

Kapiti Aeromodellers Club Inc.

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(Full Name of Club)

HEALTH AND SAFETY PLAN

FOR OPERATING MODEL  
AIRCRAFT

AT

Queen Elizabeth Park.Paekakariki  
MacKays Crossing Entrance

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(Full address of flying location)

21/03/2016

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(Date)

Kapiti Aeromodellers Club Inc Committee

Date: 21 / 03 / 2016

## **Introduction**

Kapiti Aeromodellers Club Inc. conducts model aircraft flying activities at Queen Elizabeth Park, Paekakariki for club members and invited members of other clubs affiliated to Model Flying New Zealand.

Whilst flying model aircraft at this location does not constitute a public event, spectators are welcome to attend and observe.

Safety is of paramount importance in all of the flying conducted at this airfield.

## **Rules and Procedures**

Rules governing the safe operation of radio controlled model aircraft at this location are listed in the following publications:

1. CAA Regulations Part 101
2. Model Flying New Zealand Members Manual
3. NZJMA's Jet Turbine Code of Practice
4. Large Model SIG Code of Practice
5. This Club's safety rules and guidelines

MFNZ and NZJMA have approved this site for the flying of all types of model aircraft including jet turbine models in terms of the above listed publications.

## **Hazards and Risks**

A Risk Assessment has been undertaken and a Register of Hazards established. Both the severity of a risk and the frequency of the risk occurring are taken into account to give a final score by using the methodology recorded in MFNZ's "Risk Assessment Procedure".

Mitigation of identified risks is undertaken by a number of control methods to lower the final score to an acceptable level.

Should a serious accident occur, a post-accident audit will be conducted to capture any additional actions to make model flying at this site even safer.

Any queries regards this document should be directed to the Club's President.

### **Proximity to Personnel**

The approach adopted to ensure the safety of members, observers and nearby residents is one of lateral separation and flight direction limitations. This is a similar approach to that taken when considering safety at aviation locations and events. The logic is based on accepting a low risk of an aircraft accident, and following this occurrence, trying to ensure the aircraft is as far away from any people as possible.

The layout of the airfield and establishing safety lines makes best use of this approach.

### **First Aid**

A comprehensive first aid kit is located on site and some members also carry their own first aid supplies.

A Defibrillator is part of the Club's 1<sup>st</sup> aid equipment and is available in the club house.

### **Fire Hazard**

Radio controlled model aircraft generally fall into three categories: -

#### **Diesel, Methanol and Petrol fueled Aircraft**

These types of model aircraft have been flown internationally for several decades with a very low incidence of fire.

#### **Electric Powered Aircraft**

Electric aircraft are powered by Lithium Polymer batteries which may combust in the event of a crash or use of incorrect charging procedures. The fire is of a very short duration and risk of environmental damage is low.

### **Jet Turbine Aircraft**

Jet turbines use Diesel, Kerosene or Jet A1 fuel for their operation. The small fuel loads carried and the temperature of exhaust gases pose a small risk to the surrounding area.

### **Fire Mitigation**

A commercial sized dry power fire extinguisher is located on site and is readily accessible to all club members.

Members charging batteries at the strip do so in a safe manner away from buildings and combustible materials. Members are encouraged to charge and store batteries, in fireproof containers.

Each jet turbine pilot will have his personal CO<sup>2</sup> fire extinguisher when flying at this location.

### **Attachments:**

1. Key Contacts List
2. Hazards Register
3. Flight Line Guidelines

### **Attachments: Separate Electronic Documents**

4. Risk Assessments and Control Measures
5. Aircraft Inspection Form
6. Club Safety Rules and Guidelines

### **Attachment 1: Key Contacts List**

List of Contacts	(List name of contact)	(List phone numbers)
Club Committee	Steve Hutchison – President	021 644595 04 2973097
Club Safety Officer	Don Lynn	04 905 6169

Paraparaumu Fire Station		111
Wellington Free Ambulance Paraparaumu		111
Greater Wellington Regional Council	Brendan Bulliffe – Ranger Wayne Boness Parks Controller Drew Brown - Farmer	021 667 321 0276000180
Model Flying New Zealand	Jonathan Shorer	06 362 6313
CAA	Rex Kenny	04 560 9458

## Attachment 2: Hazards Register

Environmental		<i>(The following are examples of type of information to be recorded)</i>
Airspace		<p>CAA has a registered “Danger Zone” covering our airspace.</p> <p>Danger Area designation: D620</p>
Airfield	Runway	<p>North/South alignment. 155 metres</p> <p>Unrestricted approach from North and South.</p> <p>Hazards to the North of strip.</p> <p>Cycleway 50 metres from Northern end and uncontrolled environment beyond.</p> <p>Hazards to the South of the strip.</p> <p>Sandhills, Farmland. Public access road 400 metres from south end of strip</p>
Flight Envelope		<p><i>The flight envelope extends to the north, east and south.</i></p> <p><i>No flying West of a line drawn north south of the pilots box.</i></p> <p><i>Aircraft to be within line of sight at all times.</i></p>
Surrounding Area	<p>Public Road</p> <p>Public park access road</p> <p>Cycle/Walking track</p> <p>Horse riding business.</p>	<ul style="list-style-type: none"> <li>• <i>Motorway to the East – 1.5kms from pilots’ box.</i></li> <li>• <i>500 metres from South end of runway</i></li> <li>• <i>50 metres from Northern end of strip</i></li> <li>• <i>1km to the East of the strip</i></li> </ul>

	Stables at the Park	
Grounds Layout	Airstrips	Grassed area – fire hazard
	Pilots' Box	Personnel close to runway
	Area to the North.	Scrub-land – fire hazard
	Pits Area	Behind Safety fence
	Spectators	Spectators only allowed in pits area by invitation. Spectator area 30 metres from runway
Radio Spectrum		Use of MFNZ approved frequencies only with most pilots using 2.4 GHz. Peg Board in use for 26-72MHz radios
Meteorology		Windsock. In house anemometer mounted on club house
Fire		Spread of fire through undergrowth.
<b>Mechanical</b>		
Aircraft		Failure of aircraft
RC system		Failure of communications system
Fuel		Fire Hazard – covered above
Accident/Failure		On airstrip
		Off airstrip
Collision		On circuit
<b>Human</b>		
Pilot Qualification		Control of aircraft
Operational Limitations		Operating within airspace and geographical limits.
Pilot Awareness/Co-ordination		Loss of awareness of operating environment
Safety Management		Co-ordination of safety response.

Medical		Unexpected medical event affecting ability to control aircraft. Sunburn. Minor and/ or major injuries.
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### Attachment 3:

## FLIGHT-LINE GUIDELINES FOR FLYING AT

### Kapiti Aeromodellers Club

(Name of flying location)

When more than one pilot is present, the following matters are to be discussed and agreed: -

#### Runway:

- In Use
- Circuit Direction
- Entry
- Exit
- Queuing

#### Startup Area

- Positioning
- Jets - fire extinguishers present

#### Take Off

- Once airborne move to Pilots' Box
- Takeoff run, only 80m down runway.
- Aircraft not to be at full speed going past the pilots' box.

#### Circuit:

- Limitations 500 ft AGL North of the Whareroa Stream. 650 ft AGL South of the stream.
- All flying to the East, North and South of the runway.
- No direct turns or maneuvers directly towards any occupied areas.
- No over-flying of residential properties.

#### Emergencies:

- Jet turbine pilots – personal fire extinguishers on hand.
- Club Fire extinguishers are located in the Clubhouse and tractor shed.
- Anyone going to recover aircraft MUST have approval of active pilots.
- No one on the active runway unless specifically cleared by active pilots.

#### Engine outs:

- Verbally communicate immediately



- Control aircraft to runway, or if not possible, to the most appropriate safe area to the North/East/South side of the runway onto farmland if possible.



## **KAPITI AEROMODELLERS' CLUB INCORPORATED**

### **CLUB OPERATING RULES AND PROCEDURES**

Amended May 2015

**Please note that these operating rules and procedures are additional to rules and regulations as published by Model Flying New Zealand & CAA**

1. All models, new or repaired, are to be inspected by an authorized model inspector prior to being flown for the first time from the club field. (A list of authorized model inspectors will be displayed on the Club notice board).
2. The frequency board and pegs must be used at all times when frequencies other than 2.4GHz are operating.
3. Should the frequency board be unavailable, before switching on your transmitter, pilots must pre-arrange appropriate procedures to prevent the possibility of a frequency clash.

#### **IF YOU DO NOT HAVE A PEG YOU MUST NOT SWITCH ON YOUR RADIO**

4. When more than one member wishes to utilize the same peg, then occupancy of the peg should be restricted to 15 (fifteen) minutes. This includes engine tuning time. The peg must then be returned to the board. Be considerate to those who may be waiting.
5. Prior to starting. All models, including electric, **MUST** be restrained either by an assistant or some form of tether.
6. If it is necessary to run an engine at high revs, this should be done away from the pit area being used at the time and past the clubhouse. Ensure that no one is standing in the propeller plane or in front of the model.
7. Before attempting to fly, check the number of models that are airborne. The maximum number which may be in the air at one time is 5 (FIVE).
8. Mufflers must be fitted to all engines that are designed to be so fitted.

9. All aircraft shall conform to MFNZ noise restriction requirements and must be operated at minimum practical noise.

10. No aircraft may be intentionally flown to the West of the runway or over the pits area. The clubhouse side of the runway is OUT of BOUNDS

For a sketch of flight zone see the last page

For clarification: (added Feb 2015)

*While doing circuits, pilots must not cross a line drawn along the edge of the runway. (No flying behind the pilot, over pits, club-house, or beach).*

*North end take off and landing - pilots may fly to the line from the pilot's box to the trig station, as long as they are not more than 100m out.*

*South end take off and landing - pilots may fly to a line from the pilots' box to the road gate.*

This means that we can maintain safety by keeping much of the traffic back behind the runway edge, but pilots have the discretion to take a bit more space, e.g. to cope with cross winds, during take off and landing.

11. Height restrictions, as directed by CAA, are as follows:

The Whareroa stream (approx 280 m North of the clubhouse) forms the landmark reference for the height restrictions.

North of the Whareroa stream - 500 ft AGL

South of the Whareroa stream - 650 ft AGL

12. Observers: Observers are NOT required when:

1 (one) aircraft is airborne and flying below 400 feet.

Observers ARE required:

(a) When there is a possibility of flying at over 400 feet, irrespective of the number of aircraft airborne.

(b) 2 (two) aircraft are airborne even if they are flying at below 400 feet ---- 1 (one) observer

(c) 3 (three) aircraft are airborne even if they are flying at below 400 feet ---- 2 (two) observers.

(d) 4 (four) aircraft are airborne even if they are flying at below 400 feet---- 3 (three) observers.

(e) 5 (five) aircraft are airborne even if they are flying at below 400 feet. ---- 4 (four) observers.

When more than one aircraft is being flown, it is mandatory that "circuit flying" be strictly observed.

13. Flying and associated activities must be carried out in a safe and considerate manner. If intending to make a low pass check that the runway is clear and make your intentions known to other pilots. If flying with others, avoid making repeated low passes as this is distracting to other pilots.

14. If flying aerobatics, these must be flown on a line to the East of the runway. No aerobatics are to be performed near the pit area or above the strip.
15. Circuit directions are Right hand on the Northerly vector and Left hand on the Southerly vector. If you do not feel confident in your ability to fly the circuit pattern being flown at the time, then you should not fly until you enlist the help of an experienced pilot.
16. Should you experience any unusual characteristics during flight, e.g. control flutter, erratic response etc, the model must be landed as soon as possible and checked out before attempting to fly again.
17. If your model has engine failure, call "Dead stick". On such occasions other pilots **must** give landing priority to the affected model.
18. Prior to landing, ALWAYS advise other pilots and if necessary move out of the pilot's box to have clear sight of the runway. If you need to "go around" advise other pilots. Once you have landed, remove your model from the strip as soon as possible and notify any pilots still flying when the strip is clear.
19. **DO NOT** taxi into the pit area.
20. Visitors wishing to use the Club's flying facilities must be introduced by a Club member who thereby accepts responsibility for the visitor and ensures that Club procedures are followed.
21. Any visitor wishing to fly solo must provide evidence of current MFNZ affiliation and proficiency.
22. Any new member or visitor not holding a current wings badge, must be checked out and observed by an approved instructor before flying for the first time at the KAMCI field.
23. When flying, any non wings badge holder is to be supervised by a wings badge holder.
24. No animals are allowed within the fenced area of the flying field.
25. Children must be kept under close supervision at all times.

