

**CHRISTCHURCH MODEL AERO CLUB EXECUTIVE 2019 / 20**



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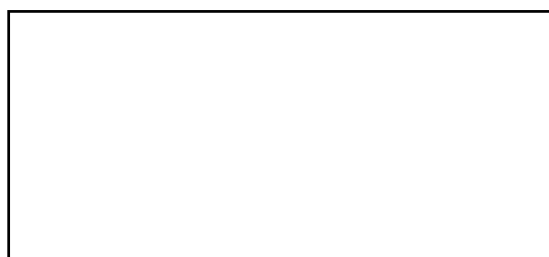
CHRISTCHURCH MODEL AERO CLUB (INC)

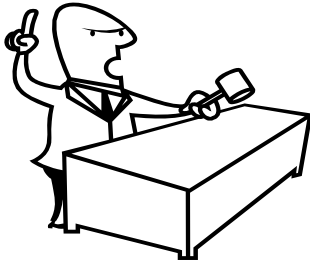
**Torque**

**JULY 2020**



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





## **THE PREZ SEZ**



<b>Junior / Junior = under 18</b>
<b>Junior = 18 to 60</b>
<b>Senior = 60 to 80</b>
<b>Senior / Senior = 80+</b>
<b>Club perceived age / knowledge</b>

I have to admit that I have not been out to the flying field of late as much as I would like, due to inclement weather on some Sundays and a fall in my garage which has caused a bit of pain over the last few weeks.

The club is ticking along well through the winter months, with good flying on the good days due to some smooth winter air. Spring and Summer are on the way.

Welcome to our new members who have joined us this year, it is great to see new faces at the field and I look forward to meeting you all.

Happy Flying  
Grahame Hart

## **NOTICES**

- Club night Wednesday 5th August “ bring a indoor type model that flies” refer to Mark Venter’s column

## Minutes:

CMAC meeting – Thursday 9 July 2020  
Hart Residence, 6B Middlepark Road at 7:30pm



- Present and apologies  
Apologies: Ian Harvy Mark Ventor  
Present: Grahame Hart, Graham Moffat, Gary Burrows, Trevor Henderson, Stewart Morse, Bruce Weatherall.
- Business arising Minutes of last meeting 28 May 2020  
Grahame Hart contacted CAA with reference to the Incident Report.  
CAA were happy with the information provided and the report requires no further action.
- Correspondence in / out
  - Application form from new member.
  -
- Treasurer's report.  
Emailed to Committee  
Final report accepted by the committee

### Section officers' reports:-

#### 🍷 R/C Power

Flying on the Sunday morning has been limited because of the weather. FWF have taken advantage of flying on the good days available during the week.

#### 🍷 Free Flight / Electric / Vintage

Good number attending on the Sunday but flying has been limited because of the wind.

#### 🍷 Tomboy

No flying because of the weather.

#### 🍷 Pylon

No report

#### 🍷 R/C glider / soaring

Winter conditions still allow good soaring with several successful "meetings" held to fulfil NDC soaring program. However, coordinating all the active fliers to fly at specified or scheduled dates has become a challenge.

#### 🍷 Torque / website

No report

#### 🍷 Indoor.

No report.

### QA Business-

No other business

Meeting closed 7:55 pm

**Club night July.**

Allan Knox was our guest speaker and gave a great presentation on the Vintage scene with plenty of models as examples of the various classes that can be flown. A great discussion was had and if you missed it then be sure to come along in the future - Allan will be back with more talks. (Maybe he can be persuaded to do a write up on his talk of the vintage scene?)



Allan's superb 1/2a scale Texaco Cub



Allan's Gaggle of vintage models



Some of the gathered throng and some of your editors vintage models on the stage

**Club Night 5th August - Anything that can fly**

Anything you have, bought or built that can fly **in the hall**. No prizes but a photo opportunity and mention in Torque for the simplest flying object you can come up with.

Note that in this case "flying" means just that, it must be capable of rising up or at best a few seconds of sustained flight, so no, throwing a tennis ball or a stick will NOT count. (although a Boomerang will, but not in this case in the hall!)

So dig something out or knock something together and bring it along and show us that it can indeed fly.

Mark

### Indoor Report for the 12<sup>th</sup> July.

We flew F1D this month and what an interesting day it turned out to be. Kay and I decided that we would take the opportunity test some of our May 99 Rubber (cost wise it is the most expensive of any rubber and also extremely hard to source) We used the heaviest of the high ceiling rubber we had, there was no way we could afford to make up motors for low ceiling testing, to put this in prospective all the top flyers in the world only use this rubber.

Both our models on inspection were not in correct flying trim and try as I did getting my model right proved to be too difficult to fix, Kay's came right and flew well but the rubber was in no way going to prove to be usable at the weight we were using, that being said the exercise help us to wind this Rubber way pass what we had done in the pass.

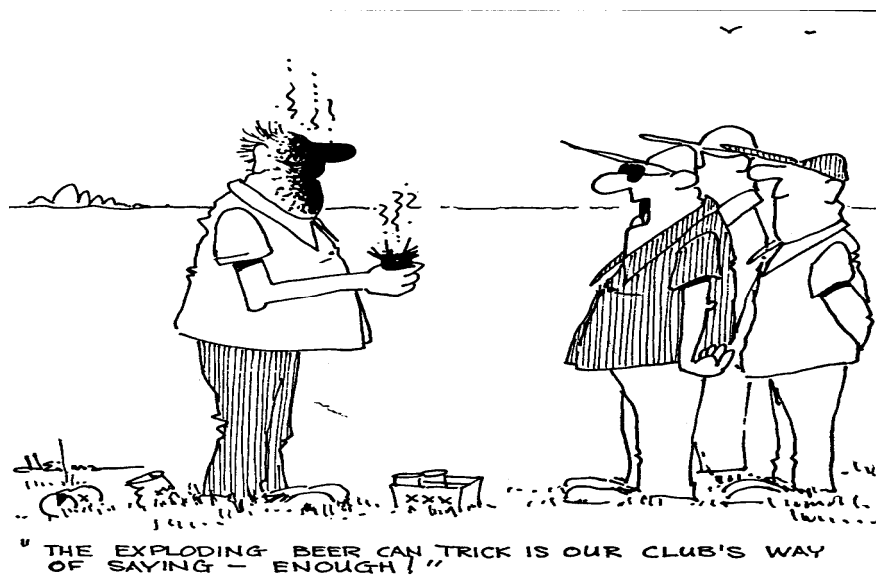
Nev showed again that he is getting a handle on trimming with his model and I have no doubt this is going to be a great help with any outdoor flying he does.

Times in general were down but even flying indoors in winter can turn out to be a bugger. Our next meeting is on the 9<sup>th</sup> August and we are flying Open Tissue.

**Results. Kay.** 4 min. 4 min 21 sec. **Nev.** 4 min 20 sec. 3 min 18 sec. **Bill.** 3 min 20.

What do you know as CMAC AERO MODELLERS who should be up with all the rules governing our SAFE flying activity so here is a few questions you might like to review your understanding

- What is the name of our danger zone
- How big is our danger zone
- What does "AGL" mean
- What does "AMSL" mean
- How high is our flying field above "AMSL"
- Can full sized aircraft fly thru our danger zone
- How high can we fly at our flying field above the surface
- What must a FPV modeler have with him any time he flies
- How many classes of wings badges are there and what are their requirements
- What does 1013.2milibars setting on a full size aircraft altimeter mean
- How far away can you fly your model from you, safely
- When was the last time you read our club flying rules
- Indeed have you reviewed the NZMAA Flying rules and are up to date with Civil aviation rules



## **AAC, ABC, AND ABN PISTON AND LINER ASSEMBLIES BY BIGT**

Yes, you would have seen these all previously- perhaps those using OS, or Thunder Tigre engines will be familiar with ABN meaning Aluminium piston, brass liner and nickel coated. The piston generally will have a single or a couple of oil retention grooves.

Of course there are other alternatives being AAC, which means aluminium piston, and a chrome plated aluminium liner. Generally you will find these in high performance model engines where high revs are typical. The AAC engines are by my experience very simple to use as the aluminium dissipates the heat very well, and because of the aluminium are generally lightweight engines. One of the benefits of the AAC setup is that aluminium has a 'memory' and even after a hot or/and lean run the fit will return to the cold setup.....very reliable in that respect and certainly has benefits over the ABC setups which are quite different. The AAC engines are setup in the piston liner fit very tight and have a tapered bore.

As the engine heats up- and it won't take long- the heat generated by combustion will see the top portion of the liner expand and the engine will effectively burst into life.....giving a rapid warm-up period and ideally suited for say a tuned pipe operation.

The ABC comprises an aluminium piston with a chromed brass liner- similar to the AAC as above but there are quite different performance factors. Firstly the brass liner DOES NOT have a memory and therefore any lean run can have disastrous results, and secondly the brass DOES NOT dissipate the heat as quickly as the AAC. And is prone to heat distortion!

ABC piston liner configuration was designed around the early 70's by the Italian company of Super Tigre.....many of you will be familiar with that brand although the manufacture, if my memory is correct, is now in China.

ABN as described is a reasonably common configuration for sport type engines, however there have been problems in the past where the nickel has peeled from the liner with somewhat disastrous results. Although I must when I have run engines with the ABN configuration I have never had any problems- because I run my engines at high revs- that may be the secret.

We should take into account that the AAC, ABC, and ABN engines need to be run at a highish temperature to get the full benefits- low revs, and a rich setting is not an ideal tuning method as the expansion is needed to get full power., and damage can be sustained if you are not careful.

Gone are the days of slowly running in engines as the CNC machining methods give accuracy to the piston and liner fit, and the tapered bore is built into the machining process during manufacture.

There are many theories on running-in engines and it is safe to assume that ABC and AAC only really require the conrod big-end to be run-in to the crankpin on the crankshaft and the little end to the gudgeon pin in the piston.....get these right and your engine will last a very long time.

Engine tuning is important as any rich run will not generate the heat to allow for the liner to expand- this applies in all cases of AAC, ABC, and ABN and this effectively loads the big-end bearing. You need the engine to be warmed up very quickly and it is not uncommon to heat the cylinder head of the engine for the initial runs with a heatgun!

Don't laugh but the last comment is true and used by one well known engine manufacturer when bench running his engines.

**5TH JULY REPORT BY THE RELIABLE REGULAR LYNN RODWAY**

Weather watch got it's wind speed way out, they forecast 15k NNE however it was near dead calm.

JB and I flew cabin Texaco.

139 RC Sport Cabin IC Texaco

Lynn Rodway 262 245 302 = 564 ( best two count )

140 RC Sport Cabin E Texaco

John Beresford 252 364 261 = 625 ( best two count )

There was a good turnout, I arrived later on otherwise would have got Sport Cabin E Texaco done as well.



Sean McCurrie out testing his new models he must have finished his wife's list Of things which MUST BE done!!!!



" LOOK .... YOU GUYS KNOW WHAT FREQUENCY I USE ..... AND I'M THE BEST FLYER AROUND.... SO I SAY THE HECK WITH A BUNCH OF SAFETY RULES .... SO DONT BE A PAIN IN THE ———!"

# SOARING

By associate soaring reporter Allan Knox  
 I figured you can never have too many pics for torque.  
 Ian and I flew class A off the winch in beautiful conditions. He is holding my Pike Perfect from Samba models. Like Ian, an oldie but a goodie!

**Soaring Report** by Ian Harvey *et al.*  
 NDC Competitions for July (to date)

## Class A

Two of us flew off a winch for this competition from the free flight paddock. Nice lift from the north enabled most launches to see max 6 minute flights. Best 3 flights counted.



Class A      NDC #86    DATE:      20200705

NAME #		Min	Sec	T	Lndg	Total	Best 3 To count
Allan Knox 7621	CMAC	6	2	358	95	453	1360
		6	4	356	96	452	
		5	59	359	96	455	
		6	1	359	93	452	
Ian Harvey 3194	CMAC	5	48	348	93	441	1341
		5	57	357	97	454	
		5	46	346	0	346	
		6	4	356	90	446	

## F5J

Several fliers were able to post scores under pleasant conditions and these are tabled below

F5J NDC # 87    DATE: 20200711

Name #	Club	Min	Sec	T	Hgt	Pen	Ldg	TOTAL	GT
John Shaw 2339	CMAC	9	59	599	239	217	50	432	2108
		9	41	581	181	90.5	50	540.5	
		9	59	599	188	94	50	555	
		9	59	599	137	68.5	50	580.5	
Dave Griffin 3537	CMAC	9	59	599	142	71	40	568	1949.5
		9	59	599	124	62	50	587	
		7	10	430	154	77	50	403	
		7	58	478	173	86.5	0	391.5	
Anton Nikoloff 3599	Kaiapoi	5	47	347	185	92.5	35	289.5	1495.5
		7	50	470	183	91.5	0	378.5	
		9	57	597	219	157	45	485	
		6	32	392	189	94.5	45	342.5	
Phil Pohoi 11625	Waimak	5	50	350	208	124	0	226	1217.5
		6	57	417	208	124	45	338	
		7	10	430	192	96	40	374	
		6	17	377	195	97.5	0	279.5	



We hope that there will be further scores posted in the above events plus ALES 123 and possibly 2METER later in the month.

**NOTE:** An email is sent around to a list of people I think will be interested or may be vaguely interested in what soaring events are being flown when. If you are not receiving these, get in touch and I will put you in the mix.

**NOTE ALSO:** The **SOAR CHAMPS** are coming up in September (17th—20th) so start planning to get to the Hawkes Bay for that weekend .



ALES 123 NDC #88							
DATE: 25 July 2020							
		Min	sec	TT	Ldg	Total	GTOTAL
Allan Knox	CMAC	6	0	360	50	410	
7621		6	0	360	50	410	
		6	0	360	50	410	1230
Dave Griffin	CMAC	6	1	359	50	409	
3537		6	0	360	50	410	
		6	0	360	50	410	1229
Ian Harvey	CMAC	5	40	340	50	390	
3194		6	2	358	50	408	
		6	0	360	0	360	1158
Anton Nikoloff	Waimak	5	3	303	0	303	
3599		4	8	248	50	298	
		2	55	175	0	175	776

NDC Results July 2020 CMAC via IAN HARVEY

Class A	NDC #86	DATE:	20200705				
		Min	Sec	T	Lndg	Total	Best 3 T
Allan Knox	CMAC	6	2	358	95	453	
7621		6	4	356	96	452	
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		6	1	359	93	452	1360
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		5	46	346	0	346	
		6	4	356	90	446	1341

F5J NDC #87									
Date: July 11 and 25 2020									
Name #	Club	Min	Sec	T	Hgt	Pen	Ldg	TOTAL	GT
John Shaw	CMAC	9	59	599	239	217	50	432	
2339		9	41	581	181	90.5	50	540.5	
		9	59	599	188	94	50	555	
		9	59	599	137	68.5	50	580.5	2108
Dave Griffin	CMAC	9	59	599	142	71	40	568	
3537		9	59	599	124	62	50	587	
		7	10	430	154	77	50	403	
		7	58	478	173	86.5	0	391.5	1949.5
Ian Harvey	CMAC	2	28	148	79	39.5	30	138.5	
3194		8	55	535	182	91	25	469	
		9	55	595	167	83.5	20	531.5	
		9	1	541	152	76	30	495	1634
Allan Knox	CMAC	9	7	547	231	193	0	354	
7621		9	25	565	245	235	50	380	
		5	10	310	155	77.5	0	232.5	
		9	59	599	154	77	40	562	1528.5
Anton Nikolof	Kaiapoi	5	47	347	185	92.5	35	289.5	
3599		7	50	470	183	91.5	0	378.5	
		9	57	597	219	157	45	485	
		6	32	392	189	94.5	45	342.5	1495.5
Phil Pohio	Waimak	5	50	350	208	124	0	226	
11625		6	57	417	208	124	45	338	
		7	10	430	192	96	40	374	
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		2	55	175	0	175	776

## ALLAN KNOX IS LOOKING FOR COMPETITORS

It was a great mornings flying Sean. I got the 2nd Cox running strongly and reliably but I noticed it always had a smoke trail and drank fuel at about twice the rate of the one in the Cub! 3 min run times. Go figure. So, I need to assemble another one. Fortunately I have lots of bits. The Skipper was thermalling well in the afternoon. Lots of folks seemed interested in our efforts so we may have more company soon. But, as I always say, as long as there are two of you, you can fly.

On that subject we have in August

August 2019	141	VINT	RC	RC Vintage IC Duration
August 2019	142	VINT	RC	RC Vintage E Texaco
August 2019	143	VINT	RC	RC Classical E Duration
August 2019	144	VINT	RC	RC Vintage Precision

The weather looks good for the coming Saturday 1 august., I'm keen to do 3 of these classes but there are other weekends too of course.

How are you guys placed for Saturday morning?

Stu, I can pick you up. The New Ruler would be good for Precision and Duration.

Gary, do you have anyone else who might be keen and has something to fly in any of these classes? Almost anything can fly Precision.

I do want to build an RC Vintage circulation list so everyone knows when we are flying and can join in.

Also lets me accommodate people who may have other commitments on a given day so we can at least try and accommodate them.



" SURELY YOU'RE NOT GOING TO LET GO OF THAT MONSTER WITHOUT WEARING A HELMET ? "

PAUL LAGAN esquire



## THE PHL FILES

**PHL IS SMILING AFTER PRODUCING THE BEST FREE FLIGHT WEATHER IN MONTHS FOR THE NEW SI FF CHAMPS, WELL DONE PAUL , WE ALL KNOW WHERE YOUR INTERESTS LAY JUST A PITY WE LET THOSE FRUSTRATED WEBBED FEET NORTH ISLANDERS TO ENTER AS THEY TOOK MOST OF THE HONORS SEE THE NEXT FLIERS WORLD FOR DAVE JACKSON' S EXCELLENT REPORT . BILL LONG WILL BE DOING A TORQUE VERSION FOR THE AUGUST TORQUE**



**X CMAC member Dave Jackson with his TLG**



You can see where Craig King last flew FF, seen here with his auzzie sun deflector on and sucking on a "Tinny"  
All photo's courtesy Allan Knox there are more to come.

**Weather Station Phone Number**

**021 02943562**

**Operating times Monday to Friday 0530hrs to 1800hrs**

**Plus Weekend 0530hrs to 1800hrs**

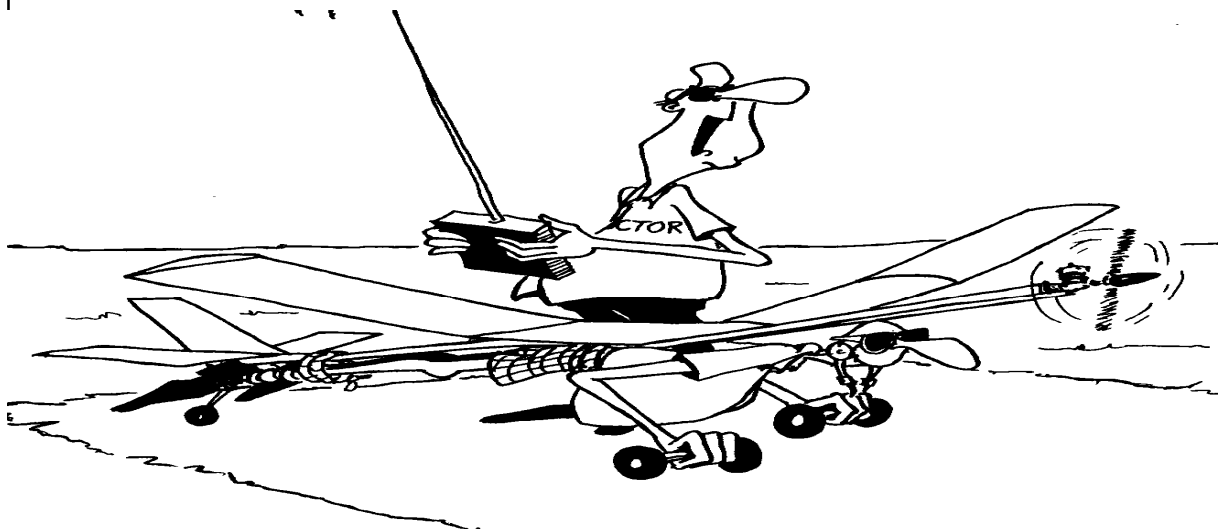
**CLUB WEBSITE**

<http://cmac.net.nz>

**please note change**

**EDITORIAL MANURE. # 184, ( 16 TO GO = 200 THEN I'M FINISHED)**

- **HALLELUIAH** I'm back on the building board after Allan Knox's club night lecture on vintage and after seeing all his finished and flyable vintage models has convinced me to follow his method of "only building ONE model at a time" until it is finished and flown not my very non focused mind on what interests me and takes me off track!!! I suppose that is why I have about 10 unfinished projects at the moment and applying my late modeling friends (Warren Clemens) method of doing at least 30minutes a day on the current project may see me with more models to fly. The method I am using is the countdown "Voice Zone Talking Timer" set to count down my allocated time to the tasks in hand (like this copy of Torque which I have allowed 30 minutes of which I have currently used 15 minutes of the 30 that I have allowed) My concentration span limit!!! I have decided to divide my building time as follows 1/ glue up what I have ready 2/ prepare the next items for gluing 3/ other planning
- Most of which seems to be over taken tomorrow by domestic duties like 3hrs grocery shopping, Such is life!!!!
- Don't you hate it when those who should know better load on tasks which are unable to be achieved because not every one has the equipment that they need to achieve the task For example how many of you have smart phones to be able to follow the requirements of photoing the tracing logo for covid 19???
- When you get this torque the South island FF champs should have started, the weather looks good, lets hope the flying is as good. It was and the flying was good too.
- **AN APOLOGY, DUE TO A RECENT MEDICAL EVENT THIS TORQUE IS LATE**



**... AND REMEMBER, NO BELLY LANDINGS!**

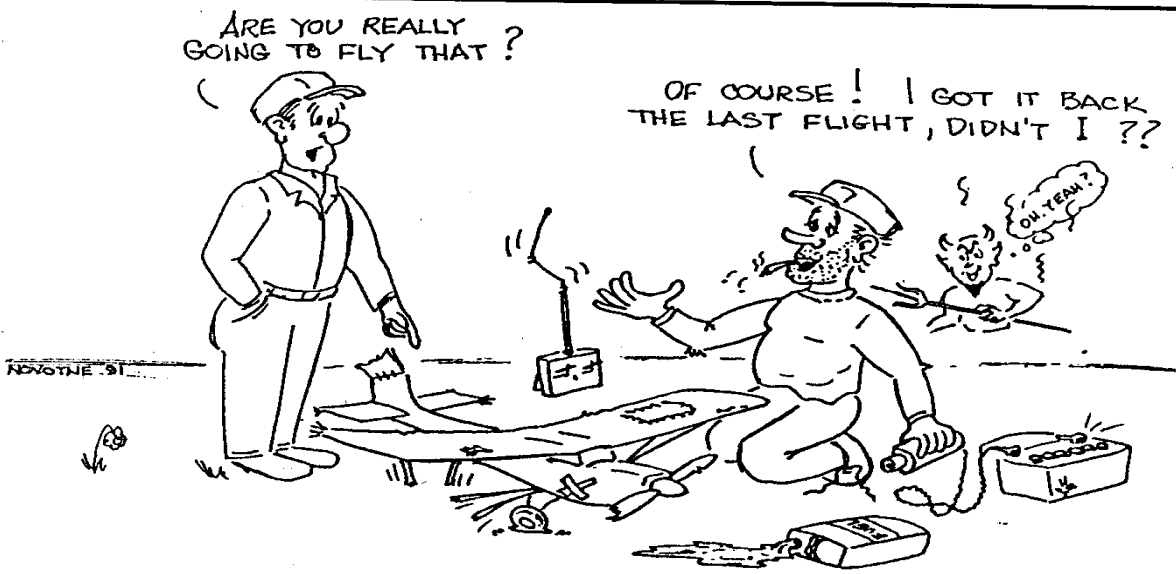
## AUGUST NDC EVENTS

August 2019	141	VINT	RC	RC Vintage IC Duration
August 2019	142	VINT	RC	RC Vintage E Texaco
August 2019	143	VINT	RC	RC Classical E Duration
August 2019	144	VINT	RC	RC Vintage Precision

August 2019	48	FF	Catapult Launched Glider
August 2019	49	FF	Hand Lanch Glider
August 2019	50	FF	Open Power
August 2019	51	FF	Kennedy Precision
August 2019	52	FF	Open Tissue

August 2019	89	SOAR	Thermal B (10 min)
August 2019	90	SOAR	X5J Unlimited Class O

1-Aug-20	SATURDAY	Soaring	NDC Events	1300 - 1600hrs	Willows
2-Aug-20	SUNDAY	RC / Vint	NDC Events	0900 - 1200hrs	Willows
2-Aug-20	SUNDAY	TOMBOY	TOMBOY	0900 - 1130hrs	Willows
5-Aug-20	WEDNESDAY		CLUB NIGHT	1930 - 2100hrs	Studholme st
8-Aug-20	SATURDAY				
9-Aug-20	SUNDAY	RC / Vint	NDC Events	0900 - 1200hrs	Willows
9-Aug-20	SUNDAY	Indoor	Open tissue	1300-1500hrs	Templton
15-Aug-20	SATURDAY				
16-Aug-20	SUNDAY	RC / Vint	NDC Events	0900 - 1200hrs	Willows
22-Aug-20	SATURDAY				
23-Aug-20	SUNDAY	RC / Vint	NDC Events	0900 - 1200hrs	Willows
29-Aug-20	SATURDAY				
30-Aug-20	SUNDAY	TOMBOY	TOMBOY	0900 - 1130hrs	Willows
30-Aug-20	SUNDAY	RC / Vint	NDC Events	0900 - 1130hrs	Willows
30-Aug-20	SUNDAY		BBQ Day	1130 - 1230hrs	Willows
30-Aug-20	SUNDAY	Soaring	NDC Events	1300 - 1600hrs	Willows
31-Aug-20	MONDAY				



## SEPTEMBER NDC EVENTS

September 2020	53	FF	FAI FIB Rubber
September 2020	54	FF	FAI F1A Glider
September 2020	55	FF	FAI F1D Indoor Rubber
September 2020	56	FF	Indoor Hand Launch Glider
September 2020	145	VINT	FF Nostalgia 1/2A Min Replica
September 2020	146	VINT	FF Classic Power Duration
September 2020	147	VINT	RC Vintage 1/2A Texaco
September 2020	148	VINT	RC Vintage A Texaco
September 2020	149	VINT	RC Sport Cabin IC Texaco
September 2020	150	VINT	RC Sport Cabin E Texaco
September 2020	91	SOAR	Thermal D (F500)
September 2020	92	SOAR	ALES 200 Class M (Scoring per 3.13.7)
September 2020	93	SOAR	ALES Radian Class P
September 2020	94	SOAR	Thermal J (2,4,6,8,10)

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16-Aug-20	SUNDAY				
22-Aug-20	SATURDAY				
23-Aug-20	SUNDAY	RC / Vint	NDC Events	0900 - 1200hrs	Willows
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30-Aug-20	SUNDAY	TOMBOY	TOMBOY	0900 - 1130hrs	Willows
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