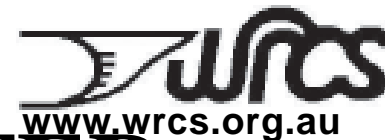


**NEXT MEETING IS ON
TUESDAY 12th FEBRUARY 2008**

The Newsletter of WRCS Inc.
PO Box 349
Brookvale NSW 2100

Warringah Radio Control
Society Incorporated
(Incorporated under the Association Incorporation Act 1984)



NEWSLETTER

JANUARY 2008

BIG STUFF!

Garry Welsh with his Gee Bee Y bought from Peter Coles, Garry reckons this is his best model ever!

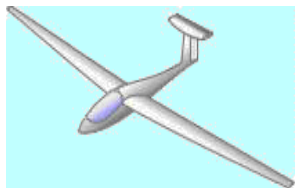
Tom Sparkes successfully straightened the crankshaft after Garry's last Corsair crash



MEETINGSMEETINGSMEETINGSMEETINGSMEETINGS

The next meeting will be on Tuesday, 12
February 2008 at Tennis Cove, Eastern Valley
Way, starting at 7.30pm.

POSTAGE
PAID
AUSTRALIA



GLIDER & ELECTRIC DAY

Sunday, 17 February 2008

PROGRAMME TO BE ADVISED NEXT MONTH
THIS IS A FUN EVENT WITH SAFETY
PARAMOUNT

Competition Director - Mike Minty



CONGRATULATIONS

to KEVIN EINSTEIN

on achieving his

HELICOPTER GOLD WINGS



Warringah Radio Control Society Inc.

President	Colin Simpson	9419 7844(w)	0417 264 240
Vice President	Warren Lewis	9417 0269(h)	
Hon Secretary	Brian Porman	9488 9973(h)	
Treasurer	Ron Clark	9440 1990	
Committee	Grant Furzer	9451 3651	
	Paul Mandl	0411 854 977	
	David Pound	9907 9261	
C.F.I. fixed wing:	David Menzies	9975 7576	
helicopters:	Shane Austin	0412 453 351	
Editor	Tom Wolf	9371 0843(fax)	0411 339 590

WRCS 2007 COMPETITIONS

Report from the Burglar, competition coordinator



We had a rather eventful year this time due to the number of events that had to be cancelled due to bad weather.

In fact there were only two events run in which the stock class was a category, so our winner in this section had a rather easy time of it !!

We had very good support in the days that did go ahead, and we were blessed with excellent

weather for a change for both Scale Days, which were a stand out success with record numbers taking part. The amount of carnage continues to be a worry on Scale Days, in fact we lose a greater percentage of planes on scale day than we do on Combat Day, which is pretty weird when you think about it. I think it is a combination of two factors, true scale planes particularly warbirds are not as easy to fly or forgiving as your weekend fun flyer, and we all get a case of the nerves and twitches when we are flying something we have spent 2 years or so building and putting our heart and soul into.

I would like to thank all those who stepped forward to run the various events, and a big thanks to all those who took the trouble to "have a go" and make the events a success. Remember that nothing improves your flying like competing in the competitions, and also it is worth remembering that sporting clubs per se get a lot more recognition from the public and government, and to be a sporting club we have to have Competitions!! Now for the results. The overall winner of the perpetual shield is **Al Zuger** with over 100 points. Second was **David Foster** and third **David Pound**.

The winner of the Stock class for the year was Al Zuger again. Congratulations to the winners and to all those that took part. Good luck to all for next year.

THE BURGLAR

Fun Fly November 2007

Report by Mike Minty

After a mixed week of dodgy weather Sunday came up a cracker! Sunny, warm and not much wind greeted the fliers who turned up (many a bit late including your scribe who assumed a 10.00am start but it was 9.00!).

The classes were:

Stock (the good old Plagiariist or similar)

Open (any other “normal” aircraft)

Hover (purpose fun fly planes – you know all ailerons and elevators)

Electric (you can work that one out!)

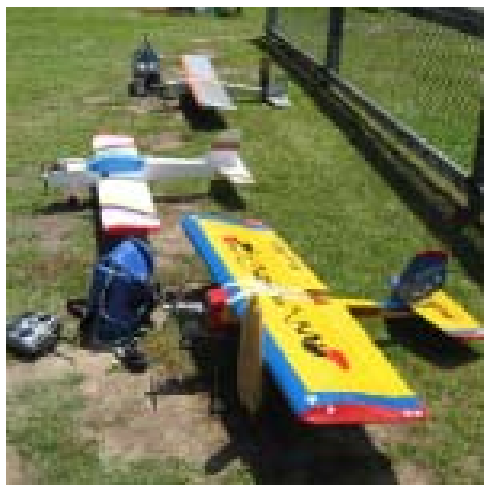


A total of 11 pilots entered (some in 3 events) and they were Al Zuger, Peter Coles, Mike Minty, Mark Connor, Simon Press, Tom Sparkes, David Pound, Lynette Austen, Matthew Dean, Doug Radford and John Parker

There were no set rounds, just events that you could try as often as you wanted (and some people had MANY goes at the Spot landing ... didn't they Simon).

Here's a typical selection of models.

Loops in 15 seconds sounds easy but it's surprising how short a time that is. Most people only manages 5 or 6 in that time though.



Lynette turned up a bit late but got straight in and did a bunch of loops with her Zaggi.

The highest score (apart from Mark's silly one of 100 with his tiny electric model!) was Peter with, not surprisingly, his Cougar.

The loop, 8, loop and roll was popular with some pretty close times around the 30 second mark but the fastest was from David Pound who screamed through it with his ancient Quickie 500 which he proudly points out has won 4 1st prizes in it's time including Combat and Pylon Racing! Peter got the fastest time of only 17 secs.

Climb for 20 seconds and spin said the instructions though many planes could only really manage a spiral dive.

Mark Connor's little electric plane did a classic flat fully stalled spinactually 100 of them and he probably could have done more!

Hovering was really only for the “Hover” planes or foamie electric as most others don't have the power to weight ration to manage it. Mark got the highest time of 22.28 secs.

Three Inverted Circuits showed the difference between those who can and those who are prepared to have a go! The fastest time was achieved by Tom.

The spot landing proved one of the hardest events with planes missing completely or rolling too far despite the desperate attempts of the pilots to nose them over or turn sharply as they reached the circle.

Simon had many attempts with his old Precedent Fun Fly and got some good ones – he also got a tree at one point but was soon flying again after quick repairs, Matt did a few good rolls too. Peter and John flying their Cougar and Magic did pretty well as they land so slowly.

Doug was one of a number on the day who stopped a little short and then revved up to get the last few feet to the boos of the watching crowd.

Al used his big electric Angel to good effect – after a rather hairy approach or two he flopped it down in the middle of the circle but bent the U/C a bit.



There was a special event where 4 planes lined up propless – the “mechanic” had to run to a bucket, get an appropriate prop from an assortment, run back and fit the prop and start the motor and then the pilot had to fly three laps.

The teams were Al/Mike; Tom/David, Peter/Matt, John/Augusta Chang and despite getting a rather oversize prop, Al/Mike won it. Here Mark briefs the teams.

A little later in the day Simon's quick repair showed it was a bit too quick as the wing and fuselage parted company. The wing fluttered to the ground, the fuse rushed off to the bush.

Simon went searching with the help of Tom, Lynette and Jody Redfern and not only found it, but also found a Twister that Graeme Swalwell had lost 6 weeks earlier! Matt had gone looking for it weeks earlier and all he found was Dennis Grech's Me 109! Funny old world isn't it.

When everything was added up it was prize giving time and there were a lot of them.

Not only the trophies but we must give special mention to the people who donated the extras (remember to visit their businesses when you can).

They included an OS 40 from **Col Taylor Models**; \$100 & \$50 vouchers from **Northern Beaches Hobby Centre** and our own Peter Coles **Model Aero Products**; 2 Thunder Tiger Expo 3D electric models from **Wings'n Things** and a



bunch of coffee and hamburger vouchers from Ida at **Café Bel**.

And the winners were:

Prop in a Bucket

1st Al Zuger 2nd David Pound

Open

1st Tom Sparkes 2nd Mike Minty 3rd Al Zuger

Sport

1st Mark Connor 2nd Equal Simon Press and Matt Dean

Stock

1st Al Zuger 2nd Mike Minty 3rd Tom Sparkes

Hover

1st Peter Coles 2nd John Parker

Electric

1st Mark Connor 2nd Al Zuger 3rd Lynette Austen



Overall, the highest scorer was Mark and Tom was next and Al, and Simon got an award for the best (actually the only) crash of the day.

Here are the winners.

A special "thank you" to Margie Connor who cooked a load of delish sausages kindly provided by **Belrose Meat Supplies**

And a special "thank you" to Dick Ogilvie for doing a lot of timing of events.

See you next time!



BAREFOOT TO BRONZE

by Colin Buckley



It has to be here somewhere. I'm sure I took a mark on that big gum. Maybe it's a little further up. Could it be past the rocky outcrop near the tall trees? Damn this bush! Wish I could get a bearing on the field.

I struggled higher up the ridge. Sharp grass made another cut in my hand. I could feel numbness in my lower legs from shinning on fallen timber. God, I love this hobby.

I kept on thinking, "How come the model didn't straighten after I gave it right aileron"?

My dream of earning Bronze Wings seemed decades away. Models still had a mind of their own. Even on the buddy box, all I do is correct, not steer. Why is it so hard?

My latest crash was simply due to dumb thumbs. I was hot boxing when the model decided to rub its nose into the dirt at full throttle. And I thought I was flying so well, completing near square circuits. Only the occasional slight panic now and then and even the death grip on the transmitter had relaxed slightly.

Then, out of the blue, wrong input. Smash. So here I am, sweating like a pig, clothes ripped, cuts & scratches all over my body, throat parched, feeling lonely and depressed.

At last I see a flash of yellow. I push a clump of trees to one side. A small rock ledge is my last hurdle.

Oh my God. My sweet little model looks like it's been run over by a bus. Bits everywhere. For some inane reason, I switch the plane off. I gather an armful of wing and fuselage hoping there might be some salvageable parts and turn back to civilization. Thirty minutes later, I stumble into the open and find a path back to the field.

Three models were sacrificed to the Garigal Gods before I was granted Bronze Wings.

I have held a pilots license, have read everything about aeroplanes and always look up in the sky when I hear an engine. So flying models should have been like shelling peas.

However, it took many months before I had a feeling of partial control.

My long suffering instructors calmed me with soothing words such as; "You're doing really well Colin—Ooops, my aeroplane".

Eventually, I was allowed to set up landing patterns.

That was no problem but I was informed it was preferable to have the aircraft point towards the strip on finals.

On approach, not only did I have left and right problems, I now experienced up and down difficulties, PLUS my instructors wanted me to think about engine rpm!!

Give me a break.

After a while, I actually started to enjoy flying. Moving the sticks was more instinctive. For some reason, my plane quit its wild ways and started to behave.

Some of the time on landings, I found the middle of the runway. Most of the time I landed four or five times before it eventually stopped bouncing. Very occasionally, I still had engine to taxi back home.

I knew I was ready for the Bronze Wings test. When I cut the engine after the intense exam and was told I had passed, the feeling of euphoria was the same as when I first passed my driving test or when I first solo'd back in the UK.

I would personally like to thank all those instructors and members that buddy-boxed, hot potatoed, soothed my battered ego, lifted my spirits, bathed my wounds, counselled me, and accompanied me in the woods.

To you dear folks – a thousand thanks for introducing me to a hobby that keeps me fit, drains the housekeeping, gets the adrenalin pumping but most of all, the camaraderie.

Editor's Note: Colin's award of his Fixed Wing Bronze Wing was approved at the 9th November 2007 meeting of MAS and confirmed in the December Newsletter (Issue 301)

Christmas Party 8th December 2007

While half of Sydney covered under hail stones the size of tennis balls, or thunderstorms or torrential rainor all three the gathering at the field for the annual Christmas party was blessed with sunshine, a pleasant temperature and hardly any wind – perfect really.

Your ace reporter arrived in time to see David Menzies launch a diminutive plane powered(!) by a .6cc diesel but not to photograph it. That was a pity as it coughed and spluttered in ever rising circles before the engine cut and wandered into the trees beyond the car park. David was gone for some time and sadly came back empty handed.



Stan Begg had wisely fitted some tiny radio gear in his Tomboy and it's 60 year old Mills 75 carried it high from a launch by Col Simpson and it came back for perfect little touch down. Ah the smell of ether!

It wasn't long before the field was covered in kids hurling

chuck gliders everywhere and adults were seen wandering around with small planes which they enthusiastically wagged their fingers at – it's called winding up the rubber motor! The plan that David Menzies had laid had borne fruit – about 15 of them. Here's a happy group shielding their faces from the sun (look at that sky will you).

Flights ranged from the heart stopping letter P (ie launch, climb and dive into the ground



just behind you) to the very impressive for such a simple plane. Their style varied a bit too, Peter Coles went for the wrap it in loose cling film daggy look, Lynette went for the covered in stickers and named Dragonfly look while Mike Minty's had lovely red tissue covering on the fuselage for a whilethen the



rubber band broke from too many winds! Mark ter Laak was one of the few fitted with balsa wheels – which fell off as soon as he launched it. Warren Lewis was looked at with great suspicion when his flew so well – what had he got inside it? It turned out to be the standard band but with a broken one tangled up with it – was this giving it the extra edge? Kathy Randles had two Cascade beer bottle caps for nose weight – very elegant. David Pound gave Lynette's a launch that took it on a lovely curving flight straight into the trees by the storage containers.

As ever there was a great spread of food and everyone got well stuck in for a feed. See the web site for all sorts of pictures of the partying.

It was soon Lolly Bomber time flown by Simon Press though, as usual the lollies didn't always fall where and when planned but the kids loved it especially the chance to run and fall in the mud.

There were a heap of raffle prizes and very good ones too! Here they are waiting for a winner, the beer bottle isn't one.



First prize was a large Seagull Models Super Star kindly donated by Model Engines and was won by Graeme Swalwell. Second prize was a 46 size Cap 232 ARF donated by Peter Coles and his Model Aero Products. It was finally won by David Pound (after Doug Radford won it twice and Stan Begg won it and re-donated it to the club). Third prize was an ex-Cec Ashley Tiger Moth kit and was won by Doug.

Fourth prize was an OS LA 46 donated by Col Taylor and it was won by Peter Sharpe.

"Door Prizes" were two vouchers for a visit to the Richmond RAAF base provided by RAAF 33 Squadron and one was won by Tom Wolf and the other by Deek McIntosh.

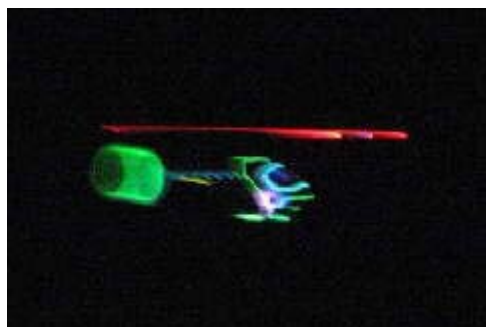
Santa appeared again, he always seems to turn up just after Doug Radford leaves – pity you missed him Doug. The kids sang to him and then lined up for their pressies.



Col announced the Club Person of the Year award and it was to Ron Clark for all his fine supporting efforts, here he is getting his trophy.

The partying continued and with darkness came the demo flight from George Atkinson and his illuminated helicopter. Its "cold cathode emission" apparently but we all thought it looked positively alien!

Mike Minty was the lone tent camper again this year (others were "gunna" but were put off by the weather forecast!) but Lynette decided to sleep in her



wagon and made herself a very comfy bed there. In the morning she found the ground a bit wet and it took a fair amount of muscle from the clearing up crew to get the car clear of the slippery field. So once again a great evening of fun and flying – old friendships renewed and new ones made. Hope to see you there next year.

HOBBY HEROES AT BROOKVALE

On 3rd December, Paul Tilley, a member of WRCS has opened a new hobby shop at 1/18 West St. Brookvale (Mob.Ph: 0422 136 478, paultilley@hobbyheroes.com.au) Paul recently returned from living in Singapore and has rejoined WRCS on his return, and the shop is a break away from his past work in advertising. Since Paul's main love is radio control airplanes, he has made sure he is well stocked in planes and all sorts of accessories and aeronautical stuff to suit his fellow flyers at Belrose.



So if you need something or just want to see what the new shop is like, go for a visit and make yourself known to Paul. All members of WRCS get 5% discount on every purchase over a hundred bucks.

MORE FROM NATIONAL AIR RACES COOTAMUNDRA 2007

After printing the December Mag we received these additional photos from Doug Radford:



Right: This must be the latest fashion statement

Soaring at WRCS

by Stephen MacMahon

Unlike our friends the power pilots who force their way through the atmosphere with their engines, the glider pilot learns to fly feeling the effects of the atmosphere relying on the natural updraughts due to convection or ground lift to keep his aircraft afloat.

Completely on the other end of the spectrum is the poor heli pilot who keeps his aircraft afloat by "thrashing the air" almost immune to the effects of the atmosphere not dissimilar to the blender, whisking the meringue mix in the kitchen. The helicopter however is quite comfortable flying in adverse atmospheric conditions making both the fixed wing power and the glider pilot jealous. I had to make this statement to keep the natural balance within our club!

More than both the power fixed wing and heli pilot, the seasoned glider pilot needs to be a practical meteorologist with enriched knowledge of atmospheric conditions, of thermals, hill lift and lee waves. This knowledge and assessment adds to the challenge of a prolonged and successful flight. I do not consider myself an expert in this field but developed my interest stemming from over 1300hrs as a general aviation pilot. My thoughts in this paper are to stimulate some interest into looking at the environment at Belrose for successful thermal flights.

The Earth is surrounded by a blanket of air called the atmosphere reaching up to about 350 miles. The lowest layer is called the troposphere, which reaches to about 80,000 feet. The belt of air that approximates the earth's surface is termed the boundary layer. The greatest meteorological changes will occur between 0 to 1500 feet and it is here that RC pilots soar in.

Belrose presents interesting challenges to the glider pilot for successful thermal flights. Sustained lift for the glider pilot will depend upon:

1. Temperature
2. Local topography and its affect on winds
3. The ocean and its affects
4. Prevailing winds
5. Cloud formations and seasonal changes

The sun is our source of solar energy. Taking aside climactic conditions, the sun heats the earth's surface as a day progresses and sets up a microconvective layer on the surface. This heating up of the earth's surface warms this microconvective layer. As this layer is warmed, the air rises; Irregularities in the earth's surface also create uneven warming of the microconvective layer. The hotter air will rise faster and create our sought-after thermals.

Rich grasslands, heavily treed areas and waterways do not create ideal areas for thermals as heat is absorbed in the tree vegetation reducing the amount of available heat. Rocky and parched areas, car parks and vast ploughed paddocks seen in open country areas, are far more suitable for thermals. Sadly these "pure" thermals are very few and far between at Belrose.

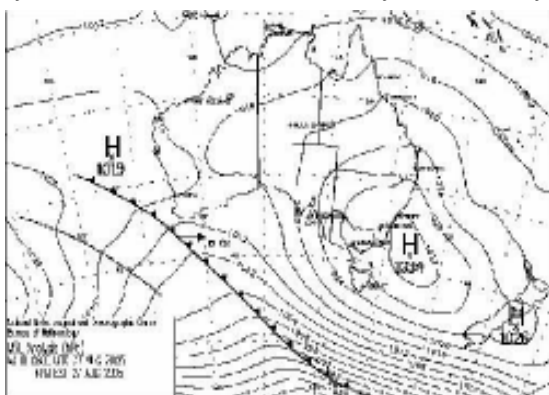
On many occasions, as was seen on Sunday afternoon, 30th September 2007, meteorological conditions will occur such as temperature inversions. This will help to create very ideal thermal conditions at Belrose. Very occasionally, in the cooler months with warm balmy days, a high-pressure system will sit off the Tasman.

This will create gentle north-easterly winds which will send cool north-easterly air off the ocean and up the valley underneath the rising warm air. This creates the effect of warmer air sitting above the cold air. This will force the warmer air to rise at a greater rate creating a thermal effect.

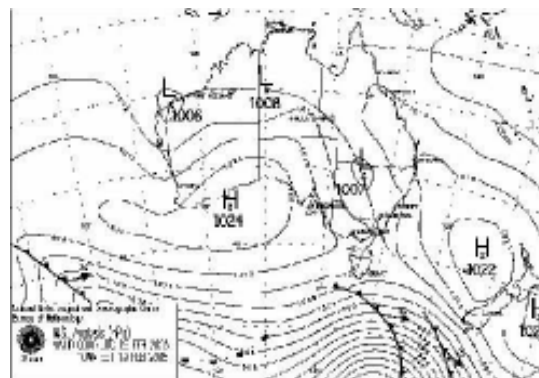
With the aide of the buffering affect of the north-easterly wind, it is possible to soar for as long as your neck will withstand looking upwards. My Hawke 1400 glider has virtually climbed out of sight (at 299 feet!), the trick on these days is to find the inversion layer and stay above it. In the hot months, some thermal lift is possible.

The best place to look for it at Belrose is where there are rocky outcrops.

The easterly aspect around the dam has substantial rocky outcrops that will aide in thermal formations in the hot summer months.



The actual dam itself will not create thermals but the rocky outcrops in the vicinity of the dam will present as good thermal prospects. The area around the carpark and the road access, are also good areas to look for thermals in summer. The presence of lots of cars in the carpark will significantly aid in thermal production due to reflection of heat off the cars, in the hot sun. By far the most suitable form of lift at Belrose is created by updraughts from the seasonal prevailing winds.



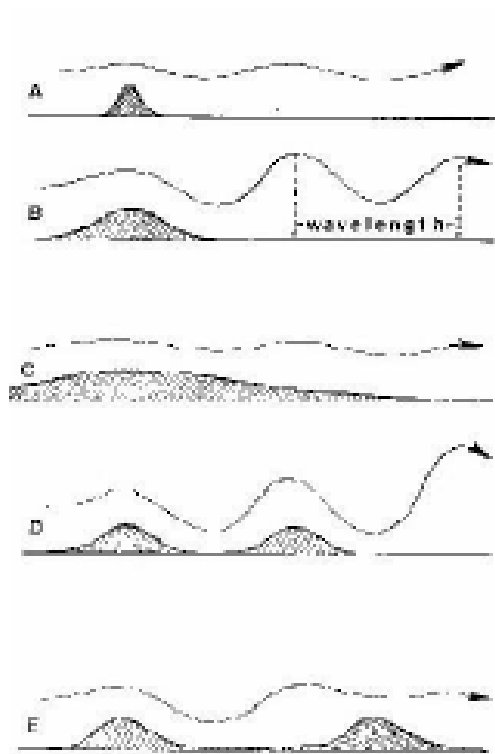
During the cold winter months, high-pressure systems drift across the centre of Australia forcing the weather fronts to the south normally resulting in north-westerly to south-westerly prevailing winds. The weather patterns during the summer months see predominantly low-pressure systems drifting across the continent being

influenced by the weather systems above the Tropic of Capricorn. High-pressure systems are pushed south into the Tasman creating north-easterly winds. When our winds are influenced by a high-pressure system, the winds are seasonally the best however if our weather is influenced by a low-pressure system off the north coast, NSW or Queensland, the north-easterly winds are associated generally with bad weather.

As we are aware, our airfield is situated in a valley surrounded by undulating ridges to the north, south and west. The eastern aspect of the runway heads down a valley towards Wakehurst Parkway, a main road leading to Narrabeen Lakes. An onshore north-easterly breeze will meander its way up the valley toward our strip. Westerly winds tend to rise off the plateau at Belrose and force their way eastwards up and down the ridges and valleys. There are also north and south ridges either side of the strip.

These ridges and valleys help to cause vertical displacement or upward movement of the winds to create lift. This upward movement particularly over undulating ridges creates what is termed as Lee Waves.

Be aware that vertical motion forces with periodic changes in speed and direction created by uneven undulations on the lee side of the terrain can create turbulent airflow referred to as rotor turbulence close to the ground. Hazardous rotor turbulence will be quite marked on approach from the carpark with strong westerly winds. When these conditions arise, all good pilots know to increase power on approach. Glider pilots need to use steeper approaches and heli pilots have the last laugh! This condition is relatively rare on approach from the dam, as the terrain is not so undulating. North-easterly winds create the best environment for soaring at Belrose.



North-easterly and south-easterly aspects of the north and south ridges create a buffering affect with these winds. Geographically, there are two ridges on the north-east aspect which will help to promote mountain waves.

This helps to explain why soaring is usually better on the north-east



ridge in summer months. This, coupled with the rocky quarry, below the heli area, will promote thermal lift in the summer months and good soaring conditions.

Lift generally extends along the ridge behind the barbecue areas.

The south-east ridge does not have as ideal geographic undulations, hence the soaring whilst quite efficient, is not as good as the north-east ridge. In the winter months when a thermal inversion is present, it is good to soar to and fro between the north-east and south-east ridges to get the best lift.

It is also worth mentioning the effects of southerly winds that are usually associated with cold fronts. The southern ridge adjacent to the field has quite a steep rise on the windward side. This will create "reasonable lift" on both the south-east and north-west corners of the field.

Southerly winds are usually associated with cold fronts and are often strong hence rotor turbulence on the lee side of the ridges is common. The south-east corner can be quite hazardous on base leg for landing. In a further issue we will discuss;

1. Cloud formation and its affects on soaring
2. How to fly safely in and out of strong thermals.
3. Types of soaring aircraft
4. Methods to fly such aircraft

Happy and safe soaring!

