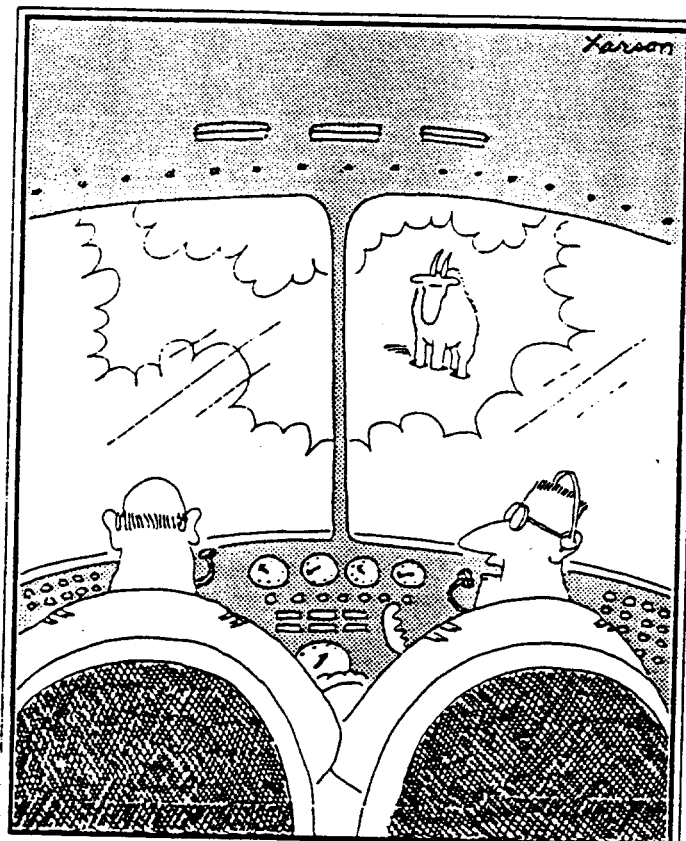


# Uni Gliding

Volume 15, Issue 10

November/December, 1990



"Say ... What's a mountain goat doing way up here in a cloud bank?"

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An official publication of The Adelaide University Gliding Club Inc.

## Editorial

Welcome to this special November/December issue of Uni Gliding. Unfortunately, both David and I did not have any time to spare last month which was mainly due to exams. However after being back at Lochiel for a few weeks, I cannot believe the weather we have been getting. There has not been a circuit day in the last three or so weeks as far as I know. I am also told that during November, some fantastic soaring days occurred that allowed height gains in excess of 10,000 feet on at least one occasion.

In the last newsletter, it was mentioned that the Libelle was in the finishing stages of its annual inspection and that the Arrow would be out immediately after for its own annual inspection. Well, both aircraft are back in the air again which means all four club aircraft are operational once again. Since it looks as though we are going to have a really good summer soaring season this is an ideal situation. With four club aircraft and five private aircraft the club should be able to do a large amount of flying over the next few months. It is also a good time for pilots who are still training to improve their skills. We have two twin seaters operational which means that trainees can have more flying.

Agata has been busy once again, organising more social events. It has been decided that after the huge success of the last club barbecue, we will be holding another on the 18th of December at the residence of Redmond Quinn. People wishing to attend are requested to bring a plate of salad and some drinks. Meat and the rest will be provided at a small cost.

While on the subject of social events, the club has organised a special passenger day for the 15th of December. It will be much the same as the passenger day held during the Vintage Regatta which was well attended. The upshot of this is that people who cannot fly single seater gliders will be inconvenienced, although they might expect to get preferential treatment in following weeks to make up for this and the time they put in to help run the day. Those that can fly single seaters can be launched as normal. However, we still need people to help run operations and pilots to fly the passengers.

The paddock still has a crop in it. It is about ready to be harvested and we expect that this will occur soon seeing as most of the other surrounding paddocks have already been done. This will make our lives much easier and enable operations to run more efficiently since we will no longer require everyone to land on the one strip.

Just a couple of operational notes. Each day that flying occurs, the fire extinguishers are to be brought out. One is to be kept in the winch and the other at the launch point. The field is quite dry and contains lots of hay and is quite likely to burn well if something causes it to catch fire. I might also point out that the fire extinguishers tend to be less effective at putting out fires when they are empty! THINK about it.

Well that's all I have got to say for this month, have fun and enjoy the soaring season!

David Hulse

# President's Report

## Ode to Achievement

I've been going through the club archives recently, trying to produce various forms of club chronology and it amazes me the amount of work that has been done by club members in the past to bring club facilities to the state they are today. When the club pioneers first arrived at Lochiel...

The one aircraft was kept in it's trailer and had to be rigged and derigged each day. There were no amenities on field: all food and drink for the day had to be brought up from Adelaide, there was no way of keeping it hot/cold, and the only sleeping facilities were at the shearers' quarters, 5 km away.

The club today provides a much greater measure of comfort and civilization, due entirely to the efforts of our members, past and present. Emilis once wrote about clubs building up assets "over the burned out bodies of several generations of keen members". Well, we haven't had several generations of operation, but 14 years of keen members have achieved a great deal.

In that time club members have built 3 hangars (and pulled down one). There was the construction of two winches, and the saga of the septic tank. You will hear experienced members saying things like, "I remember the day Don and I put up most of the northern clubhouse wall". The clubhouse itself has slowly evolved from a large slab of concrete, via activities like building the bathroom, tiling and grouting, acquisition of furniture and appliances and putting in the ceiling.

Work continues: Just this last year we have added a new water tank, water pump and hot water system, and in a big effort, rebuilt the Blue House.

So ponder this as you sit in our air-conditioned clubhouse, clean and fresh from your shower, sipping your cool drink and eating a hot pie.

A famous club philosopher once wrote:

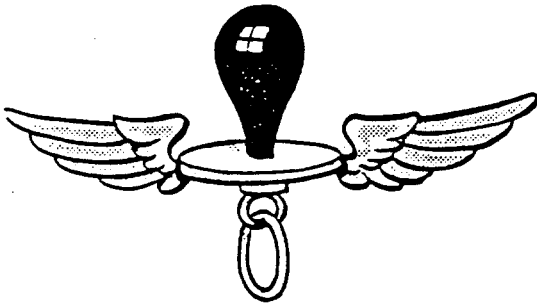
... work and personal interaction is an integral part of flying at Lochiel. Flying at clubs like Waikerie ... is fundamentally different. ... you can just spend \$ and have the 'donkey work' done for you; ... flying is inseparable from the 'ground aspects': change one, and the experience of the other is changed in balance. Sure, you still get airbourne and the controls work the same way, but to use an analogy: is the experience of being atop Mount Everest different in the case where you climbed there yourself, from the case where you caught the lift? Experience, particularly exhilarating experience, thrives on achievement.

... flying (the experience) is not 'flying' (the act). The surroundings to 'flying' may be changed, thus also changing the flying. Such changes, of course, may either be detrimental or beneficial, but are always necessarily limited to the achievable. The achievable, however, is a very large set ...

Peter Cassidy  
President, AUGC

# A New Concept

JUST SUPPOSE THEY DECIDED TO MAKE THE WINGS REFLECT THE JOB?



NEW SOLO PILOT



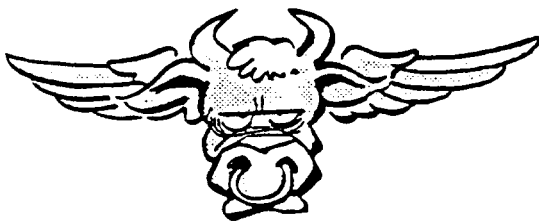
WINCH DRIVER



QUALIFIED FLYING INSTRUCTOR



MOTOR GLIDER PILOT



CHIEF FLYING INSTRUCTOR



GFA CHAIRMAN

# Winch Serviceability - More Theories

## Analysis of Conway Winch Serviceability Theorem

### Introduction

Originally published in an obscure regional scientific publication, this work has caught widespread attention by its application of a central causal principle (Heisenberg's Uncertainty Principle) to a peripheral scenario.

### Abstract

Conway put the proposition that Heisenberg's general theorem applied to glider winch dynamics results in a universally applicable Winch Serviceability Theorem accurately describing winch behaviour at all times.

### Summary

As far as it goes, the proposition and anecdotal proofs are consistent, leading to an expectation that the Theorem will prove a useful tool in day to day application.

As an overview it is encouraging, though it is expected that a high speed computer simulation will be needed to test the validity of the Theorem for all applications.

### The case for a Special Theory of Winch Serviceability Relativity.

Without detracting in any way from the General Theorem put by Conway (1990 September Uni Gliding), there is anecdotal evidence to suggest it may not hold in all dimensional situations. Several situations are portulated below based on life.

### Cable Breaks

Applying the Conway Winch Serviceability Theorem intuitively over a number of years, both winch engineers and operators have been known to leave cable break residue in the winch cab.

The proposition has been that the increase in mission critical components thereby included in the winch of known  $S=0$  would result in an artificial reduction in  $F$  to less than 0.5, thereby obviating the likelihood of the operational cable from needing to break at all. Regrettably, even when broken cable ends are left even to such numbers as to make it impossible for the winch driver to mount the cab ( $N=100$ ); use of the winch still resulted in breaks of a random nature more appropriately dealt with under Chaos Theory.

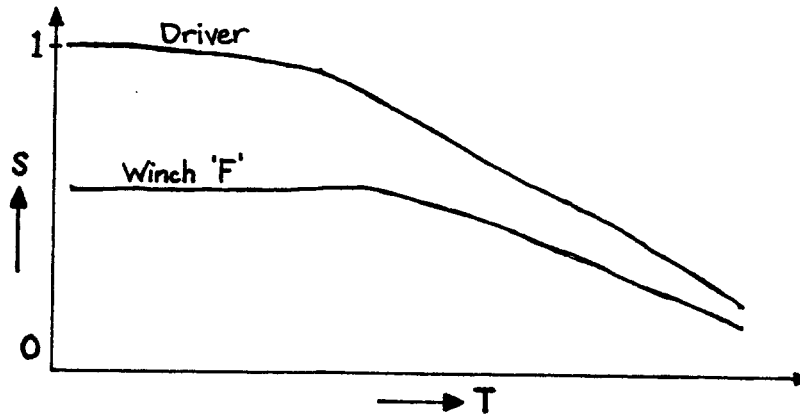
The proposition that the inability to enter the cab would make the winch  $F=0$  at which time  $S=1$ ; has to be rejected as being such a specialized case usually never reached because there is always at least one person who will clean the rubbish out eventually.

### The Martian Knot

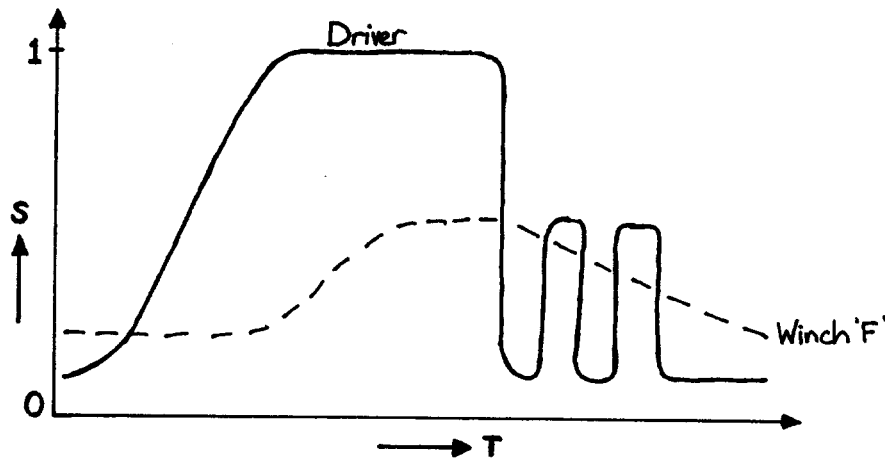
Originally known as The Tangle, Gordian Knot, etc. depending on local custom, the Martian Knot is a well documented specialized case involving both cables simultaneously; generally attributed to a gliding operation at Monarto.

# Winch Serviceability - More Theories

Applying the Conway Winch Serviceability Theorem to winch drivers as a critical failure prone component, the likelihood of winch driver induced failure would seem to bear a relationship:-



The Martian Knot experience suggests along with other anecdotal experience that the F:S relationship is actually more like:-

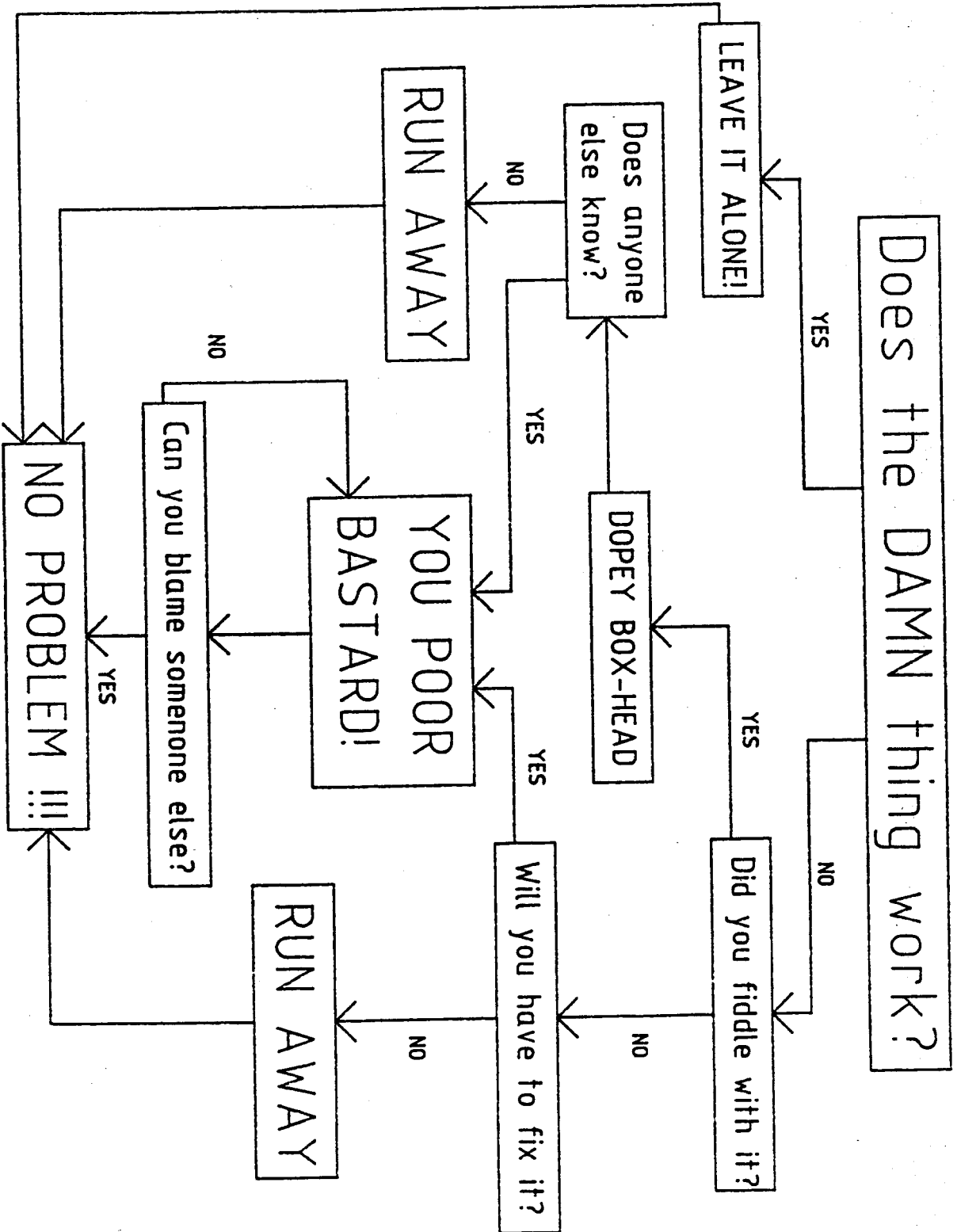


As the diagrams show, the winch driver decay curve, although usually blamed on the rest of the winch collectively, is in documented cases irrespective of the actual winch condition. Early launches have high failure rates, the "winch gets sorted out", launches go well, the driver starts stuffing up (S approaching 0) resulting in a rapid decline in F. Yet another driver taking on the winch at low F values will immediately operate at high S values. There is also anecdotal evidence of two instructors taking a winch at  $F=0.75$  and reducing S to 0 in two launches.

Anonomously posted in the  
Editor's Pigeon Hole.

# Winch Troubleshooting

## MULTI-PURPOSE WINCH PROBLEM SOLVING PROCEDURE

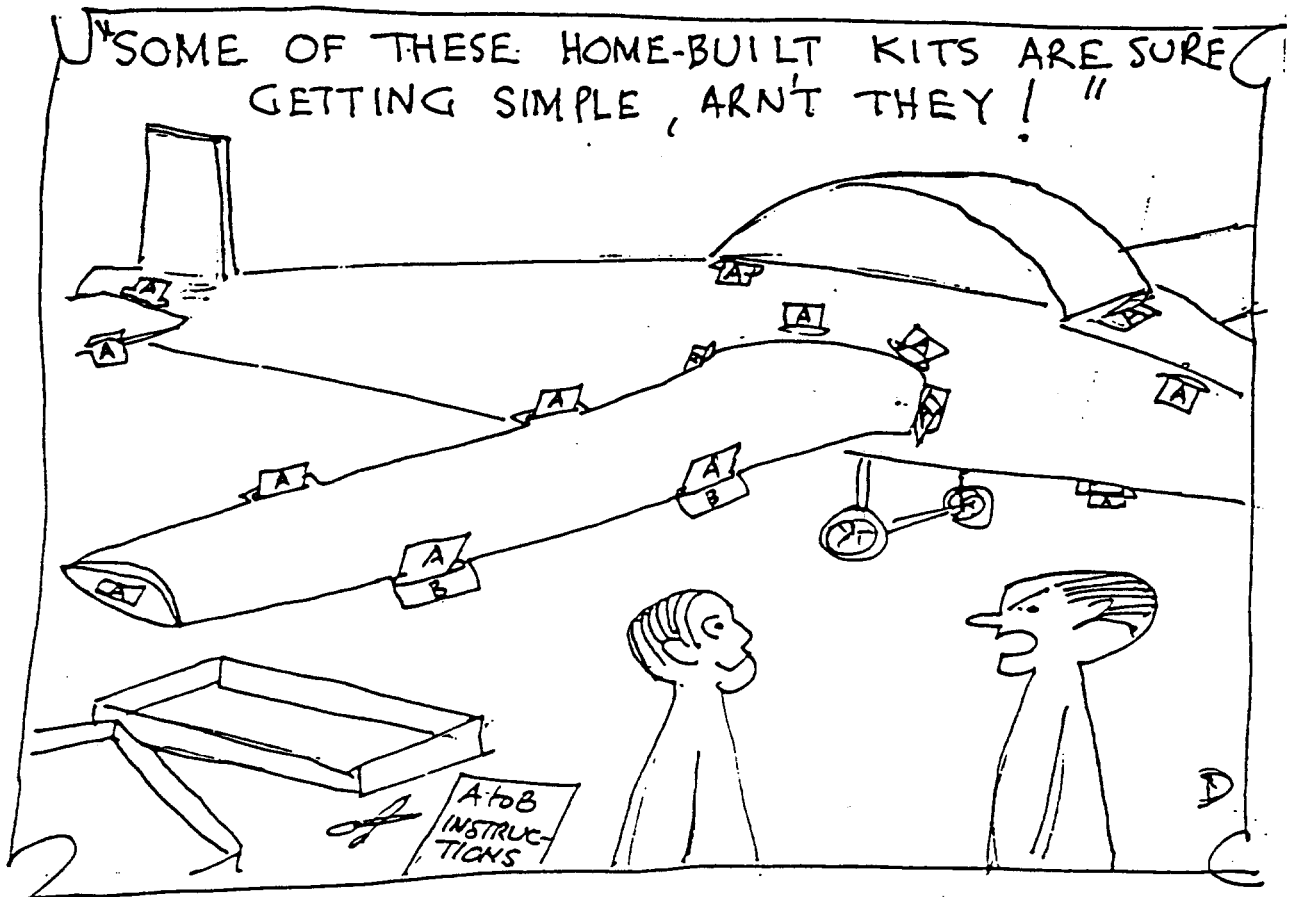


# Club Barbecue

Tuesday 18th December, 7:30 pm

13 Redmond Street  
Collinswood

Please bring a plate of salad and some drinks  
Meat provided at a small cost







# Come n Try



## GLIDING

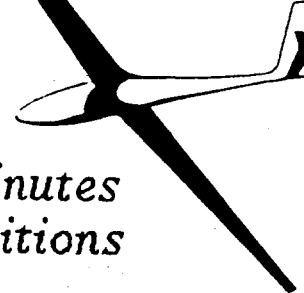


WITH THE ADELAIDE UNIVERSITY GLIDING CLUB

SATURDAY, DECEMBER 15TH



LOCHIEL AIRFIELD,  
30 km north of Port Wakefield



TAKE A TRIAL FLIGHT!

\$4:00 per launch, plus \$3:00 per 10 minutes  
flight length may depend on weather conditions

For more information contact

Life. Be in it. on 231 1754, all hours

or keep reading your **Messenger**  
*Your Community Voice!*

A Life Be in it Programme

# 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	Matthew Nicholls	297 0078
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
Passenger Day <i>The ideal way to experience the thrill of motorless flying!</i>	Saturday, 15th December	Lochiel Airfield
Club Barbecue <i>Come along and socialise with the other club members.</i>	Tuesday, 18th December	Redmond Quinn's House
Executive Meeting <i>This is your chance to find out what happens behind the scenes.</i>	Wednesday, 19th December	David Teagle's House
General Meeting <i>Come along and find out what is going on in the club.</i>	Wednesday, 2nd January	Jerry Portus Room