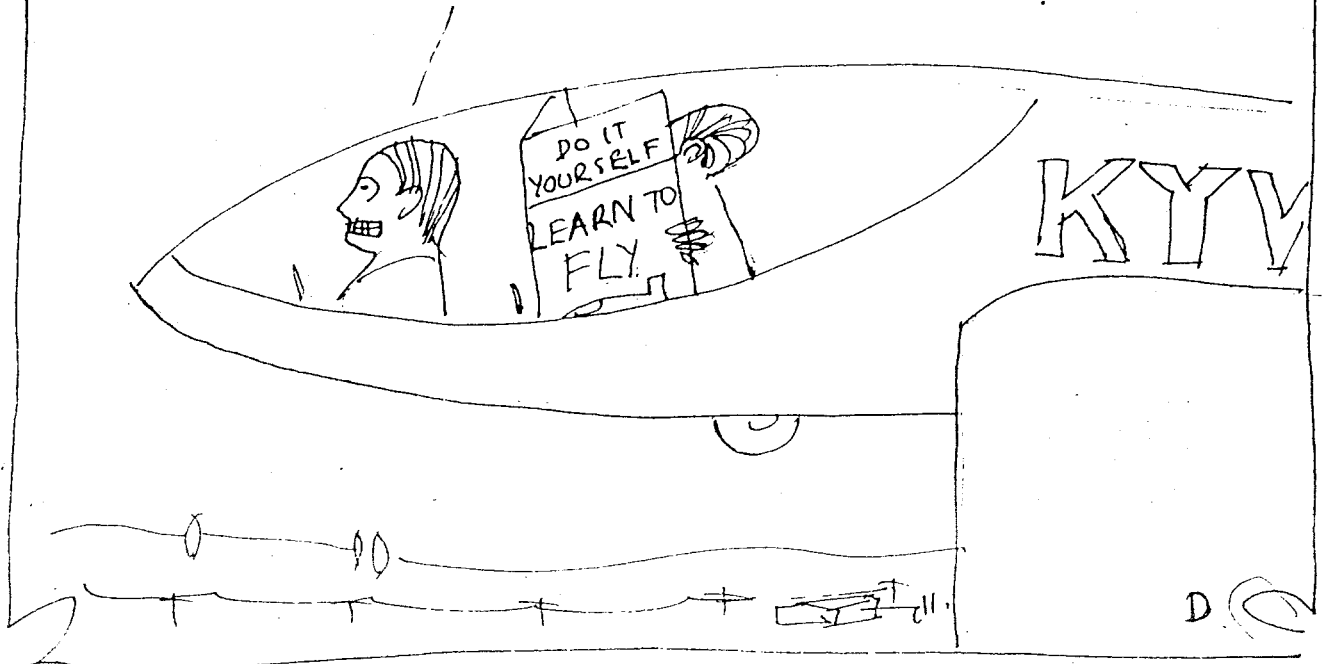
How To Go Gliding

Distances:

A-B 4.5km
 B-C 3.8km
 C-D 0.7km



"GEE, I'M A BIT NERVOUS... IT'S MY FIRST TIME... YOU SURE YOU KNOW HOW TO FLY THIS THING OKAY? HA! HA!"



AUGC Flying Training - 1991

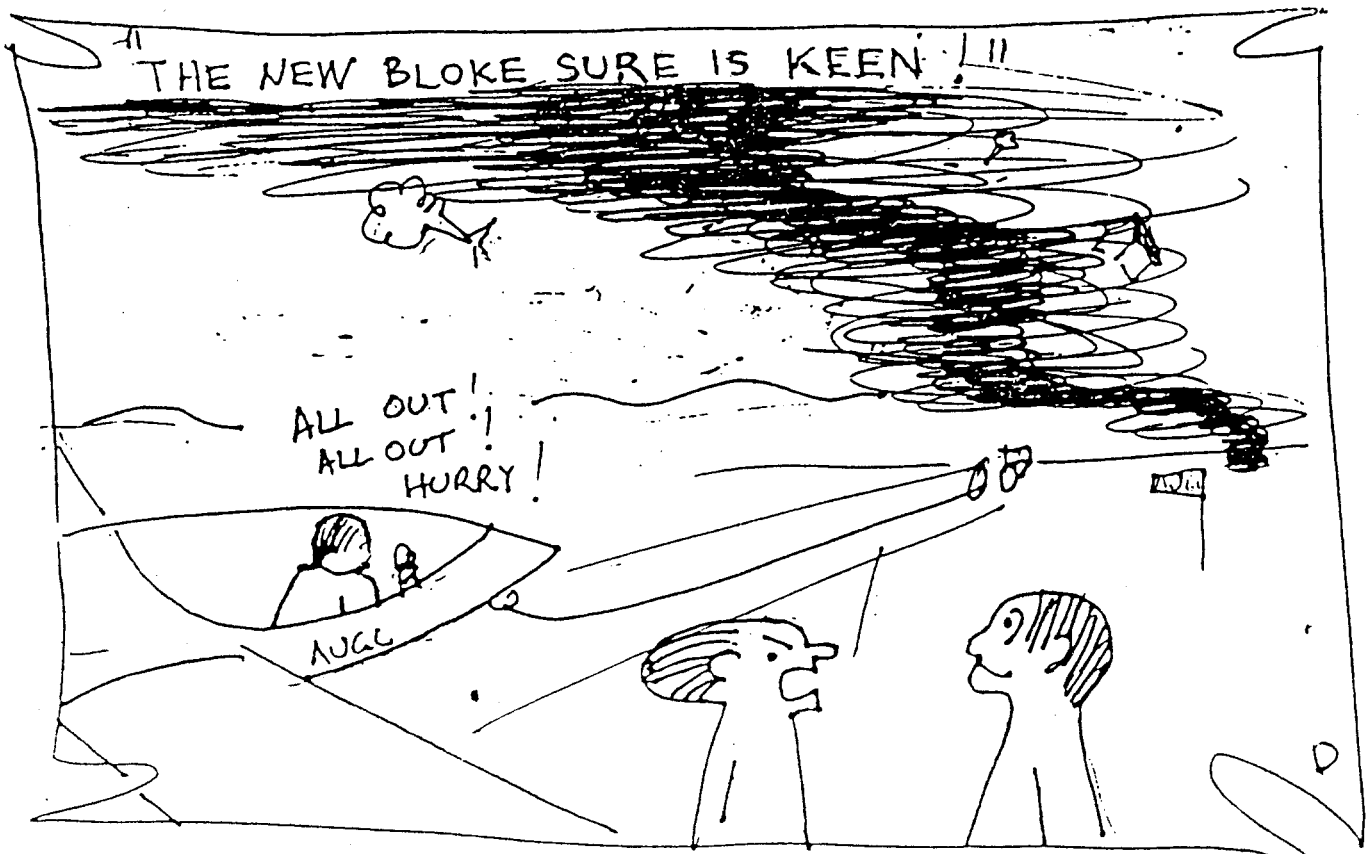
This year a series of lectures will be held during the first semester to supplement the practical flying training you will receive at Lochiel. They will be held every fortnight or so at 7:30pm in the Jerry Portus rooms.

These lectures will cover the theory in more detail than time usually permits at Lochiel, allowing you to get the most value out of your day at Lochiel.

The lectures will be presented by qualified GFA instructors and will include video of in-flight training, hand-out notes and group discussions. Appropriate text books are available at reasonable cost and are recommended.

Of course, no amount of theory will substitute for the experience of flying, but it will enable you to understand the principles of flight and make rapid progress. Early on, one day a fortnight is suitable for good development, but if you can make it both days of the weekend, or several days during a flying camp, your progress towards solo will be very much accelerated. To be a solo pilot before the mid year exams is a very achievable goal. After solo, there are many more challenges and opportunities to pursue:

- post-solo training
- basic and advanced single seat sailplane
- cross country flying
- passenger/friend flying
- regattas and competition cross country flying
- basic aerobatics
- instructing
- airworthiness/sailplane maintenance



Lecture Syllabus - 1991

13th March – Introduction For New Members

- video - introduction to gliding
- safety on field
- good habits, airmanship
- health considerations

20th March – Lecture 1

- the sailplane
- basic aerodynamics - wing theory
- the controls, their primary and secondary effects
- use of the controls in flight, straight and level, turns. Heading and track, drift correction

10th April – Annual General Meeting/Lecture 2

- instrumentation, vario systems

17th April – Lecture 3

- winch launching and cable breaks
- circuits
- use of airbrakes, landing

1st May – General Meeting/Lecture 4

- Rules of the Air, visual flight rules, controlled airspace, VHF radio

15th May – Lecture 5

- more aerodynamics, stalls and spins
- emergencies
- cramped/modified circuits
- cable hookups

Information

Club Contact Numbers

President	Peter Cassidy	356 3382
Secretary	Bradley Gould	381 2072
Treasurer	Terry Gould	381 2072
Social Convenor	Agata Jarbin	336 8131
Fifth Member	Andrew Huggins	340 2775
Club Contact	Bradley Gould	381 2072
Newsletter Editors	David Hulse	31 3312
	David Smith	264 6733
Chief Flying Instructor	Redmond Quinn	344 5331
	Lochiel Airfield	(088) 26 2203

So you want to fly this weekend?

Then ring the club contact person between 8:00 pm and 10:00 pm on Thursday nights, so that he can organise car pools, instructors etc. Meet at the Caltex service station on Port Wakefield Road, Bolivar (just past the White Horse Inn and the caravan park, on the left) at 7:30 am. Or if you can't get transport that far, meet at the Uni footbridge at 7:00 am. Someone should arrive to pick you up before 7:15 am, if you have rung the contact person to tell him that you will be there.

Calendar

What	When	Where
Introduction to Gliding <i>This meeting is specially for new members. Come along and find out about the club!</i>	Wednesday, 13th March, 7:30pm	Jerry Portus Room
Flying Theory Lecture #1	Wednesday, 20th March, 7:30pm	Jerry Portus Room
A.G.M. and Lecture #2 <i>If you only attend one meeting this year, make it this one! Vote for the new Executive Committee.</i>	Wednesday, 10th April, 7:30pm	Little Cinema, Union Building
Flying Theory Lecture #3	Wednesday, 17th April, 7:30pm	Jerry Portus Room
General Meeting and Lecture #4	Wednesday, 1st May, 7:30pm	Jerry Portus Room
Flying Theory Lecture #5	Wednesday, 15th May, 7:30pm	Jerry Portus Room