

2023 Nationals Newsletter #2. December.

Entries close on **Tuesday 31st of January**... in only six weeks! Entry form is on the website and also here... Do it now!

https://docs.google.com/forms/d/e/1FAIpQLScTQFnxQ8U6rS7WbQi-gYe9ipm1zIQdS35iuBSwBX_kE4D-eQ/viewform

ASAP; Please give us organizers a heads up via any means; email, WhatsApp, text, that you are planning on attending; and get your documents together and sequences sorted and entry done online as soon as you can please. No Snoozing- get your entries in ASAP. Smoke your entries on in!



The full information for the Nationals is on the www.aerobatics.nz event website or click here to enter; https://docs.google.com/forms/d/e/1FAIpQLScTQFnxQ8U6rS7WbQi-gYe9ipm1zIQdS35iuBSwBX_kE4D-eQ/viewform

Sort your accommodation ASAP. Now is the time to grab your friends and get a Book a Bach or an Air BnB asap. Alternatively, we have permission to erect a tent/camper/van 'City' adjacent to the Aero Club (like they do at Oshkosh). And there may be some rooms/beds at the Aeroclub and "Ravensdown" hangar office area, so bring a sleeping bag. It will be a fun location. Grant and Morris may be able to help coordinate airfield accommodation options or allocations.

The Aero Club has full kitchen and bathroom facilities to support us, so we should have a fun time being right on the field. I have the apartment on the airfield to also utilize. If you have your own tent, van or

camper - great! If not, flick us a message any way you can so that we can help sort out something for you. I can't stress enough how important it is to sort out some accommodation ASAP.

Sequences:

Have a read of the rules and understand what sequences you need to submit to the CD. The close-off date is the 31st January. \$100 late entry fee after that.

Primary, Recreational and Sports do have a Free Program.

In Primary, you are ONLY able to fly the prescribed Known Compulsory again.

For Recreational and Sports, you MAY fly the Known Compulsory again, or you MAY design your own Free (use Open Aero / NZAC Rules - Free program). The total K must be the same or less than the known sequence.

For Intermediate, Advanced and Unlimited, you MUST submit your own Free Known sequence, designed using the NZAC 2023/24 prescribed figures (use Open Aero / Power /NZAC / Free known/ Int / Adv or Unknown) The figures are also on our website in sequences.

Sort your Aerobatic rating and BFR ASAP. Please chase your instructor to get your Aerobatic rating completed and signed off ASAP so you can get some practice in on your own and reduce the amount of safety pilot rides needed as this really slows down the competition flights. We will have safety pilots available if necessary.

Paperwork:

Check:

Your plane (release to service etc. Calendar dates.)

Insurance - we need to see evidence of current Third Party insurance of at least \$2 million.

Pilot License, medical, BFR, Aerobatic Bi-annual, LLDA need to be current. Prepare these docs for the entry form.

Entry Fees:

Payable now! Bank account details are on the entry form. Lunch is being added to the entry fee.

Primary has 3 flights now \$180

Rec/Sports for 3 flights \$180

Int/Adv/Unl for 4 flights \$240

4 Minute Freestyle is Free due to the entertainment value and cost of your smoke oil.

If you are keen, you can enter in more than one category, in a different aircraft only, and at the CD's discretion.

Remember, you must be a paid-up NZAC member too. Membership is still only \$35.00

The subs form is here...

https://docs.google.com/document/d/12p4G18f736XPuLoUGUIOm3cPibA_EAvn/edit?usp=drive_link&oid=109812179691730929346&rtpof=true&sd=true

Trophies:

We need these back. If you won something last year, please engrave it with your name in the same style as previously, then polish it and either bring it back with you, or send it to us c/- the Wairarapa Aero Club.

Landing Fees: This year, the Hood Aerodrome will be imposing standard landing fees on all aircraft - \$10 per aircraft / per day (unlimited movements).

Timetable and other activities:

Mon 26th – Tues 27th. Arrivals /Practice / Setup / Tech Inspections.

If you are interested in Judging, there may be a Judging Seminar on Tuesday, followed by Judge coaching throughout the day (Tuesday/Wednesday morning are unofficial practice days). LLDA refresher, for anybody who needs it, will be Tuesday night.

Wednesday 28th Feb, 1pm will be the start of competition.

Thursday night will be the Club AGM. This is your notification. If you have any general business for discussion, send it to the Treasurer ASAP. If you would like to be part of the committee or nominate anyone, please forward an email to Morris.

AGM Commencing at 7pm. The agenda as follows;

Apologies

Minutes from previous year, matters arising

President's/Treasurer's report for 23/24 season.

Election of officers.

General Business.

Thursday night will most likely be Unknown/Free Unknown handout night (weather dependent) so we will keep that one free. Pizza or BBQ at the club rooms for this evening.

Saturday evening will be the prize giving.

If you have any questions then please contact either Grant Benns (0210629929), Morris Tull (+971506449584/ +642102401094 when in NZ) morristull@gmail.com or Andy Love (021818816)



PS, there will be beer at the finish line. We are looking forward to catch up with all you friends. Cheers.

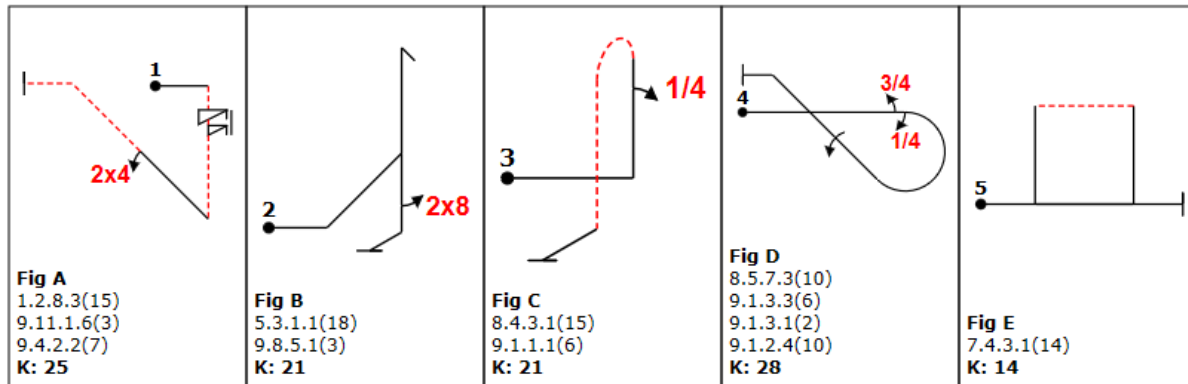


A confirmation of the 2023-24 Free Known figures and some suggestions on how to build your sequence are attached below.

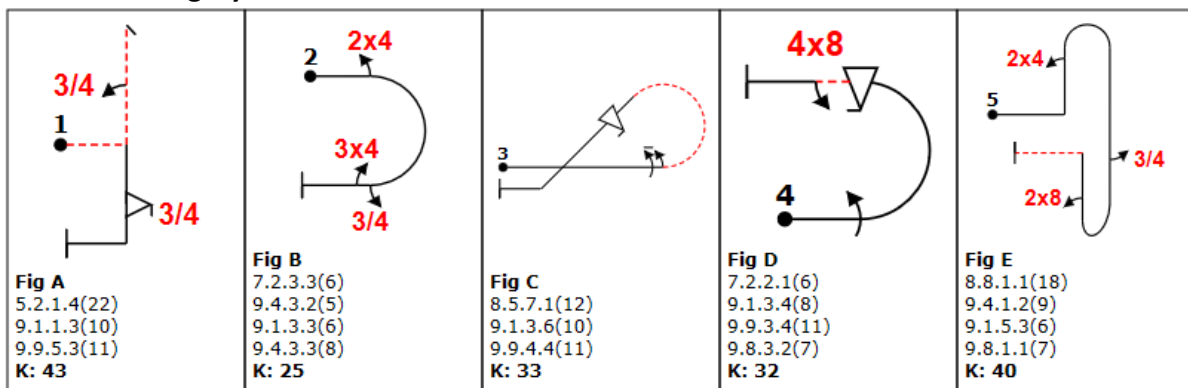
It's time to design your Free Known sequence for 2023/24 NZAC programme 2.

The 5 "Known" figures specified by NZAC for powered aircraft that are to be added to your "Free" choice of 5 figures so as to build your "Free Known" Sequence to be used from April 2023 to the completion of the NZAC Nationals in 2024 in Intermediate, Advanced and Unlimited are here; These 5 figures change every year to force variety and challenge to the competitors.

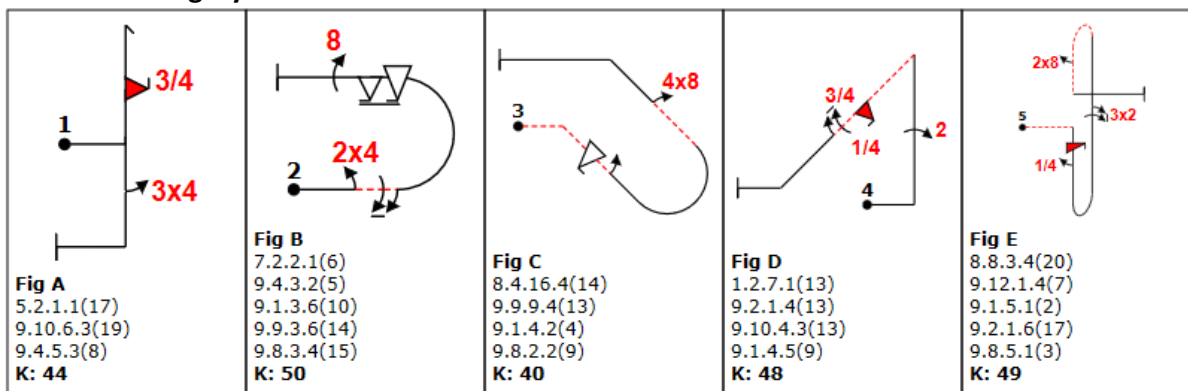
Intermediate category. Max total K allowed = 200



Advanced category. Max total K allowed = 320



Unlimited category. Max total K allowed = 450



Guidance for competitors

Competitors should preferably design their own Free Known sequence, though they are entitled to use one provided by another competitor or resource. Some examples for the season may be found from the Northern Hemisphere competitions at www.civa-results.com, www.aerobatics.org.uk, <https://vliegeniseenkunst.nl/en/donac/sequences>
A Default Free Known sequence is generally available for those unfamiliar, has insufficient time or is too lazy to design their own sequence.

Each Free Known sequence must comprise a total of 10 figures.

Within each sequence: 5 figures must be the “Known” figures specified by NZAC/CIVA as shown above and 5 must be “Free” figures, i.e. they are freely chosen by the competitor.

www.openaero.net shall be used for designing and submitting the sequence. The preformatted 5 known figures can be found via dropdown menu on www.Openaero.net – library – 2023 - CIVA Adv Free Known etc.

The 5 “Known” figures –

- Must be those specified for the category by NZAC/CIVA.
- May individually be placed in any order and at any position within the sequence.
- May be employed in any orientation, i.e. with their start direction along the main box axis into wind, or down wind, or on the secondary axis in either direction.
- Must be used with their design as specified by NZAC, unchanged in any way.

The 5 “Free” figures –

- Must be selected from the Aresti Aerobatic Catalogue Power version or in conjunction with the rules for the category when designing in Open Aero.
- Must, in conjunction with the specified “Known” figures, provide a sequence that complies overall with NZAC rules which are based on the 2023 CIVA regulations.

Sequence files submitted for a NZAC event –

- Must be in Open Aero computer format. Hard or paper copies of any type are not acceptable.
- Must contain complete pages for forms “A”, “B” and “C” as well as forms “L” and “R”.
- Must clearly identify on at least one of the forms the 5 “Known” figures using the specified letters A-E.

Recreational and Sports category are also allowed, and are encouraged, to design your own FREE sequence for the second flight. The required figures are listed in the rules and also on OpenAero. You should make you own Free sequence to the same maximum K as the known sequence for the season.

Feel free to contact myself or other senior aerobatic pilots for advice or recommendations and checking of your Free sequences and suitability to your type aircraft.

Tips and Hints for designing your Free Known or Free sequence from some of the legends of Aerobatics.

The Free sequence should highlight what you and your airplane do best.

Always use the maximum allowable points for your category, if you don't, you're giving away points! The percentage score is on the max points, not the points on your sequence it is if less.

Keep the K for each figure not too far from the average for the sequence (Subtract the value of the Known figures from the total sequence K, then divide the remaining K by the remaining number of figures. Try to keep each figure's value close to that average K factor.) This reduces risk of point loss by spreading out the max points such that a single zero won't have as large of an impact.

Choose the right figures for your airplane, if you have a blindingly fast roll rate, put in lots of rolls. If you have tons of power, put in lots of vertical stuff. If you have everything, well, you're lucky! Higher performance aircraft can fly rolls on the vertical lines to increase the K as needed, while lower performing aircraft require rolls on horizontal or 45-degree lines.

Start with a center box high speed figure that you can dive in to with lots of speed and energy as this energy will carry for a few figures and it makes up for a low powered aircraft.

All vertical lines (Stall turns, Humpties, etc.) should be on the right side of the "B" form. (Upwind). You are exposed to the wind twice as much during stall turns and humpties.

All looping figures (half loops, Cubans, Sharks-teeth, etc.) should be on the left side of the "B" form. (Downwind). Try to fly the tops of Loops and Humpties downwind. Begin Immelmann's downwind and Split S's upwind. Reason being the roll should be INTO the wind to help avoid the costly 2-point deduction of drawing a line between the loop and the roll.

Place spins into wind as the stall break will appear cleaner, place the spin early to midway in the sequence, you will probably be struggling for altitude at the end of the sequence - get the spin over with.

Make point or opposite rolls into the wind.

Cross box figures should always be on the upwind side of the box, the wind will blow you into the box, whereas if you are on the downwind end, it will blow you out! Try to place a cross box "wind corrector" every 5 or so figures, it works whether there is a wind or not - if there is a strong wind, you'll be glad you did.

When Rob Holland builds a sequence, he actually comes up with two to three combinations of wind correctors...puts them on the right side of the "B" form and then build the rest of the sequence around them.

Some good combinations for wind corrector pairs are:

Stall turn 1/4 or 3/4 roll down followed by Humpty 1/4 or 3/4 roll up.

Stall turn 1/4 or 3/4 roll down followed by a 90 turn.

Humpty with roll down followed by a 90 turn.

1 ¼ spin followed by a Stall turn or Humpty.

P Loop and rolling circle.

Reduce 45-degree lines as much as possible. NO down-wind 45-degree lines, they are hard to keep in the box and NO back-to-back 45-degree lines, you're guaranteed an out.

NO center box loops, in fact, if at all possible, avoid vanilla loops altogether - they are very hard to score 10s on.

Choose the minimum K rolling turn, Rolling turns are very difficult to score well on, so try to pick the minimum required - give the judges fewer reasons to downgrade. 90 degree turns only. Generally, put the rolling turn last.

Don't beat yourself up by putting a lot of pushing in your Free.

Place more difficult figures early in the sequence so you can get them done while you are fresh and strong and can ease through the rest of the sequence.

A popular style that is emerging has been dubbed the "California Freestyle" - placing most or all the figures at the ends of the box - no center box figures. While this works well for fast airplanes that accelerate on horizontal lines, it must be flown properly so as not to be boring for the judges to watch. Even for fast airplanes, the ends must be centered in the middle 2/3s of the box.

After you draw the free on paper, or preferably drawn in OpenAero it must be practiced to determine if the sequence can be flown safely and in the box without losing too much altitude. Then get some coaching from the ground for flow and presentation. If your coach is happy, you are all set. Don't worry if you decide to make small changes during the season, just have it finalized well before the competition entry cutoff date. Your FREE KNOWN sequence will need to be submitted to the Contest Director in OpenAero format so it can be checked against the rules and for him to print out the scoring forms before the event.

The most important thing of all when it's all said and done; make sure it is safe and make sure you enjoy flying it. After all; if it is not fun - what's the point?

The Unknown programme or Judges Unknown is Programme 3 and it is designed by a guest judge or taken from a database and given to the competitors at beer o'clock the night before they are required to fly it, you are not allowed to practice fly it so you have to think it through, use your model aircraft, walk the sequence in your head and visualize as best you can. These are a lot of fun and great to watch for any huge mistakes.

Often, the judges Unknown violates all the rules for a good free sequence that I have just described, just for the fun of the judges.

For those flying the 4-minute Freestyle; look at the rules for scoring that and build your sequence that you think will tick the boxes or you will definitely miss out on some scoring points.

Cheers

Morris Tull

President.

New email; morristull@gmail.com