

**CHRISTCHURCH MODEL AERO CLUB EXECUTIVE 2015 / 16**



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**CHRISTCHURCH MODEL AERO CLUB (INC)**

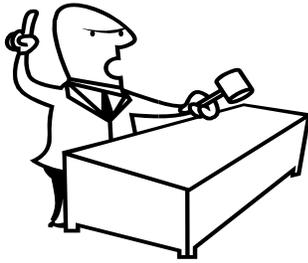
July 2015

**Torque**



If undelivered please return to P.O. Box 14115 Christchurch Airport





## THE PREZ SEZ



**Junior / Junior = under 18**  
**Junior = 18 to 60**  
**Senior = 60 to 80**  
**Senior / Senior = 80+**  
**Club perceived age / knowledge**

Currently I am writing the “Prez Sez” from Melbourne, where I am having a bit of a break.

It is nice to be in a vibrant CBD once again and it reminds you of what we are missing in Christchurch as our CBD is being rebuilt

There is a model shop in the CBD called Metro Models which is in Swanston St, I have had a quick look but will have a better look later in the week, probably when my wife wants to have a look at the clothes shops, not fun for a mere male.

Back in Christchurch I managed to have some flights with my helicopter on Monday before leaving on Tuesday, my heli flying is slowly coming along and there is now some measure of control as I gain in confidence.

The morning was very cold as was the Sunday before and still the diehard flyers turned up - good to see.

I was pleased to see the report from the Cirrus cup and it looked like a great day was had by the competitors, well done to everyone.

Just another reminder if any of you wish to obtain your wings badge, please approach me, I don't bite and it has been said I am a bit of a pushover (although that is not proven)

Happy Flying Grahame Hart



**Just superb Roy**

A short write up of our latest English reader of Torque, note the photo of the background of the lovely English countryside and the very smooth runway (must have been summer!!)

Hi Mark,

Well, I have managed to dig out some old photos of my Super 60 taken in 2005 just before it's maiden flight at Pymore Farm near Bridport in Dorset here in the UK. This is a private farm strip used for micro lights and small private aircraft as well as aero modellers. The strip is well maintained and we get treated to some unusual visitors that 'drop in' from time to time. The most interesting visitor was a pristine, fully restored 1936 De Havilland Hornet Moth that dropped in unannounced one perfect Summer's afternoon. We have a rule on this site that we naturally land our models when a full size joins the circuit overhead which works perfectly plus we get a chance to see lots of different aircraft and chat with the pilots.

The model I have here is a plan built Super 60 that was originally kitted by Keil Kraft in about 1959. It is of all built up construction apart from my own modification of the addition of strip ailerons which make life a lot easier when dealing with cross wind landings which are quite common on this site due to the location of the strip. I think the latest plans on the Internet have ailerons as a choice nowadays but all I did was to reduce the plan dihedral by 50% to give some 'effectiveness' to the ailerons and apart from that it is all built exactly as per plan. The engine is an OS 40 Surpass four stroke that sounds wonderful pattering away overhead and the economy is good too as the throttle never exceeds about half for the duration of the flight so that I usually achieve about 15 minutes on a 4 ounce tank.



### **POOPY PUPPY POOPER SCOOPER REPORTS**

- Your editor, received from a very disappointed 1/2A FF'r a email explaining his poor performance at the Avon trophy (he thought that due to the low turnout he fancied his chances) to quote himself "PS yeah my 1/2A timer was working A OK it was just the old fool operating it. A bit like sending your RC model off and forgetting to turn on the Rx if you know what I mean!" sour grapes me thinks!!! After all, while the editor may have on ONE occasion have this happen he didn't repeat it several times so there!!! AND I should point out that the editor didn't make the same mistake on the day in question and so was the winner!!!

just got back from a pleasure trip. I took my mother-in-law to the airport.

## **Ever have a fuel problem that seems to defy logic?**

This snippet from UK modeller Brian may just save you from pulling your hair out one day.

*"In 1995, a late friend of mine, Paul Cox of Cheltenham here in the UK used to fly his venerable Junior 60 from the club field, this was built from the Flair kit and powered by an OS FS40 engine that was faultless in both operation and reliability. This model was finished in Green and Orange and with that colour combination it looked rather like a Carrot and as a consequence it was called always affectionately known as 'Jasper' after Jasper Carrot the comedian.*

*Paul was a very competent flyer and his control of that model was faultless, making it fly and land more or less exactly where he wanted to put it. One fine Summer's day I was flying with Paul when he called out 'Landing!' so we all watched the master at work as he performed yet another 'greaser' on the strip. However on this occasion fate intervened and just as 'Jasper' touched the grass one of the wheels collided with a substantial stone that was hiding in the grass, causing the model to stop a lot quicker than desired and less elegantly as the tail rose up and the prop dug into the soft turf.*

*This was annoying of course as well as embarrassing but it was a simple landing accident and apart from Paul's bruised ego, 'Jasper' looked pretty much OK. However, as it was the last flight of the day the model was de-rigged and placed into Paul's car. The following day or so I went to his house and saw that the engine was out of the model and on a test stand after Paul had noticed rather too much dirt etc. around the engine so he had elected to strip the vitals and clean the carb etc, just to be happy that all was ok. The engine was duly started and ran perfectly of course and after many minutes running time, Paul was happy to refit it into the model.*

*That weekend was the Easter Fly-in and it was rather too windy for most but Paul was up for it so 'Jasper' was fired up and duly lifted off into the wind. As he turned to make a downwind leg we heard the engine falter and cut...however the wind was very lively that day and Paul was unable to make it back to the field so landed 'out' some distance away out of view behind a hedge. Sadly 'Jasper' had flipped over on landing and sustained some damage to the wing which prevented any further flights.*

*A few days later Paul had stripped and cleaned out all the jets of his Faithful engine and bench tested it on the stand for two complete tankful's of fuel totaling about 30 minutes faultless running so then he made the repairs to 'Jasper' and all was fine. That afternoon we both went to the flying field and it was perfect weather, dry, sunny and just the hint of a breeze. Paul now confident of the engine, fueled up and 'Jasper' was once again in his element for a 15 minute flight.*

*After just three or four minutes the engine faltered and cut...this was uncanny as it was identical to the disaster on the previous flight. This time a dead stick landing was carried out safely and the model was checked over as much as we could do but everything was ok and there was three quarters of a tank of fuel still left so fuel was not the problem. Much head scratching ensued and Paul decided to call it a day as something must be very wrong here but what? It was very mysterious.*

*Paul went home and took the engine out yet again...a lot quicker I might add as he was getting very used to it by now and it was checked very carefully, mounted in the test stand and again ran faultlessly!!*

*Radio was double range checked as we had done on the field but was faultless, we were stumped. The engine seemed and was perfect...on the bench! Fuel was not suspect as it was the same fuel used throughout then we looked deeper as I remember hearing that a round fuel tank can sometimes rotate with vibration but Paul said impossible as he handed me the tank he had earlier removed from the model...it was a SLEC square 4oz tank so that theory was out the window. As I put it back on the bench I started to smile and told Paul I have found the problem. He looked at me incredulously but when I showed him what I had seen he was very happy indeed. If you remember I told you that 'Jasper' had hit a stone on landing some days earlier, well, what had happened was that the clunk tube in the tank had shot forward with the weight of the clunk on impact and had doubled itself up leaving the clunk more towards the top of the tank. Invisible to see while it was in the airframe but something I saw by chance when the tank was in my hands. Therefore that explained why the engine would run perfectly outside the model using another tank but would effectively 'run out' of fuel in the air after just a few short minutes with the tank that was fitted in the model. A new tube was fitted to the tank and from then on...perfect!*

*So we both learned about model flying from that!"*

Thanks Brian, good advice for our Sunday Sport flyers to take note of.  
Mark

## **CMAC Club Nights**

### ***July meeting***

Our July Club night meeting had a good turnout, 13 members despite the cold weather. Sadly though our members are an apathetic lot (Winter weather blues?) as the theme was to bring along your favorite model to show off. Besides myself, no one else bothered to bring any models other than JE who brought along two for disposal. Does that mean that no one else has any favorites or that they just cannot be bothered? C'mon chaps, if I can put some effort into organizing the club nights each month at least you guys can make an effort as well to play the game regarding our club night themes etc.

OK, enough sledging before I get accused of being grumpy. At least he helli practice session seemed to go down well and maybe we have even garnered a few converts. Remember, these little marvels can be gotten for around \$20 so keep your eyes open for those sales (K-Mart being a good one) and you cannot get better fun for less than that. One of the two that I brought along is at least around 4 years old now, gets plenty of use & abuse and it just keeps going.

So, get yours now and get in some (i.e. lots of) practice. But do keep out of drafts and away from fans etc as they are very easily upset by air currents and can be difficult to fly accurately in the learning stages.

We will have our competition night later on this year and this time there will be a cross bar between the two pylons and you will need to fly figure eights around the pylons as well as loops over the cross bar, so make sure you get lots of practice!

### ***August meeting***

The August meeting theme is "Show & Tell". However this will only work if you actually bring a model or two along to show so please participate and do your bit.

**Mark**



John Beresford's R/C Indoor model seen at club night powered by a 75ma lipo, amazing how much miniaturization, just look at the RX plus 2 servo brick attached to the fus shaft. Flew great but the hall is too small to show of its potential.



John Ensoll's Sal Taibi Pacer now owned by Stu Grant



## **TOP DEAD CENTRE- more commonly know as TDC, and how is it measured? thru the eyes of Big T.**

It's interesting the feedback and queries that I get from my articles in each months TORQUE- with a few wanting me to elaborate on what I had previously written.

Let's first define Top Dead Centre...it is the top of the stroke, which is determined by the position of the crankpin in relationship to the crankshaft; and in conjunction with the bore size determines the engine volume. Or simply put if you measured the crankpin offset from the crankshaft centreline then that is half the stroke, or even easier is to measure TDC and Bottom Dead Centre and subtract one from the other and there is your stroke.

The conrod length will not affect the stroke- that has been determined by the manufacturer and affects the timing of the engine relative to the ports in the cylinder. That could be another article for a later time!

### Why measure TDC?

If you want to start playing with compression adjustments then you need to know default measurements and they are best measured by a vernier calliper or micrometer, then recorded in a diary for safe keeping....yes, if you don't record the dimensions then the whole exercise is meaningless.

### How to measure TDC?

Engines are generally very tight at TDC, so the trick is to remove the Glo Plug, then turn the engine over the full stroke and you will feel when the engine becomes tight that you will be at TDC. Rock the engine to ensure that you are exactly at that point. Then remove the cylinder head with care and put aside....don't misplace any head shims that may either appear sitting on top of the engine sleeve, or on the cylinder head.

With the vernier callipers you can now measure the distance down from the top of the sleeve to the piston top- take a note of that dimension.

What I do next is to measure the shims( generally individually) and then measure the spigot depth ( the piece of the head that sits inside the sleeve) of the cylinder head. If you have no shims then the maths is very easy- you simply subtract one figure from the other and then that will give you the head clearance. Always remember that the resultant figure will ALWAYS be positive. If you get a negative figure then you have done something wrong, as that would mean the piston would be hitting the cylinder head.

Many years ago one of the CMAC younger members had been playing with compressions and ended up with a negative figure and wondered why the bigend of the conrod failed- yes a true story and the member tried to claim on the warranty. He no longer is in the club and should have known better because he purported to be an engineer.

If you have shims then you need to add the combined shim thickness and subtract that from the spigot depth, That then gives you the true position of the underside of the spigot in terms of the piston top.

Then

Put the cylinder head back in place and carefully tighten the cylinder head screws.



HELP WANTED

Any silencer to fit my Irvine .40, if you have any 'possibles' let me know and we can see if they will fit.  
Mark



**Indoor Report for the 12<sup>th</sup> July. BY THE OVER WORKED GAZZA STRIP BRICK LAYER BILL LONG (his excuse for late report!!! Must be retired)**

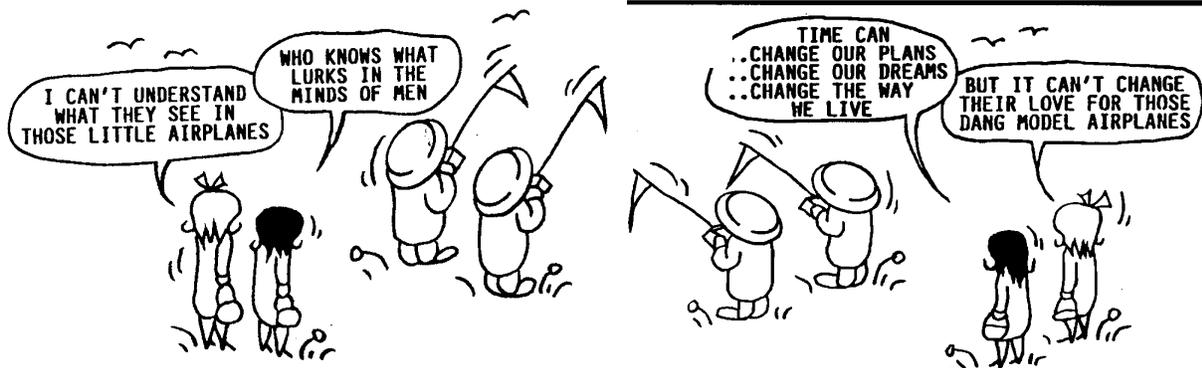
Event we flew was F.1.L. Dave was again flying his new model which is proving to be a good performer with consistent times. Nev,s model also is getting better with trimming giving him his best ever time.

Kay left her flying to the last minute so had to live with times just behind Dave.

I took advantage of getting a number of flights which gave me one reasonable time to take the lead.

Overall the times are not too good for F.1.L. but with winter the air is far from perfect making flights at times difficult. With Fourteen official times taken the hall space was busy and Dave and I had a collision breaking my model which was justice as it was my fault. Overall it was a good day for all and we are looking forward to next month.

**THE NEXT MEETING WILL BE OPEN TISSUE TO BE HELD ON THE 9<sup>TH</sup> OF AUGUST**  
**Results. Bill. 8 min 31 sec. & 9 min 5 sec. Dave. 8 min 15 sec. & 8 min 28 sec.**  
**Kay. 8 min 4 sec. & 8 min 10 sec. Nev. 6 min 52 sec. & 7 min 12 sec.**



## **DOWN AT THE POWER PATCH** By Graham Moffat

We have had some very pleasant Sunday mornings out at the strip. We have started with Fog on some mornings but it finally wormed up. One Sunday it was -3 Deg when we started flying but the sun was out and it did warm up.

Have had the maiden flight with the Sea Fury and was very happy with the result and I didn't brake anything.

We have started to increase the size of the Helicopter Pad as a result of the increasing number flying. We are very lucky that we have some space within the field boundary that we expand into.

### **Field Safety**

As part of the NZMAA requirement for Re-Registering the club field we need to review and update the club Operating Procedures, Complete a Risk assessment and a Health and Safety Plan.

We will publish any changes as soon as they are confirmed.

We should refresh ourselves with the existing operating procedures and comply with them fully. They can be down loaded from the CMAC site. You can use this link and it will take you directly to the document.

<http://cmac.synthasite.com/resources/ClubForms/>

See you at the Strip Graham Moffat



**Bigger heli pad**



**Graham's Sea Fury plus his Tucano the heli's, with training wheels, in the background ARE NOT his!!!**

**I don't have gray hair. I have "wisdom highlights". I'm just very wise.**

**My people skills are just fine. It's my tolerance to idiots that needs work.**

**VINTAGE 12TH JULY** Cold as a frog on a frozen pool, cold as ..... never mind the Laplanders would have thought they were in a heat wave.

Some of the hardy turned up a little late but as the saying goes " better late than never " probably as a result having a job dragging themselves away from the electric blanket set on 3.

Yes it was cold and frosty however not a cloud in the sky with very little wind for a start and then a mild NE set in about 10:30. Good FF conditions.

It was Vintage day, Vintage precision and 020 Replica. Lynn, Bruce W, Gary and Dave put some times in for Vintage precision and Lynn also 020 Replica.



**Lynn**

Bruce gave us a demo how to fly a FF model control line style ie tight circles about 10m off the ground, the flight never gaining or losing height however it managed to correct itself after about 30 sec and carried on in a normal flight pattern.

Gary had a good first flight with a max however on the second flight the motor must have decided it was going to warm itself up properly before the cold descent and continued to run longer than it should have with the resulting long retrieval, the owner not being able to locate it on the first attempt ( somebody mentioned Spec Savers may be worth a visit ). Fortunately it was recovered after a second look.

Results: Bonus points included

**Vintage Precision**

Lynn ( KK Bandit 1948 )	88, 90, 73. = 251
Bruce W ( Request 1941 )	70, 69, 61. = 200
Dave ( Lulu 1948 )	72, 63, 62. = 197
Gary ( Loutrel Sportster 1935 )	90, 24, 0. = 114

**020 Replica**

Lynn ( Playboy Senior )	114, 90, 98. = 302
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**Bruce**

**Addendum** to the ramblings Of Lynn and others about my sloppy participation in Vintage Precision. My excuse (there is one of course!!!) my old reliable "Loutrel Sportster" (winner at last outing and many others too numerous to mention) had suffered hanger damage not noted at the time of first flight, which saved the embarrassment of recording a not the best score because the motor ran for a lot longer than normal on the normal fuel allotment (strange!!! 58 seconds instead of 40-45 secs!!) it was fortunate that the Loutrel habit of a tight spiral without spinning in allowed a 94 second flight with the bonus gave a max of 90.

The second flight had the motor appearing slightly over compressed on the new fuel mix which after reducing the needle (lower fuel flow) improved the RPM of the motor better than it normally ran and with the trim adjustment I let it go at the same fuel allotment point (big mistake!!!) the model climbed very rapidly and the motor ran for about 90 seconds No No!

Lessons learnt, that the new fuel mix is a lot better than what I have been using, giving more power and better fuel economy We shall see!!! Tomboys look out!

Weather Station Phone Number

021 02943562

Operating times Monday to Friday 0700—1300hrs and 1400—1700hrs

Saturday and Sunday 0700—1600hrs

CMAC WEB SITE <http://www.cmac.net.nz/>

**EDITORIAL MANURE. # 129, MANY MORE TO COME**

- **WARNING DANGER TO OLD FFONZ-CD\*** about the flying field surface conditions on frosty mornings (something that we are not used to these days due global warming!!!) the usual foot wear of smooth soled shoes is NOT the recommended foot wear, why? might you ask of me, who is typing this bulletin with one finger due to the left hand in plaster after gaining a fractured left wrist after a slip on frosty grass located on a down slope (all over in a split second) the effects of which will be with me for at least the next 3 weeks. You don't realize how reliant you are on 2 serviceable arms and hands (just think about cleaning the rear end with the right hand if you are left handed for example and the left hand has been incapacitated ) I can assure you the wife doesn't want to know about it (that's why she didn't want to become an old peoples home nurse) Lucky me I'm right handed and it was the left wrist that copped it. Wear gumboots, crampons and look for danger to avoid!!!
- **\*FFONZ-CD** = Free Flighters of New Zealand — Christchurch Division



Thinking, is the hardest work there is,  
that's why so few choose to engage in it.

1-Aug-15	Saturday AM 0900-1200hrs	SOARING	147	NDC	CLUB	Formula 500 (class D)	Willows
1-Aug-15	Saturday PM 1300-1600hrs					SPARE	Willows
2-Aug-15	Sunday AM 0900-1200hrs	FF	141	NDC	CLUB	Aggregate (Class B)	Willows
2-Aug-15	Sunday AM 0900-1200hrs	FF	145	NDC	CLUB	Cranfield Classic	Willows
2-Aug-15	Sunday AM 0900-1200hrs	FF	148	NDC	CLUB	Vintage FF Power Duration	Willows
2-Aug-15	Sunday AM 0900-1200hrs	FF	149	NDC	CLUB	Nostalgia FF Power Dura-	Willows
2-Aug-15	Sunday PM 1300-1600hrs					SPARE	Willows
4-Aug-15	Tuesday PM 1900 - 2130hrs	SPECIAL			CLUB	Club Meeting	Condell ave
8-Aug-15	Saturday AM 0900-1200hrs					SPARE	Willows
8-Aug-15	Saturday PM 1300-1600hrs					SPARE	Willows
9-Aug-15	Sunday AM 0900-1200hrs	FF	142	NDC	CLUB	Catapault Glider	Willows
9-Aug-15	Sunday AM 0900-1200hrs	FF	143	NDC	CLUB	Hand Launched Glider	Willows
9-Aug-15	Sunday AM 0900-1200hrs	VINTAGE / CLASSIC	150	NDC	CLUB	Classic FF Rubber Duration	Willows
9-Aug-15	Sunday PM 1300-1600hrs	INDOOR	146	NDC	CLUB	Open Tissue	Templeton
15-Aug-15	Saturday AM 0900-1200hrs					SPARE	Willows
15-Aug-15	Saturday PM 1300-1600hrs					SPARE	Willows
16-Aug-15	Sunday AM 0900-1200hrs	FF	144	NDC	CLUB	Kiwi Power	Willows
17-Aug-15	Sunday AM 0900-1200hrs						
18-Aug-15	Sunday AM 0900-1200hrs						
16-Aug-15	Sunday AM 0900-1200hrs	VINTAGE	151	NDC	CLUB	Vintage RC IC Duration	Willows
16-Aug-15	Sunday AM 0900-1200hrs	VINTAGE	152	NDC	CLUB	Vintage RC Electric Dura-	Willows
16-Aug-15	Sunday PM 1300-1600hrs					SPARE	Willows
23-Aug-15	Sunday AM 0900-1200hrs	SPECIAL EVENTS			CLUB	TOMBOY 36 and 48 R/C EVENT	Willows
29-Aug-15	Saturday AM 0900-1200hrs					SPARE	Willows
29-Aug-15	Saturday PM 1300-1600hrs					SPARE	Willows
30-Aug-15	Sunday AM 0900-1200hrs	SPECIAL EVENTS		NDC	CLUB	Club Rally day, cancelled events and NDC final day	Willows
30-Aug-15	Sunday PM 1300-1600hrs					SPARE	Willows

I've been in love with the same woman for 49 years. If my wife finds out, she'll kill me!

The Doctor gave a man six months to live. The man couldn't pay his bill, so the doctor gave him another six months.

My wife and I went to a hotel where we got a waterbed. My wife calls it the Dead Sea.

1-Sep-15	Tuesday PM 1900 - 2130hrs	SPECIAL			CLUB	Club Meeting	Condell
5-Sep-15	Saturday AM 0900-1200hrs	SOARING	165	NDC	CLUB	Altitude Limited Electric Soaring 200 (class M) scoring per 3.13.7	Willows
5-Sep-15	Saturday AM 0900-1200hrs	SOARING	166	NDC	CLUB	Altitude Limited Electric Soaring 123 RADIAN (class P)	Willows
5-Sep-15	Saturday PM 1300-1600hrs					SPARE	Willows
5-Sep-15	Saturday PM 1300-1600hrs	SOARING	169	NDC	CLUB	Closed Circuit Distance (class F)	PM Hospital
6-Sep-15	Sunday AM 0900-1200hrs	FF	153	NDC	CLUB	Wakefield (FAI Rubber Class F1B)	Willows
6-Sep-15	Sunday AM 0900-1200hrs	VINTAGE / CLASSIC	158	NDC	CLUB	Classic A/2 Glider	Willows
6-Sep-15	Sunday AM 0900-1200hrs	FF	159	NDC	CLUB	A/2 Glider (FAI Class F1A)	Willows
6-Sep-15	Sunday AM 0900-1200hrs	VINTAGE	172	NDC	CLUB	Vintage RC 1/2A Texaco	Willows
6-Sep-15	Sunday AM 0900-1200hrs	VINTAGE	173	NDC	CLUB	Vintage RC A Texaco	Willows
6-Sep-15	Sunday AM 0900-1200hrs	VINTAGE / CLASSIC	174	NDC	CLUB	Classical RC IC Duration	Willows
6-Sep-15	Sunday AM 0900-1200hrs	VINTAGE / CLASSIC	175	NDC	CLUB	Classical RC Electric Duration	Willows
6-Sep-15	Sunday PM 1300-1600hrs					SPARE	Willows
12-Sep-15	Saturday AM 0900-1200hrs	SOARING	168	NDC	CLUB	2,4,6,8,10, (class J)	Willows
12-Sep-15	Saturday PM 1300-1600hrs	SOARING	167	NDC	CLUB	Pylon Racing Open (class G1)	PM Hospital
13-Sep-15	Sunday AM 0900-1200hrs	FF	154	NDC	CLUB	FAI Power F1C (Class D)	Willows
13-Sep-15	Sunday AM 0900-1200hrs	VINTAGE / CLASSIC	171	NDC	CLUB	Classic FF Power Duration	Willows
13-Sep-15	Sunday AM 0900-1200hrs	FF	157	NDC	CLUB	Open Power (Class A)	Willows
13-Sep-15	Sunday PM 1300-1600hrs					SPARE	Willows
13-Sep-15	Sunday PM 1300-1500hrs	INDOOR	155	NDC	CLUB	FAI Class F1D	Templeton
13-Sep-15	Sunday PM 1300-1500hrs	INDOOR	156	NDC	CLUB	Indoor Hand Launched Glider	Templeton
19-Sep-15	Saturday AM 0900-1200hrs					SPARE	Willows
19-Sep-15	Saturday PM 1300-1600hrs					SPARE	Willows
20-Sep-15	Sunday AM 0900-1200hrs	SPECIAL EVENTS			CLUB	VIC SMEED PRECISION	Willows
20-Sep-15	Sunday AM 0900-1200hrs	VINTAGE / NOSTAL-	170	NDC	CLUB	Nostalgia/Vintage FF 1/2A Power & Miniature Replica	Willows
20-Sep-15	Sunday PM 1300-1600hrs					SPARE	Willows
26-Sep-15	Saturday AM 0900-1200hrs					SPARE	Willows
26-Sep-15	Saturday PM 1300-1600hrs	PYLON	160	NDC	CLUB	Quickie 500 Sport Pylon	Willows
26-Sep-15	Saturday PM 1300-1600hrs	PYLON	161	NDC	CLUB	Quickie 500 Expert Pylon	Willows
26-Sep-15	Saturday PM 1300-1600hrs	PYLON	162	NDC	CLUB	FAI Pylon (F3D)	Willows
26-Sep-15	Saturday PM 1300-1600hrs	PYLON	163	NDC	CLUB	Intermediate Pylon	Willows
26-Sep-15	Saturday PM 1300-1600hrs	PYLON	164	NDC	CLUB	Sportsman Pylon	Willows
27-Sep-15	Sunday AM 0900-1200hrs	SPECIAL EVENTS			CLUB	TOMBOY 36 and 48 R/C EVENT	Willows
27-Sep-15	Sunday AM 0900-1200hrs	SPECIAL EVENTS		NDC	CLUB	Club Rally day, cancelled events and NDC final day for month	Willows
27-Sep-15	Sunday PM 1300-1600hrs					SPARE	Willows