FNRCF CLUB RULES

2024

FNRCF Club Rules

MFNZ CLUB No. 16

Radio Control Flying Rules

These rules are intended to provide for the safe operation of radio-controlled aircraft at the club's flying site at Kaikohe Airfield (NZKO). Notwithstanding these rules, the rules and regulations of the CAA and Model Flying New Zealand take over-riding precedence.

Latitude: 35°27'04"S (-35.451110)
Longitude: 173°49'02"E (173.817222)
Elevation: 573 ft (175 m)

All members are required to read and observe these Rules.

1) Airfield Safety

a) SAFETY and COMMON SENSE at all times. Everything else will follow.

b) Flying is not permitted with only one pilot unless they have an appropriate observer present at the Kaikohe Airfield flying site

c) All pilots operating transmitters other than on 2.4Ghz frequency hopping system (FHSS) are required to check with others for frequency clashes (refer to 1.a above)

d) Taxiing is not permitted in the pits or pilot box areas or towards any person in reasonably close proximity, such as taxiing into the taxiway while a person is moving in that area.

e) Prior to flight, pilots MUST ensure they have carried out the checks shown in Rule 4 and Rule 5 in this document.

f) Any person under the influence drugs or alcohol is NOT permitted to be in control of any aircraft.

g) All children under the age of 10 MUST be under adult supervision.

h) Any person NOT holding a Wings Badge qualification for the type of aircraft being flown is not permitted to fly without an observer. The observer must hold a Wings Badge qualification for the type of aircraft being flown. and be in a position to take control of the aircraft if required.

i) The FNRCF Club Captain is the primary person responsible for the safe operation of model aircraft at the FNRCF flying site at Kaikohe Airport. At the sole discretion of the Club Captain, temporary variations to these rules may be allowed.

j) MFNZ competition events held at the FNRCF flying site at Kaikohe Airport with the prior approval of the FNRCF may operate under their own rules, so long as the only use of the airspace is for the purpose of the competition(s) and the rules of the MFNZ, the CAA and the requirements of Far North Holdings Ltd are met.

2) Model Safety

a) Models should be built to a standard such that they will not fail under normal circumstances, giving particular attention to control surfaces and connections.

b) They should be thoroughly checked prior to each flying session and after any hard landing.

c) It is recommended that rounded spinners or safety propeller nuts of the domed type are fitted to internal combustion and electric powered models and that gliders and pusher powered aircraft noses should also be rounded (no needle noses)

d) Care should be taken by the operator that propellers are of suitable size and construction for their engine or motor's operating speed. All propellers should be carefully balanced.

e) On internal combustion engines and electric motors, damaged propellers must not be used. Inspect your propellers regularly and replace any that are not in good condition

f) Metal propellers must not be used.

g) Heavy ballast, or any other heavy part, subject to jettisoning in flight is prohibited. Jettisonable ballast must be of a safe nature e.g. water.

h) All R/C models are subject to in-flight vibration, landing knocks, transport damage etc. Be sure that receivers and batteries are well protected, servos are fixed securely, control linkages (pushrods, snakes, closed loop etc.) are robust enough for their purpose, are properly supported where necessary and are as slop free as possible and that all control surface hinges and horns are fitted correctly. Pushrod clevises should fit control horns cleanly with no sideways strain and they should be fitted with a plastic or silicone tube 'keeper' as a secondary closure.

i) When starting an engine make sure that the model is restrained and cannot move forward. Restraint is best done by either a helper or by some mechanical means. Never put yourself in a position where your face is in line with a turning propeller. A broken propeller will fly out and forward so make all engine adjustments from the rear if possible. A broken propeller will also be a danger to anyone standing nearby so take care that no-one is in line with it when starting your engine.

3) <u>Radio control model flying safety.</u>

a) Before you do anything else, make sure that you understand and are complying with the field frequency control system. NEVER switch on your transmitter until you are sure it is safe. Operation on ANY frequency other than 2.4Ghz FHSS is forbidden without the express permission of the Club Captain. A frequency peg board is available in the club house should it be required.

b) Before each flying session, check that transmitter trims, rate switches etc. are in their correct positions and that each control surface on the model moves freely and in the correct sense and make sure that wherever available, a failsafe is set to prevent the aircraft flying away in the event of loss of signal.

c) Immediately before take-off, flight controls must be checked for full, free and correct movement under full power if applicable. If there are any doubts as to their operation, DO NOT FLY.

d) Do not taxi in or out of the pits area. Wheel or carry your model well clear of the pits to either of the two taxiways before commencing taxiing. Stop the model well clear of the pits when taxiing back after landing. **Do not put other pilots at risk**.

e) Before take-off, check that both ground and sky are clear and never take off or land towards other pilots, spectators or the pits area.

f) Always make the initial turn after take-off away from the pit area. Diving manoeuvres should always be pointed away from other people.

g) Always maintain a clear view of the model and always fly within the designated area.

h) At any sign of malfunction or jettisoning of model parts, land as soon as it is safe to do so.

i) Do not distract pilots, particularly when they are controlling models taking off or landing.

j) NEVER assume that the landing area is clear even if you have called landing. In emergency situations call for help from your fellow pilots and always be prepared to land in a safe place off the landing area if necessary. In ALL cases, the safety of people is paramount.

4) <u>Pre Flying Session Model Checks</u>

On arrival at the flying site:

a) Check airframe for any transit damage.

b) Check that servos and linkages are secure.

c) Check undercarriage for secure fixing and correct alignment.

d) Check propeller for damage and secure fixing.

e) Check receiver aerial for damage and, with 2.4 GHz equipment, that the orientation is correct.

f) Carry out a range check if any changes or re-installation of equipment have taken place since the last session or if a history of range problems exists.

g) Carry out a failsafe check and make sure that it does what you expect.

h) Check that the receiver and transmitter batteries have sufficient capacity for the intended use.

5) <u>Checks Before Each Flight</u>

a) Obtain frequency clearance if required (See 3.1 above). Understand exactly what you are doing and do not forget this step.

b) Check that all controls operate freely and do not bind or stick at any point in their movement.

c) Check that all controls move in the correct sense. For conventional models, stand behind the model and look for:

i) Elevator stick back – Elevator comes up.

ii) Aileron stick right – Right hand aileron comes up.

iii) Rudder stick right – Rudder moves to the right.

d) Check that all control surfaces are in their correct positions with the transmitter trims at neutral.

e) Look for any minor radio malfunctions such as slow or 'jittery' servos, glitches etc. If in doubt, DO NOT FLY.

f) Check Rx and Tx battery capacity is sufficient for the intended flight with an added safety factor.

g) With I/C models:

i) After starting the engine and allowing it to warm up, check that the pick-up from idle to full power is satisfactory. Hold the model with its nose pointing upwards at a steep climbing angle for ten or fifteen seconds and check engine operation at full power. If the engine falters or cuts it is usually set too lean and must be re-tuned. Repeat the test until the engine runs correctly in the nose-up attitude.

h) With electric models

i) The first and most important principle of electric flight ground safety is to understand that the instant you start to plug in the flight battery, the model you are holding may transform itself from a dead airframe into one with its motor running at full revs and all controls moving. No matter how good your other safety checks, you must be prepared for this to happen every single time you start to connect the flight battery. If a separate Rx battery is fitted, then you have the opportunity to check the operation of the radio equipment before the flight battery is plugged in.

ii) Since plugging in the flight battery is nearly always a two-handed job you must give serious thought to how your model will be restrained BEFORE it does something you don't expect. When plugging in, positive restraint, either by a helper holding the model or by some other method and staying completely clear of the propeller must always be part of your regular routine.

iii) Electric motors have very different power and torque characteristics to normal IC model engines. You must take very great care when setting up their control systems and handling them as an accident, such as the propeller hitting your hand, which would stall a glow engine, might just make an electric motor turn even harder.

i) Just before you go out to fly, DOUBLE CHECK that all transmitter trims, rate switches, mixers etc. are in their correct positions and that the transmitter meter is 'in the green', that you have the correct model selected and that your aerial is correctly positioned.

j) Finally, with the aircraft held securely (usually on the ground for i/c models but not if the failsafe is set to retract the undercarriage), open up to full power and re-check all flying controls again for full and free movement, also noting any glitches, hesitations or odd vibrations. If ANYTHING seems odd, DO NOT FLY

k) Be S.M.A.R.T. with your transmitter.

l) S = Switch - Ensure it is OK to switch on.

m) M = Model - Ensure the correct model is selected.

n) A = Aerial - Ensure the aerial is secure and free from damage and contamination, extended where necessary and orientated as per the manufacturer's guidelines.

o) R = Rates - Ensure you have the correct rates, modes and trims selected.

p) T = Transmitter - Check that your transmitter voltage is safe to use.

6) <u>Checks After Each Flight</u>

a) Receiver OFF then transmitter OFF (Unless your equipment manufacturer specifies otherwise).

b) Check propeller, airframe, undercarriage, wing fixing etc. for security of fastening and for possible flight or landing damage.

REMEMBER – Never fly with a damaged aircraft or propeller, or with any possible radio problem.

7) <u>Altitude</u>

a) The maximum altitude of any model flown at FNRCF is 400ft Above Ground Level unless a NOTAM has been issued. FNRCF operates on an airport (NZKO) and is legally required to comply with the CAA Regulations Part 101 (101.205).

8) <u>Observers</u>

a) There must be at least one dedicated observer in the pilots box when up to three aircraft are airborne.

b) Two dedicated observers must be present on the flight line when more than three aircraft are airborne. The observers role is to watch for full size aircraft that enter our airspace. The observer shall instruct the model pilot to descend immediately if the full-size aircraft is low or there is a perceived safety risk.

c) Under MFNZ Rules an Observer must hold a current wings or observer qualification.

9) Who may fly at FNRCF Kaikohe Airfield

a) All persons flying on the FNRCF flying site must be a financial member of both the FNRCF and MFNZ.

b) Guests must hold an appropriate MFNZ Wings Badge for the type of aircr4aft being flown (unless under instruction).

c) They must be accompanied by an FNRCF club member at all times.

d) This privilege is limited to 3 days per year for that guest.

e) At open days or where other clubs are invited to compete or participate in organised events the maximum 3 days per year rule does not apply.

10) Vehicles

a) Vehicle access to area of the airfield which require traversing or crossing the active runway is NOT allowed unless the appropriate safeguards are in place.

11) Kaikohe Airfield Operations (NZKO)

a) Kaikohe Airfield is leased by the Kaikohe Gliding Club from Far North District Council's trading company Far North Holdings Ltd.

b) The model aircraft flying site has been registered with Model Flying New Zealand as the flying site of the Far North R/C Fliers. The flying site is located on the eastern end of the de-activated runway 07/25. This runway no longer appears on the CAA airfield plate published in the Visual Flight Guide.

c) The main model flying runway is aligned East/West. The North/South runway may be used only for take-offs to the South, after leaving pits/taxi way area. Aircraft should be flown to the South side of the runway. Avoid flying too far to the West so as to avoid conflict with the gliders of the Kaikohe Gliding Club, operating on the East side of runway 17/35. In cross wind conditions, runway 13/31 may be used by the gliding club.

d) Only authorised vehicular activity and pedestrian traffic is permitted air side of the entrance gate and such traffic shall keep clear of aircraft movement areas and exercise caution at all times. Cars may be parked along the North boundary, clear of the pits area. Private cars must not be driven on operational areas of the airfield.

12) <u>Flight zones</u>

a) All pilots must familiarise themselves with the designated flight zones and at all times fly within these boundaries. Under no circumstances whatsoever should you fly between yourself and the pits area

b) All pilots must respect our neighbours at all times. Flying near to or over neighbours property is expressly forbidden – NO EXCEPTIONS.

c) Flying over the public highway (SH15) at the eastern boundary of the flight zone is strongly discouraged.

d) The model flying area is approximately 300m (North to South) and 600m (East to West). Pilots should ensure they remain in the designated flying area other than due to circumstances beyond their control, such as avoiding a mid-air collision.

13) Pilot box procedure.

a) All pilots must stand in the pilot box whilst flying their model.

b) Glider pilots may walk to their landing spot once they have called "LANDING" and checked for other approaching aircraft. They may not walk onto the active runway if others are flying.

c) No pilot may take off without first obtaining consent from all other pilots that are flying at the time.

d) Pilots must clearly call "Landing", "Low Pass", "Dead Stick" or any other activity that may affect others in flight.

e) The "Dead Stick" shout is similar to a Mayday call and all other pilots must keep clear of the landing area until the dead stick aircraft has landed (or arrived).

f) The maximum number of aircraft flying at one time is five.

14) Health and safety

a) IN THE CASE OF AN EMERGENCY CALL 111 AND ASK FOR AMBULANCE, FIRE or POLICE. In the event of a serious accident or incident please also contact the President and or Club Captain immediately.

b) FIRST AID – A first aid box is located in the club house. Please advise the Club Captain of any items used so these can be replenished quickly.

c) FIRE EXTINGUISHERS – These are located in the Club House. Please advise the Club Captain if used

15) General

a) Dogs are not permitted on site at any time, with the exception of registered service dogs, which must be on a lead at all times.

b) Responsibility is with the last person on the premises to ensure all gear (pilot box barriers, chairs, windsock etc.) are stowed away in the shed and to lock all gates that have locks on their way out. Common courtesy is required by any person using equipment to put that equipment away unless it is still being used by someone else.

c) The permitting or declining of commercial operations will be at the discretion of the committee but must be within the current MFNZ Rules.

d) Operators of models falling within the Large Model Categories as defined by MFNZ must produce LMA documentation on request.

e) Blatant breaches of these rules may lead to expulsion from the club by way of the club's constitution under sections relevant to the disciplinary action's clauses.

Appendix A – MFNZ Wings Badge

- As our flying field is on an active aerodrome (Kaikohe Aerodrome) it is a Civil Aviation requirement (and also a requirement of our Club Rules) that all pilots must fly with an observer present beside them. Flying alone is not an option and is illegal under Aviation Law.

- From the start of 2025 it will be a requirement for all Pilots with Wings Qualifications to be re-tested in their elected flying discipline every 5 years to retain currency and competence. This means that if you were Wings Qualified prior to 1st January 2020 and you have not re-qualified before 31st December 2024 then on 1st January 2025 your Wings Qualification will lapse, and you will only be able to fly with a Wings qualified Observer.

- We also anticipate that there may be potential personal insurance implications for unqualified Pilots not in the process of renewing their Wings Qualification.

- It is not compulsory until the end of 2024 for all pilots to be tested and hold a Wings Qualification, but the management committee strongly recommends that all pilots should gain a Wings Qualification as soon as practical.

- From 1st January 2025 it will be mandatory to hold a Wings Badge for the aircraft type being flown, or be undertaking a course of instruction by a designated FNRCF Instructor as a pre-requisite to sitting a Wings Qualification test. Recreational flying without a Wings Badge for the type of aircraft being flown will not be permitted.

Model Flying New Zealand Wings is a proficiency program ensuring MFNZ members are competent and safe!

Wings is broken down into 11 disciplines, 6 basic and 5 advanced, and 4 specialist endorsements, as well as Observer Training. Our Wings program is accepted by the Civil Aviation Authority as the qualification needed to operate within 4km of an aerodrome as per CAR101.205

Wings is only valid for recreational use; commercial use of the qualification is strictly forbidden and invalidates its use as well as jeopardising membership.

The qualification will be valid for a 5-year period (phased in from 2025) and is composed of both theory and flight test, administered by Model Flying New Zealand Wings Examiners.

Full details of the Model Flying New Zealand Wings Program can be found at:

https://www.mfnz.org/members-pilots/wings-programme/

or

https://drive.google.com/file/d/11nUoSkUYkERSsF1BcldN_gTojzBGcLMD/view