

Nelson Model Aero Club

https://nmac.org.nz

December 2023

#### **President's Piece**

And just like that we are in December. The Christmas tree should be up by now and heavy hints on what new model is to go under it should be being made to Mrs Claus. Thankfully the weather is improving, and our members are enjoying some great days flying both mid-week and weekends.

Our recent fun fly STOL event (with a silent 'L') was an entertaining time for all those that watched and entered. It is amazing how challenging trying to land as close to a line on the ground becomes regardless of our skill levels. Congratulations to all that entered and those that managed to get close enough to the line to win a prize. Thank you to the team who organized the fun morning and I'm sure everyone is looking forward to the next event in December.

Recently Murray and I met with two Nelson city council members who look after the parks and reserves to discuss the club activities at Wakapuaka Sandflats. It was a positive meeting for both sides and it will be important to maintain dialogue with them to ensure we are considered in any future council discussions and planning.

As always please consider the conditions when driving out to the field after rain. The sun dried out the ground very quickly so any tyre ruts caused on a wet day can stay for some time when dried. Please stick to the gravel road and avoid driving in front of grass pits area.

If I don't see you at the field beforehand, I hope everyone has a safe and merry Xmas and new year.

Tristan

Membership: Welcome Nigel Heath, a recent new member of the club and we look forward to enjoying some weekend flying with you at the field. It's also great to see so many new and prospective junior members learning to fly at the club each weekend.

Fun Fly Events: We will arrange a fun-fly event and Xmas BBQ in December. Keep an eye on emails and WhatsApp for the date and format (weather permitting).

Show 'n' Tell: We had an enjoyable Show and Tell meeting in early October. With about 10 members at the meeting there was plenty to look at. The highlight was seeing the beautifully made small electric models that John Reid brought along – it was a real privilege to take-in the artistry and fine workmanship required to make the models. We have another S&T scheduled for early December.

### **November STOL Fun fly:**

With 20 entrants plus spectators and all the sausages eaten, I think we'll all agree that everyone had a fantastic time at the field on Sunday the 5<sup>th</sup> of November when the NMAC committee held a Short Take Off and Landing (STOL) fun fly event.



The committee members rallied together on the morning and got out to the field early to help with the setup, invent some "rules", and lay down some exceptionally straight and accurate lines for judging the landing attempts, which proved to be trickier than you would expect!



Electric foam models were overwhelmingly the pick of the day, with only one or two balsa models giving it a go. This made the take-offs a bit difficult to judge since almost all the foam models can take flight within a few meters, so we opted to keep it simple and judge only on the landing attempts, of which each pilot was allowed two attempts.

We kicked off close to 10:00 am, and the first round wrapped up quickly, so we all decided a second round was in order since everyone now felt more confident in their precision landings.

Murray organised the food while the judges tallied the results, taking the average score of each pilot's two best attempts, which led us into a quick prizegiving in between sausages, which saw Greg in 1<sup>st</sup>, Oscar in 2<sup>nd</sup> and Amy in 3<sup>rd</sup>. We also had several hobby-related spot prizes given out for the members to enjoy.

The turnout and enthusiasm from everyone was fantastic, which made it one of the stand-out days for me this year at the field, and I'm already looking forward to our next fun fly event.

#### **NMAC** Nationals

The MFNZ Nationals are being held in Carterton on 1 - 5 January. This year's dates make travelling from the South Island up to event even more challenging and I don't know anyone who is making the trip.

However - there are a few of us interested in flying pattern and IMAC aerobatics (which is what we'd be flying at the Nationals) and we need an excuse to get our models off the wall and into the air. So we'll run the 'NMAC Nationals' during the first week of January or thereabouts (weather permitting).

There are many exciting reasons to fly an aerobatics schedule, but the most compelling are the personal rewards that come from conquering the challenges of trying to fly your plane to a known pre-set plan; making the plane "go where you want it to go" rather than following it around the sky in a hot-dog fashion. Many of us can hack through a few advanced manoeuvres well enough to impress those who don't know what they're looking at, but without the discipline of following a schedule, and scoring our efforts, we never make great advances in our flying or know where our weaknesses lie. Inspired? - all you need to take part in the event is a plane that will loop and roll and a desire to improve your flying.

Depending on numbers this is what we'll fly:

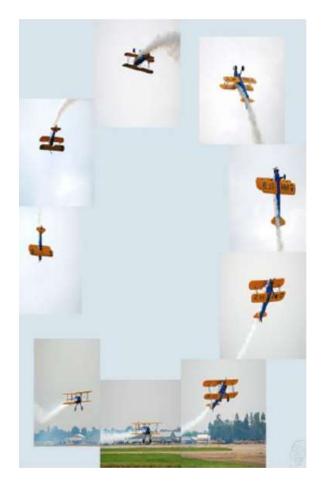
- We'll fly an introductory sequence for those new to aerobatics the NMAC Schedule. A plane that loops and rolls can easily fly the NMAC schedule.
- We'll fly a pattern schedule for those who are keen (you choose either the 'Clubman' or 'Expert' schedule).
- And an IMAC schedule (you choose either the 'Basic 2022' or 'Sportsman 2022').

Let me know if you're interested and I'll send you the sequences so you can get a few practice days in over December.

Cheers Murray

#### **NMAC Schedule:**

- 1. Take off
- 2. Straight and level flight
- 3. Descending 360-degree circle
- 4. One loop
- 5. One roll
- 6. Immelmann turn
- 7. Cuban eight
- 8. Rectangular landing approach
- 9. Landing



## Photos from the field (October - November):



Asher and his Spitfire



Rex and the flatpack delta



Jan successfully maidened his Hein Kawasaki



Mike in his happy place with the Decathlon



Sam readying the powered glider on the dolly



Peter maidened his beautiful Nieuport XI



Another successful T-28 Trojan maiden



Phil, NASA called, they want their Space Shuttle back.



Seven young pilots at the field...  $\textcircled{\textcircled{}}$ 

## The NMAC Committee:

Your committee members for 2023/2024:

Tristan Lynch		
Peter Stevens		
Chris Hinkley		
Murray Irvine		
Greg Dyer		
Andrew Reeve		
Glen Ellicott		
	Peter Stevens Chris Hinkley Murray Irvine Greg Dyer Andrew Reeve	Peter StevensChris HinkleyMurray IrvineGreg DyerAndrew Reeve

CnS Editor Glen Ellicott	
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The CnS newsletter is published every two months: Feb, Apr, Jun, Aug, Oct, and Dec.

#### WhatsApp Group:

The WhatsApp group is growing and has become an excellent method to share information and pictures of your models and flying outings. To get connected to WhatsApp, get in touch with Murray or Phil.



#### Facebook:

We are on Facebook. For those Facebook users out there, look up the Nelson Model Aero Club and add a 'like' to our page.

https://www.facebook.com/NelsonModelAeroClub

#### **Special offer for NMAC Members**

COOL POWER – 1 Gal (US) or 3.785 litre containers \$65 each

Contact Peter Stevens.



Peter's beautiful F-82 Twin Mustang \*sounds great!



Tristan's Corsair – after succeful maiden flight.

# Manoeuvre of the Month: The Stall Turn

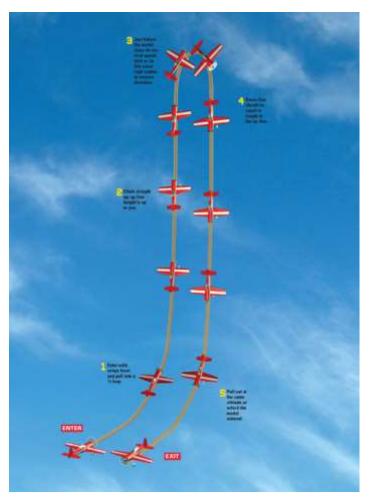
The stall turn (sometimes also referred to as the "hammer-head") can be broken down into five steps. While this manoeuvre may seem fairly easy, it can be rather difficult to perform time and time again.

The basic stall turn is performed by pulling the model to a vertical up-line. This should be fairly gradual in radius and not be abrupt. Once the model is tracking on a perfectly vertical up-line, slowly decrease the power. Then, while traveling vertically and before the airplane comes to a complete stop, add rudder to pivot the aircraft 180 degrees.

Now, let the aircraft track on the down-line. Lastly, perform a quarter loop to horizontal upright levelflight that matches the same altitude at which the manoeuvre began.

This manoeuvre is not as easy to perform as it looks; here's why: When performing the traditional stall turn, you must ensure that the aircraft is tracking in a manner that is parallel to the runway and that the model's wings are level to the horizon. If the wings are not perfectly level and you pull the stick back to perform the quarter loop to establish a vertical upline, the model will be tilted. You'll then need to apply rudder input to correct the model's flight path. If this were a competition, points would be lost.

EXECUTING THE STALL TURN: As with all new manoeuvres, it's best to perform at a high altitude until you are familiar with each move.



- 1. Once you've determined that the model is flying parallel to the runway and that the wings are level, increase the throttle to full power and perform a gentle quarter loop to a vertical up-line. Please note, however, that attention must be given to the size of this quarter loop, as you will have to perform the same radius to exit the manoeuvre later in step 5.
- 2. Now that the airplane is tracking perfectly vertical, slowly decrease the power. While the length of this vertical line is entirely up to you, remember that you do not want to make the vertical line very long, as the airplane may drift while on the up-line (this will require many small corrections). Also, if the vertical line is too short, the manoeuvre will look "rushed."
- 3. Once the model is about to stop traveling on the vertical up-line, apply full rudder deflection. Tip: It is always best to stall the model (turn the aircraft) into the wind to ensure that the model will not "flop" over the top of the manoeuvre. Once the airplane pivots about 170 degrees, begin to release some rudder input. When the model pivots a complete 180 degrees, most of the rudder input should be released. Sometimes pilots find it helpful to hold a little rudder input a bit longer so the aircraft will not display the pendulum effect.
- 4. The length of the vertical down-line should be the same as it was on the vertical up-line. The throttle should remain at idle until the exit radius has been started.
- 5. To complete this manoeuvre, perform a gentle quarter loop that is the same size as the one performed in step 1. This way, the model will exit in a manner that is parallel to the runway. Remember, the airplane should also exit as the same altitude in which it entered the manoeuvre.