

# Flightlines



**Inside this edition;**

**Jets Over Offaly.**

**Divert to MMFC.**

**Early Aerobatics.**



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**February 2011**



*Fergus O'Reilly with his Fokker D.xxi.*



*Sparkie the Pilot*

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**On the Cover:** *Taken at the Shankill Radio Flying Club Fly-In.*

*The views expressed within are those of the individual contributors, and not necessarily those of the MACI Committee.*

# M.A.C.I. Executive Council and Officers 2011

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# Editorial

What a refreshing change, in these financially challenging times, to be able to give the news that MACI has reduced it's membership fees by €10 for adult members! Not only that, but if you have fifty years or more consecutive years as a member of MACI then from now on your membership is free.

Last month I sent out e-mails to everyone who has an e-mail address on the MACI database, asking if you would prefer to receive Flightlines as a hard copy, or, electronically via the MACI web-site. While the response was very good, a fair number of e-mails were returned as not being in use any more. If you did not receive an e-mail from me, could you please see the item on page 10 for details on how to opt for the electronic version. If you want to continue to receive Flightlines as a hard copy, then there is no need to reply.

As you may have noticed on page 2, the Executive Council has had a complete change in personnel. Tony Greene has taken over the position of Chairperson, Paul Duffy is the new Treasurer and, for my sins, I have taken over the mantle as Secretary General. I will endeavour to perform this duty to the standard achieved by previous holders of the post, and I would like to wish success to my fellow Officers, and look forward to working with them.

I have to say that I was delighted to receive the photograph from Fred Harno of the Roundwood MFC, which appears on the inside rear cover of this issue. It goes to show that we do not have to curl up in front of the fire when the white stuff is on the ground. I guess that one issue for some however, is more to do with being able to gain access to the flying site than actually flying.

Let's look forward to 2011 being the year we refer back to in the future as being the best summer in memory .

Safe flying.

***Chris Clarke***

# **Jets Over Offaly**

## **Aug & Oct 2010**

In 2010 two Jet Fly-Ins were held at Andreas Balsiger's own Private flying site (yes we can all be very jealous) at Belmont Co. Offaly during August and October.



These being the first, were of a low key affair, and Andreas rallied around the known Jet flyers in the country an invitation to attend.

Both Fly-ins were all weekend events with many of us staying over night to avail of both days flying. The dates were picked at last minute by keeping an eye on the weather so both weekends turned out great for flying on both the Saturday & Sunday.

A gang of us arrived in convoy down from the north end of the country early Saturday morning, and Andreas, John Beasley up from Cork, and a few others were already there.



The first event in August was held only about six weeks after Andreas had decided to make a part of his land useable for model flying. Considering the short time span from a normal field, to a flying site suitable for Jets, it was excellent and showed the amount of work himself and Shaun had put in getting it ready.

The site has good clear approaches from both directions which is great especially for the scale jets which like longer flat runs into the runway. The surface itself was good, and not just the runway, but the surrounding grass which allowed easy taxiing in and out of the pit area.

Behind you is nicely sheltered with overhanging tree's which would keep you dry on a wet day but gave us some shelter from the very strong Sun we had behind us all weekend.

It wasn't long before there was the smell of jet fuel in the air and flying was non stop all day, apart from stopping to the get the 'Tae' !



*Big JetLegend L39 - Simjet Turbine - 32lbs Thrust*



A mixed array of jets was flown which included a number of Boomerangs, Harpoon, L39's, Velox, Phantom F4, F20 and a turbine powered Helicopter.

The five Boomerangs clocked up most of the flying, just from their

simplicity and great flying characteristics it is hard not to keep filling them up and going out again.

It wasn't all jets, lots of other scale models like Stearmans, P6 Hawk, Extras, Cubs, a Big Wilga, plus others were flown during the day, along with a few scale helicopters and foamies buzzing around in the evening.

Everyone went out for a meal on Saturday eve at the En Route Restaurant where we also stayed for the night and was excellent.

Sunday morning everyone was out at the field nice and early and was much of the same with fantastic weather and virtually no wind.

After another great days flying everyone was going home with

empty fuel cans. We counted 65 jet flights over the weekend and when you are talking turbines that is a lot of litres of kerosene!



*Feibao Eurofighter - Simjet - 32lbs Thrust*



We had the second event in October, not a month you would think for getting good weather but again we had watched the weather and just decided a few days before hand. It turned out very good apart from a little crosswind which just made some good video of the final approaches and touchdowns.



***Boomerang Intro - Jetcat P70 - 17lbs Thrust***

It was another weekend of great flying and our thanks to Andreas and Shaun for looking after us all and for the En Route Guest House for just excellent accommodation both times we visited.

This year 2011 will see the formation of the Jet Modellers Association of Ireland (JMAI) and we intend to have many fly-ins around the country plus competitions based on the F4J format as used in Jet World Masters.

Jets are getting more common and plenty of info is now widely available. With lots of stuff now for sale second hand, you can get started for not much more than a 90 size 3D heli or a big petrol powered aerobatic model.

### ***Seamus O'Donnell***

EI-2002

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# European F3A Championship 2010

We set off from Dublin airport, where we all meet up, on an early morning flight on Monday 23rd Aug. The final destination was Kapfenberg, Austria which we got to via Vienna airport where we picked our hire vans/trucks. We got down there by late afternoon, found our hotel and got settled in.



*Opening Ceremony*

The next morning we got the models ready and set off in search of the practice sites. We found two of them easily though one of these was quite far. Then with some difficulty we found the last one. Typical, this was the closest and best. This became our flying base for the duration. It was best because the flight line aspect here was the same as the comp site. We shared this site with the Italian's, the Finn's, Liechtenstein and others. The club members there were great providing drinks, hot dogs and even steaks.



*Tony, Angus and Elliot*

This and the comp site were in the same valley with high mountains north and south of us. The winds were very light for the most part and we were sheltered from these most of the time. This meant that most of the time we were flying in flat calm weather. I mean really calm a bit like flying in butter. The

funny thing about conditions like these is that they seem to magnify any input error you make.



***John and Brian***

As the days past it became clear that we would very likely have to fly in rain. This indeed turned out to be the case as during our official practice it poured down in bucketfuls, a sign of things to come. As the comp

progressed we got some good and some wet weather. Only when there was very poor visibility did they stop flying.

The comp. site was a full size (light) and glider site. We were flying off a grass strip. Our hotel was only 3 miles from the comp site and 6 from the practice site. We did most of our eating there. The head barman had travelled extensively in Ireland and made us feel very much at home. We were his 'special friends'.



***Team Ireland and Friends***

As for the comp It went very well. We placed 12<sup>th</sup> team wise and Angus got in to the semi finals. All in all it was the best Irish result in International F3A.

***Brian Carolan***

TM

## **MACI AFFILIATION RENEWALS**

Just a quick reminder to club officials and members that MACI affiliations must be renewed before March 31.

All forms are available on [www.maci.ie/forms/](http://www.maci.ie/forms/)

Renewal is easy. Just be sure to pay your club subscriptions immediately to give the club time to affiliate you to MACI before March 31.

If you are an associate members directly affiliated, you will receive a renewal form by email (or by post if you have not provided an email address).

Club officers will receive simple to complete pre-filled renewal forms by email in early February and need only to return them with fees. Please do so before St Patrick's day to ensure your club members receive their cards in time.

Remember subscriptions have been reduced by €10 and now are:

Senior	€60
Junior/family	€15
Spouse/partner	€25

For members resident outside of Ireland who have insurance cover through their own national association the non-insured fees are:

Senior	€20
Junior	€ 8

Members who have a large model (over 7 kgs) need to register these, and forms will be emailed, (or posted), to members who have a large model registered in 2010/11.

## **SAVE THE PLANET - FLIGHT LINES BY E-MAIL**

Flight Lines has been on the website for over 2 years, (at [www.maci.ie/flight-lines/](http://www.maci.ie/flight-lines/)), and MACI is now going down the environmental awareness route and giving members the option to get an email telling them when Flight Lines is on the website so that it can be downloaded. This will save paper, envelopes, printing and money. If you want to opt for this method of receiving Flight Lines, and you have not already done so, send an email with your registration, (IRL), number in the subject line to [membership@maci.ie](mailto:membership@maci.ie)



*Club membership restricted to first 90 applicants*

## ***Annual General Meeting***

*Venue : West County Hotel  
Chapelizod*

**Wednesday 9<sup>th</sup>.March 2011  
At 8.00pm sharp.**

We ask all our members to attend, as this is your opportunity to determine how your club is run. Please bring sufficient funds to cover your 2011 M.A.C.I. Membership and Club subscriptions.

*There will be light refreshments courtesy of the club on the night.*

**Chairman,** Kevin Manning, **Secretary,** Pat. Green, **Treasurer,** Brian Kelly.



# FOCUS ON WORKSHOPS

## WARBIRDS OVER BALLYBRITTAS

Nestled in the verdant hills of Ballybrittas, County Laois, lies the home of long time scale pilot, the urbane and wise Mr Fergus O'Reilly who has many a trick when it comes to flying in recreational and competition class.



*Close up of Fokker D.xii with SPE, 43cc.*

Visitors to Fergus, and all of whom are made welcome with a cup of tea, will be brought to an outside shed, where a cavernous workshop shaped around a stone structure is the sanctuary for model aircraft, from a WOT 4 to a large scale Fokker xxi in striking war bird colours. The surrounding walls are covered in scale plans for present and future projects, and noteworthy is a Douglas C-47, which Fergus has started along with a Top Flite Mustang.

Fergus has a well kept workshop, with power and hand tools, spray gun facilities, wood cutting bench, calibrated instruments and different glue types for wood and composite materials. The top score given by Fergus for his boundless work on scale aircraft is his reliable dremel drill, imported several years ago from the USA, but which required a reduction transformer for lower input voltage.

No problem, Fergus had one tucked away in his miscellaneous accessory storage bay and which did the trick. The accompanying photographs show the broad range of tools, instruments and materials kept by Fergus, and also the aircraft stored for this coming season.



*Fokker Eindecker with scale cowl.*

In addition to the aircraft already mentioned, you will observe a Harmon Rocket in white with red trim and a Fokker Eindecker in blue. If the truth be known, Fergus is something of a Fokker aficionado, and his interest in the WW1 Eindecker is attributable in part to the synchronised machine gun which enabled fire through the propeller without damage or the need for metal bullet deflectors; designed by Anthony Fokker.



*Awesome Harmon Rocket polished for flight.*

This technology was adopted by the German Imperial Air Force from the Dutch Fokker. This in turn brought the pilots of allied pusher type aircraft to the then grim realisation that they were at best fokker fodder. Fergus intends to continue his Fokker scourge over the Clondouglas bog.



*Bench with dremel drill and other tools.*

Of interest, the last single-engined fighter to carry the name Fokker was the Fokker D. xxi pictured here with Fergus. This aircraft was used by three air arms, the Netherlands, Denmark and Finland, and the Finnish examples inflicted heavy casualties on Soviet forces for much of WW2. The Fergus Fokker D.xxi is in Dutch colours, and you

can expect to see it in the air very soon. Power is a hefty brand new petrol SPE with a cubic capacity of 43.

My sincere thanks to Fergus, his hospitality for letting me as your scale secretary have a good look at his first class workshop to bring you this report, and which it is hoped will inspire you like Fergus to finish those models and have them in the coming spring air very soon.



*Selection of engines, scale manuals and assorted paints.*

Happy New year and happy flights for 2011.

***Paul Fetherstonhaugh***

# Triple Crown 3/4th July 2010

It was Ireland's turn again this year. The members of the IMAAA choose the Model County Flying Club, the club and MACI permitting. The club felt honoured when asked and MACI sanctioned the event.

Some people started arriving at midday Thurs, with just about everybody being there for a full day's practice on Friday. We all got together on Fri, night for a social evening and catch up with old friends.

At the briefing on Sat, morn it was agreed to do as much flying as possible on Sat, as the forecast for Sun was not great. In the end we got 3 rounds in on Sat, and the last round in on Sun, afternoon.

The club set the scene for this international comp, by having the runways comp, ready, a marquee and gazebos set up for hospitality all set off by strings of bunting in the national flags of the countries involved. To this end there was food and refreshments available all day both days. The food included homemade buns, a salad bar, the usual from the BBQ ; burgers/kebabs/chicken pieces/lamb cutlets, baked potatoes and to finish Wexford strawberries and cream.

At the end of play on Sat, it was clear to all that the round on Sun. would decide the result. We set a late start time for Sun, due to the forecast, which meant we could accept an invitation to the local hunt BBQ on the Sat, night.

What a night we had. Great food, good bear, music with dancing and bull riding. On Sun, the last round was flown with Scotland just winning out and Ireland a very close second. England were 3rd and the International team 4th.

*Brian Carolan*

## Results;

RANKING	PILOT	ROUND 1		ROUND 2		ROUND 3		ROUND 4	
		TOTAL NORMALISED	RAW SCORE	NORMALISED	RAW SCORE	NORMALISED	RAW SCORE	NORMALISED	RAW SCORE
1	Angus Balfour	3000.00	474.00	1000.00	469.50	1000.00	470.50	1000.00	452.50
2	Shane Robinson	2891.64	456.00	962.03	451.50	961.66	451.50	959.62	438.00
3	Steve Burgess	2886.79	442.50	933.54	460.00	979.77	433.00	920.30	440.50
4	John Martin	2882.14	453.00	955.70	463.50	987.22	441.50	938.36	425.00
5	Matt Hoyland	2847.52	442.50	933.54	447.00	952.08	439.50	934.11	435.00
6	Niall O'Sullivan	2836.54	446.00	940.93	431.50	919.06	450.50	957.49	424.50
7	Richard Christopher	2777.90	441.00	930.38	442.00	943.56	421.50	895.86	409.00
8	Malcolm Balfour	2738.90	440.50	929.32	424.50	904.15	426.00	905.42	402.50
9	Ray Keane	2728.68	417.50	880.80	434.50	925.45	434.00	922.42	393.00
10	Brian Carolan	2634.06	413.50	872.36	412.80	878.59	415.80	883.10	0.00
11	Paul Houllihan	2528.16	389.50	821.73	411.50	876.46	390.50	829.97	0.00
12	P Scoles	2473.59	404.00	852.32	397.00	845.58	357.50	759.83	351.00
13	Malcolm Harris	2325.25	370.50	781.65	368.50	784.88	357.00	758.77	0.00
14	Steve Currie	2174.97	329.00	694.09	353.50	752.93	342.50	727.95	0.00
15	K Moss	2080.12	327.00	716.97	322.80	686.90	321.00	682.25	250.00
16	A Hoyland	1932.23	339.50	716.24	292.50	623.00	276.25	592.99	0.00





# Leinster Model Flying Club



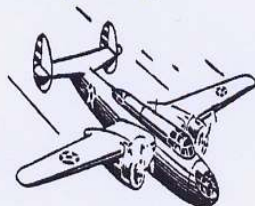
## *Promoting Safe Flying*

### *Flying Model Aircraft in The Phoenix Park*

**The future success of Model Aircraft flying in the Phoenix Park lies with every model flyer that uses this excellent facility;**

**You have to *FLY SAFELY* and are *SEEN* to fly safely.**

**Just remember  
Who's responsible?  
For Safety.**



**You are!**

**It is an offence to permit an aircraft to endanger any person or property. That applies not just to full size aircraft, but also to Model Aircraft some of which are regarded as being 'small Aircraft.**

**The bigger the model, the greater  
Your responsibility.**

*Promoting Safe Flying  
Leinster Model Flying Club*



## Rules and guidelines for members and visitors

### & Codes of Safe Practice

*The Leinster Club* for the guidance of its members and M.A.C.I. visitors to our *Flying Site* in the *Phoenix Park* have drawn up these rules and guidelines

If you are a newcomer to the hobby and not as yet a member of any club, you will appreciate that the rules have been formulated with a view to the promotion of *Safety*. In addition you must remember the following basic rules:

There is a designated *Flying site* in the *Phoenix Park*, which is approved by M.A.C.I. {Model Aeronautics Council of Ireland} Do not fly your model from any other location in the *Phoenix Park*. Do not switch on your radio transmitter under any circumstances whatsoever anywhere in the *Phoenix Park* until you have checked with other flyers at the designated flying site and that your particular frequency is clear, and is not in use. {Particularly appropriate to those on 35MHz} You must never switch on your Radio Transmitter in the Car Park

### Codes of Safe Practice

- {1} Members must have current M.A.C.I. insurance.  
Model Aircraft can only use/fly on 35MHz and 2.4GHz
- {2} Your *EI* or *IRL-Number* must be displayed inside or outside your model in order to validate your insurance, a height of at least 15mm. this is a M.A.C.I. Rule
- {3} Keep your Club ID. / MACI. ID with you at all times. {i.e. in your flight box}  
You will be asked from time to time to produce your ID by the *Park Wardens*
- {4} You must have a frequency pennant on your 35MHz transmitter when flying.
- {5} The maximum number of planes allowed in the air at any one time is 5
- {6} Do not take off from beside the pits area. Carry your model on to the take off point, which should be at least 10yds. away.
- {7} Helicopter flyers should avoid prolonged hovering in the take off / landing area.
- {8} Before landing check that the patch is clear and shout **LANDING** to warn other flyers. Aircraft on landing approach have priority over all others
- {9} In an emergency the model is the lowest priority.
- {10} The cardinal rule is-Ditch the model if necessary, to avoid people.
- {11} Do not fly;

Over the	Pits.
Over any	Spectators or other flyers.
Over or near	St. Mary's Hospital.
Over the	Trees.
Over the	U.S.A. Embassy Residence.

### Please note:

Whenever you fly in the *Phoenix Park*, it is your responsibility and yours alone to fly in a safe manner at all times. The presence or absence of a Pegboard, Barrier, or Safety Officers is immaterial. It is also vitally important to remember that our sport is a minority sporting activity and is vulnerable to negative aspects of public opinion, it is important that we are all conscious of this fact. We ask all our members and visitors from other clubs to be courteous to members of the general public, and all other users of the *Phoenix Park*. Good Public Relations is very important to us all in order that we can continue to fly at our site.

By observing the above guidelines we will all continue to benefit from trouble free flying.

*Promoting Safe Flying. Leinster Model Flying Club.*

# Leinster Champs 2010

The morning dawned bright and breezy. The scene was set for a great comp, which also doubled as the first part of the F3A team trial.



*Competitors South Leinster*

Just about everybody who is currently competing in F3A was there. There was a good entry for Masters as well, which is great to see.

The Model County Flying Club put in a great effort, at short notice, to get the site comp,

ready. Their hospitality was also great with tea and buns from first thing each morning to the aroma of the BBQ from 11.00am each day. The usual Sat, night get together was enjoyed by all.



*Paddy Gavin*

The comp, proceeded in a very efficient manner with both pilots and judges being ready at a moments notice. In Tier 1 Angus proved too strong for the rest followed by John in a close fought battle with Shane in 3rd.



*Relaxing at 2010 Leinsters*

In Tier 2 Gordon was the man to beat while Les and Noel fought it out for 2nd and 3rd.



*Winners, Leinster Champs*

In Masters James Murphy continues to show signs of great things to come. Paddy in the meantime was beating off relative newcomer Dominic.

In the end this was a very enjoyable, all be it a bit serious for some, comp.

Until next year.

## South Leinster Champ's 2010

Djà vu ! Same field, same people. Well a few less this time, a sign of the times perhaps.

This comp, was more or less a re run of the Leinster Champs.

**Brian Carolan**  
CD





## Remembering the Birth of Aerobatics World Championships for Radio Controlled Engine Powered Models

50 years ago, on the weekend of 23<sup>rd</sup> and 24<sup>th</sup> July 1960, the very first FAI World Championships for radio controlled aerobatics models were held on the airfield in Dübendorf, Switzerland. They were organised by the Aero Club of Switzerland and spectators were fascinated by the 20 competitors from eight countries competing in sometimes stormy conditions.



**Ed Kazmirski, the first RC  
Aerobatics World  
Champion**

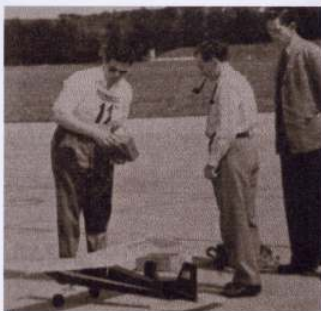
←  
**Rebuilt "Orion" the model  
aircraft of the first World  
Champion was an exemplary  
aerobatic model airplane for  
years**

## Only Models Built by the Competitor

The rules explicitly required the aeroplane to have been built by the pilot. The engine and the RC system were exempt from this requirement. The main construction materials used were balsa and plywood as well as silk, paper and stiffening varnish. The average flying weight is said to have been between 2 and 3.5 kg. The models were smaller and much lighter than those of today and all three types were represented: low-wing and high-wing planes and even biplanes. The latter was the much admired De Bolt Biplane, owned by Eliasson from Sweden, that unfortunately did not make it off the ground.

There was a remarkably broad range of engine cylinder sizes – from 2.47 ccm (MVVS) to 9.7 ccm (Ruppert).

**Ruppert engine used by most  
of European competitors**



**The British Team with F. A. Van den Bergh, Christen Olson and Stewart Uwins was first World Champion in radio controlled aerobatics. Photo shows Stewart Uwins (with transmitter), Georg Honnest-Redlich and Team Manager Ed Johnson**

## Storm Winds and Numerous Crashes

On Saturday, a stormy and unsteady westerly wind was blowing over the former home airport of Swissair in Dübendorf. It is unclear whether these difficult conditions were responsible for the crash of German Hans Gast's model. De Bolt, USA and Corghi, Italy had the same bad luck. Their beautiful models shattered on a grassy field. Both blamed faults in the RC connection. Apparently, after each crash, spectators immediately crowded around the debris and a swarm of journalists wanted to have a close-up look at the scene of the accident. De Bolt was relaxed about it all – he had a spare model with him – and let the boys take parts of his crashed aircraft home as souvenirs.



**Unlucky Hans Gast, GER crashed his "Smog Hog" into the runway**

**Swiss Competitor Fredy Bickels original aerobatic model airplane of 1960 World Championships**



**Rebuilt "Caravelle" of Gustav Saemann, GER 2<sup>nd</sup> place**

## Very Different RC Control Systems

Unlike RC Aerobatics World Championships today, the RC systems used varied significantly. Five competitors are said to have built their own control systems – this should include those by Stegmaier and Nievergeld which used vacuum to move the control surfaces. The highly sophisticated Stegmaier control system received much recognition at various European competitions and the Orbit RC system was at a very professional level. The servos didn't look much different from today's larger types.

**Swedish competitor Eliasson was not very successful with his De Bolt "BiPe"**



**Since 1960 the Trophy of the Belgian King is the RC-Aerobatic World Championships Trophy showed with the current World Champion Christoph Paysan Le Roux, FRA.**

## Significant Public Interest

These first RC Aerobatics World Championships were apparently perfectly organised. Arnold Degen of the Swiss Aero Club as competition leader and site speaker Hans Waeffler, with his technically sound commentary, was able to fill the audience – up to 8,000 spectators are said to have turned up – with enthusiasm. Chief press officer Werner Koelliker managed to mobilise various major daily newspapers, which led to a mainly positive media response. But even then, the question of safety was an issue. One large Zürich daily paper wrote: "However, the serious question remains, whether radio controlled model flying in its present development phase is sufficiently safe to justify the involvement of a large audience".

Photos: American Modeler 1961, H. Mettler, Ch. Tanner  
Text: Based on an interview with Werner Koelliker



## DIVERT TO M.M.F.C.

Divert to Mullingar Model Flying Club (MMFC). All aero-modellers can now enjoy the marvel of flying at the latest new model flying club to be created just outside Mullingar, Co. Westmeath.



*Some of the members of the Mullingar Model Flying Club*

Founded in July 2010 by a few 'mighty men of Mullingar'. The first to see this vision was myself, Martin Mangan. About three years ago, as I was on my way home from a hard days work, I saw a couple of guys flying models in a field. I noticed they were doing this several evenings and weekends. This one evening, I took the bull by the horns, crossed the gate and

proceeded to walk towards these two so-called 'model men'. After they turned  
finals and greased  
the two models onto  
the runway, I then  
asked them how I  
go about getting set  
up. They told me of  
a model shop and  
now neighbouring  
club in Longford.  
So with thanks to  
David Fernaux and  
his father Cliff  
(R.I.P), I got my  
first trainer and  
learned how to fly.



*My Sbach after its first landing.*

As all went so well in learning to fly, natural progression would be to step up to a low wing tame aerobatic kit, but this was not to be, as I got over-enthusiastic and bought an ASM model, 4-engined Hercules!!! Not willing to fly it for the first time myself, I got the help from the two guys I saw flying originally, to put it up. That was a day to remember as up she did go with cheers from a few VIP's that were there on the day. We all shot to fame then for a while as I put this marvellous day on You-Tube (Hercules R/C Mullingar).

In 2009, myself and James Lennon from the Longford Model Club travelled to Silverstone, England to the World Aerobatic Championships (W.A.C) with well-known Irish aerobatic pilot, Eddie Goggins, to support David Bruton who was representing Ireland. It was here I stumbled across a plane that really caught my



### *Off to Pull a Few G's!!*

eye, called a Sabach 342. I got chatting to the pilot and with a bit of gentle persuasion I found myself at 2500 feet pulling  $6\frac{1}{2}$  - 7 G's. (No words can describe this feeling!) Shortly afterwards, while browsing the net, I discovered a company in China called Pilot R/C who make the Sabach 342 – I just had to have it! I purchased a 107 inch 100cc kit, which had its maiden voyage in Athlone Model Flying Club over the Christmas period. I was as nervous as a crocodile in a handbag factory!! Thankfully it flew like a dream.

Our new club, just outside Mullingar town, is starting to take shape now as a result of the work put in throughout the summer. The word is out now and our club is starting to grow member-wise, with a big thanks to some of our present members, Stephen Maher, Mark Mulligan, Sean Corrigan and Justin Egan for helping with the site-works and set-up of the club in line with M.A.C.I. rules and regulations, not forgetting our two neighbouring clubs, Longford and Athlone, who helped get us off the ground as such!

So smoke on ye chaps and here's to Mullingar Model Flying Club!

***Martin Mangan***

# Aerobatics Performed by Early 20th Century Aircraft

Over the years there have been moves to realise Scale competitions which reward competitors who fly their models as near to the full size prototype as possible. With this in mind, and to garner maximum points, the competitor must be familiar with the prototypes aerobatic capabilities.

A clear distinction must be drawn between what a model of the prototype is capable of and what the full size was capable of. Emulating the scale cruising speed of a full size aircraft, for example, can be difficult, particularly for small models. Placement of the model for the judges, so that the scale speed, (or a good approximation of it), is evident, requires a keen appreciation of how high, or near, a model should be flown. An indifferently silenced engine can create an impression that the model is 'faster' than it actually is, and also collects penalty points for not sounding like its full-size counterpart.

Being conversant with the aerobatic capabilities of ones prototype should be at the forefront of a competitors mind. Judges are most receptive to competitors who provide evidence of the size, shape and speed of any manoeuvre which he wishes to display to them. There are manoeuvres on the schedule which are clearly defined and not negotiable, but there are opportunities to include manoeuvres which are characteristic of the full-size aircraft.



*Sopwith Camel as discussed in the article.*

Finding out what aerobatics early 20th Century aircraft could do is important if this is the type of aircraft the competitor has modelled. This of course holds true for any aircraft of any era. What exactly a particular aerobatic manoeuvre 'looked like' when dealing with early aircraft can be problematical, but there are publications out there which can be helpful. Low powered, and certain types of engine, high drag biplanes, lack of fuel injection often determined the shape, size and speed of any given manoeuvre of these aircraft.

Most modellers will be conversant with the 'roll' and will have knowledge of the 'axial' and 'barrel' roll. However there are, as we know, others, like the 'slow', the 'hesitation' the 'flick' and the 'aileron' rolls. Determining what sort of roll an early biplane was capable of, can unearth conflicting views and descriptions.

In an article published many years ago in RCM&E, the type of roll a Sopwith Camel would have performed was discussed, and a well known modeller who flies a model of the Camel maintained that, "because of the fuel induction used with the rotary engine it would be possible to maintain full power through a genuine slow roll. Having talked to a number of full- size aircraft engineers and pilots familiar with this era of aeroplanes, I still had serious doubts that this was the case and can find no authenticated reports of Camels, Pups or their likes, carrying out inverted flight or axial slow rolls.

The author goes on to tell us that further research from his copy of "Flight Fantastic" that there is comment on the roll as performed by the Camel - and SE5a. Words from Capt W E Johns and Oliver Stewart are good enough for me - not to mention Elliott White Springs.

In the 'Biggles' stories of Capt W E Johns, (who had himself flown Camels as an instructor), are to be found some particularly authentic descriptions of World War 1 dogfights with the Camel. In Biggles of the Camel Squadron we have a classic demonstration of the World War 1 roll as the pilot pulls the control stick back into his right side, kicking out his right foot at the same time. "The Camel swung up In a swift barrel-roll", the narration continues – which was the name given to the manoeuvre at that time. In Bring Down Your Hun!, the advice for execution of a roll is: "With the engine on, pull back the control, and pull it to one side as far as it will go. At the same time put on full rudder on the same side."

Oliver Stewart, whose Intimate knowledge of aerobatics spanned 50 years, wrote in 1967 that the normal World War 1 roll and half-roll was what we nowadays call a flick roll (snap roll in the USA). At that period it was also variously known as a barrel roll, quick roll, whip roll or horizontal spin. Like the spin it is an auto-rotative manoeuvre, but unlike the spin it is performed at speed, with an abrupt change to the stalling angle of attack combined with simultaneous application of ailerons and rudder to initiate the roll.

Curiously enough, despite Stewart's first-hand knowledge of the Camel it is over this particular aircraft that opinions among present-day pilots tend to disagree when it comes to the question of flick rolls. Although I have yet to meet a pilot who has rolled a rotary Camel, there are those who contend that its design envelope would never tolerate a properly stalled flick entry, and that the Camels quick rolls were gyroscopically induced. Perhaps it was an exception in this particular detail, but nevertheless in fighters of this period, such as the SE5a, the standard rolling manoeuvre was a flick roll, (quite logically, when you think about it!). Bear this in mind when reading the following extract, taken from the 3 May entry in Grider's diary which was later published under the title War Birds - Diary of an Unknown Aviator by Elliott White Springs.

The idea was that each man should do the stunt of the preceding man and then set another one for the next man. Cal did Mac's, (loop), and then half rolled at the top of the loop. Springs was next and his stunt as a full roll at the top of the loop. Of course he was up above a thousand feet.

I was next and I put my nose down to about two hundred after I did my full roll, and as soon as I started up for my zoom I kicked on full right rudder and



*The often modelled SE5a*

pulled the stick back into the right-hand corner. I don't know what I was doing but I sure did it. I whirled around a couple of times with my nose up and then I whirled around with my nose down and ended up stalled upside down. The motor stopped and I just did get in the field with a dead prop.

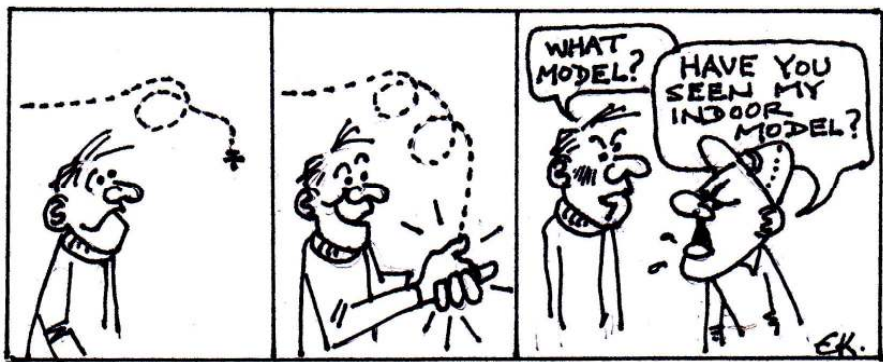


So that's an end of it? Not quite. There are reports of the American Lincoln Beachey, in his famous 'Little looper' biplane performing aileron rolls - part rolls. In April 1914 Lincoln travelled to France, purchased two Gnome 80hp engines and fitted one to his 25ft wing span, (weighing only 775lbs with Beachey on board). With this power to weight ratio there is no doubt that the aeroplane would have a good aerobatic potential and the rotaries had been purchased because they "did not suffer the problems of fuel starvation experienced with the Curtis 8 cylinder when inverted". Reports have it that Beachey would half roll at 500ft, for an inverted pass along the front of the grandstand and regaining normal flight afterwards by means of another half roll. As he was also described as performing downward outside loops, Lincoln Beachey must have been some aviation showman.

In subsequent editions of FlightLines I will elaborate further on the aerobatic capabilities, (or lack of), of early aircraft by reference to authoritative commentators and books.

To whet your appetite - the speed loop, the climbing loop, the rocket loop, falling leaf, the spectacles, the cartwheel i.e. the true Immelman turn, and the vrille, (the what?), among others will be examined.

***Eamonn Keenan***



# Thinking of Hosting a Scale Competition?

At a recent meeting of the MACI Scale technical committee it was felt that a club contemplating holding a competition for the first time could benefit greatly with careful preparation and forward planning

It would be helpful at this stage to outline briefly what requirements are necessary following the announcement that your club will host a scale competition. Each club who do so, must as a minimum have 2 qualified judges who are part of the panel who will judge the various classes on the day. Currently 3 classes are offered, F4c, Clubman and Novice. The F4c competitors have their models statically judged i.e. they present photographs, 3 views, etc. of their prototype for the judges deliberation. Judges will have attended a judging course where the flying and static elements are presented in compliance with the FAI code of practice. Courses are held when a demand for them is identified. The last course was in 2010.

With this requirement fulfilled a MACI qualified CD will be selected hopefully from within the club to organise and run the event. Priority must be given to the preparation of your flying site. In the unlikely event it resembles a ploughed field, closely ringed with high tension wires, 60 ft trees and assorted obstructions just waiting to grab a scale model, well think again. In other words organizers must do their best to present the best they can, whether its the requirement for judges, personnel on the day to set out the site and the seating for judges, runners for the score sheets, a score keeper, a registration official, catering, and now that we are in the 21 century - a Portaloo.

The prize giving should demonstrate to all that what is presented to competitors to reward their endeavours, their travelling and their entry fee is worthy of their efforts.

To gain an insight into all the above, what better way than to send a delegation from your club to the calendered competitions to observe and to ask questions. The Scale secretary Paul Fetherstonhaugh (phone and email inside cover) will be only to willing to arrange for you to speak to seasoned judges and officials at any competitions. So to at the Scale Fly ins, slots can be arranged where competition flyers can demonstrate scale manoeuvres. Copies of the judges guide and competition handbooks will be available at the different events during the year.

So if your club is interested, make it known to the scale secretary, follow the advice above and a new scale competition can be yours!

***Eamonn Keenan*** (for the technical scale sub committee)

# **The Scale Association AGM**

This will be held in Weston Aerodrome on Saturday the  
9th April at 11:00am.

At its conclusion a tour of the hangers will be facilitated.

Persons wishing to join and lapsed members will be most  
welcome.

***Eamonn Keenan***



## 2011 MACI Competition Dates

For the most up-to-date information visit -----[www.maci.ie](http://www.maci.ie)

### Helicopter

April 16	Heli Challenge	Midland MFC	Noel Campion	087 9670668
May 15	Heli Challenge	Caron	Noel Campion	087 9670668
June 11	Heli Challenge	Cork	Noel Campion	087 9670668
August 6 & 7	Heli Nationals	Carron	Noel Campion	087 9670668

### Gliding

March 12-13	PSS Fun Fly	Mt Leinster, Wexford	Fred@gliderireland.net
April 16-17	NIMSA Slope Fly-In	Slieve Gallion NI	Fred@gliderireland.net
May 14-15	ISR Slope Fly-In	Mt. Leinster	Open to all Gliders Fred@gliderireland.net
July 8-11	Retroplane	Pierre Pouquelees, Normandie, France	Fred@gliderireland.net
	*Registration Closed*		
September 17-18	ISR Slope Fly-In	Open to all Gliders	Mt. Leinster, Wexford Fred@gliderireland.net

*For more information visit [www.gliderireland.net](http://www.gliderireland.net)*

## **Scale**

### **Please Note**

*All Scale Championships, except the Scale Nationals, will be held on a Saturday. In the event of a large number of competitors or bad weather on the Saturday, then the Sunday will be utilised. Please check with the contact below, or the MACI web-site on the Friday that the competition is going ahead.*

April 17	Laois Scale Fly In	Portlaoise	Paul Fetherstonhaugh 087 1331736
May 15	Scale Fly In	Curragh	Melvin Inwood 045 433050
May 28	Scale Champs	Midland MF	Declan Henegan 087 2625868
June 25	Leinster Scale Champs	Portlaoise	Paul Fetherstonhaugh 087 1331736
July 10	Laois Scale Fly-In	Portlaoise	Paul Fetherstonhaugh 087 1331736
July 24	Scale Fly-In	Midland MFC	Declan Henegan 087 2625868
July 17	General Fly-In (All Types)	Curragh	Melvin Inwood 045 433050
September 4	Scale Fly-In	Curragh	Melvin Inwood 045 433050
September 10/11	Scale Nationals + Control-Line		Paul Fetherstonhaugh 087 1331736
October 9	Scale Fly In	Littleton	Michael McEvoy 087 2435209



## **F3A Aerobatic**

May 7/8 Munster Champs Cork MFC N Barrett 021 2475971

May 21/22 Tipperary Champs Carron MFC Gordon James 086 8269840

June 18/19 South Leinster Champs Model County FC  
Brian Carolan 087 6509848

August 13/14 National Aerobatics Champs (Team Trial) G James 086 8269840

August 20/21 Nats/Other standby date

September 3/4 AAA (Team Trial) Cork MFC N Barrett 021 2475971

September 24/25 Leinster Champs Model County FC  
Brian Carolan 087 6509848

## **Other**

June 25/26	All Models	SMFC Fly In All welcome	<b>Clashafree, Bandon, Co Cork</b> Flying Site Coordinates 51° 44' 23.40" N 8° 41' 40.15" W Contact Jackie Kelleher 021 4506757
August 27/28	All Models	SMFC Fly In All welcome	<b>Clashafree, Bandon, Co Cork</b> Flying Site Coordinates 51° 44' 23.40" N 8° 41' 40.15" W Contact Jackie Kelleher 021 4506757



*James Murphy's Plane at the Leinster Champs.*



*Not everyone stops flying when it snows - Go Roundwood!*



*Gordon McCrea from N. Ireland with his JetLegend Hawk - JetCat P70 - 17lbs Thrust*