



RISK ASSESSMENT CMAC

SECTION 1

Name of Model Flying Club	Christchurch Model Aero Club. (CMAC)
Name and Location of Model Flying Site	Thompsons Road Willows West Melton
Site Owner's name	Environment Canterbury
Does the club hold a formal lease defining use of site and term of tenancy?	WIP with ECAN
Is model flying at this site an approved activity in terms of the local Council's District Plan?	Listed in Community Information Christchurch CINCH
Does the club have Resource Consent for flying of model aircraft at this site?	No resource consent required as the activity is compliant with the SDC district plan; and has existing use rites. And the activity had the approval of the then lease-holder
Assessor's name (1)	Graham Moffat
Position in Club	Secretary Approved at CMAC Committee meeting 8th July 2021
Assessor's Signature	Grahame Hart
Assessors's Name (2)	President Approved at CMAC Committee meeting 8th July 2021

Position in Club	
Assessor's Signature	
Risk assessment checked and authorised by Club Committee on8../...06../...21.
Review of Assessment due on1..../...06../...23 (Unless circumstances relating to operation change, a period not exceeding 24 months is suggested)

SECTION 2

SUBJECT ASSESSED: The operation of radio controlled model aircraft at the site specified above.

SECTION 3

	Yes	No
Is/Are the Assessor(s) familiar with the requirements of: -		
CAA Rule 101?	X	
MFNZ Policy documents and Manuals?	X	
NZJMA Turbine Code of Practice?		X
This Club's Safety Rules and Regulations?	X	

SECTION 4 – SITE SPECIFIC RISKS

Record details of individuals, organisations, vehicles, buildings and anything else other than club members and bona fide visitors that could be placed at risk by Club operations

Ecan Staff

SECTION 5 – HAZARDS REGISTER

Date	Hazard

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RISK ASSESSMENT OF BEFORE AND AFTER CONTROL MEASURES

GROUP A RISKS - ENVIRONMENTAL

Identity of Hazard	Severity x	Frequency	= Risk Factor
Details of Hazard: Use of Airspace relative to: - <ul style="list-style-type: none"> • Full sized aircraft • Other club members aircraft • Visibility - height • Visibility - sun blindness • Spectators close to runway 	1	2	2
Control Measures: <ul style="list-style-type: none"> • CAA approval held to 950.ft. AGL • CMAC has a Danger Area D829. • No more than three model aircraft flying at any one time without an observer. • Flight envelope to the South of runway avoids sun problems • Defined spectator area 30 metres from runway • Observers for each pilot when large scale and jet aircraft being flown 	Residual 1	Residual 1	Residual 1
Details of Hazard: Airfield runway 125..metres aligned East West.....	1	2	2
Control Measures: Club safety rules defining: - <ul style="list-style-type: none"> • use of runway • approach • speed limitation on aircraft going past pilot box • flight envelope • positioning of pilots' box to facilitate communication between pilots. 	Residual 1	Residual 1	Residual 1

Details of Hazard: Fire hazard due to surrounding grass area	3	2	6
Control Measures: <ul style="list-style-type: none"> • Dry Powder fire extinguisher located in club container. • When flying from a alternative site a Fire Extinguisher is to be available in summer • All jet pilots are required to have personal CO² fire extinguishers. • Cars to use established tracks • Cars not to be parked where grass is in contact with exhaust • Fuse dethermalizer aren't permitted 	3	1	3
Details of Hazard: Fire Hazard due to dry grass on airfield.	2	2	4
Control Measures: <ul style="list-style-type: none"> • Runways are mowed at least once a week in summer to a low level. • Infield and surrounding area grass height is maintained at less than 30cm by regular mowing. 	1	1	1
Details of Hazard: Radio Spectrum issues causing loss of control of aircraft being flown.	2	1	2
Control Measures: <ul style="list-style-type: none"> • Strict use of MFNZ approved frequencies. • Most pilots use 2.4 GHz frequency hopping spread spectrum transmitters and receivers. 	1	1	1
Details of Hazard: Meteorology – poor visibility and adverse wind direction.	3	2	6
Control Measures: <ul style="list-style-type: none"> • Weather minimum 3 km visibility (CAA Reg 101) • Jet aircraft – more than 8kts cross-wind, flying to be assessed. 10 kts cross-wind, flying to halt. 	3	1	3

GROUP B when flying from sites other than the Strip SPECIFIC RISKS – ENVIRONMENTAL

Identity of Hazard	Severity x	Frequency	= Risk Factor
Details of Hazard: Grass Fire	4	1	4
Control Measures: Cars to use established tracks and park in designated areas where grass is not in contact with exhaust	2	1	2
Details of Hazard: Vehicle damage to plants and moss	3	1	3
Control Measures: Cars to use established tracks and park in designated areas	1	1	1
Details of Hazard: Uneven Ground	1	1	1
Control Measures: Be aware if uneven ground and take care when launching and retrieving models.	1	1	1

GROUP A RISKS - MECHANICAL

Identity of Hazard	Severity x	Frequency	= Risk Factor
Details of Hazard: Radio control system – failure of aircraft communication system.	1	3	3
Control Measures: Transmitter “Range Check” for every model being flown prior to first flight each day or when major changes have been completed.	1	2	2
Details of Hazard: Receiver battery failure.	1	2	3
Control Measures: <ul style="list-style-type: none"> Pilots self-regulatory check of battery voltage prior to first flight each day. 	1	1	2
Details of Hazard: LIPO battery fire due to aircraft crash, battery failure or incorrect charging procedures.	1	3	3
Control Measures: <ul style="list-style-type: none"> All LIPO batteries are charged on the ground away from vehicles and club buildings. Fire is of limited duration (approximately 30 seconds) and contained within small area surrounding the battery. Club maintains a bucket of sand in the pits area with which to smother the battery. Members encouraged to use fire proof bags when charging LIPO batteries. 	1	1	1
Details of Hazard: Collision of model aircraft being flown at the same time.	1	3	3

Control Measures: <ul style="list-style-type: none"> No more than three aircraft in the air at any one time without an observer. Observers required when flying large scale and jet models. All aircraft are flown in common circuit direction. 	1	2	2
Details of Hazard Propeller Strike	2	2	4
Control Measures Be aware of danger to hands when starting a engine. Use electric starter. Use Chicken stick. Wear a glove	2	1	2
Details of Hazard Uncontrolled Models	2	2	4
Control Measures Launch away from spectators and cars. Untrimmed models to be test flown in a controlled air space.	2	1	2

GROUP B SOARING HAZARDS SITE SPECIFIC RISKS – MECHANICAL

Identity of Hazard	Severity x	Frequency	= Risk Factor
Details of Hazard: Winch turnaround and stakes become dislodged and strike someone.	2	2	4
Control Measures: All winches to use MFNZ specified turnaround (400 x 10mm) and winch (300 x 8mm) stakes	2	1	2
Details of Hazard: Launching glider strikes person/property	3	1	3

Control Measures: A: When multiple pilots flying, CD to specify launch area and direction of launch B: All Gliders to have MFNZ specified nose radius C: No launching while people are positioned 5m either side of the line.	Residual 2 1 2	Residual 1 1 1	Residual 2 1 2
Details of Hazard: Winch or line entangles clothing or body parts	3	2	6
Control Measures: Obvious quick release from battery or winch controller must be available	1	2	3
Details of Hazard: Mid-air collision between model aircraft from different activities.	2	3	6
Control Measures: A: In the event of mixed activities at the flying site, groups are to agree as to the specific areas to be used by each group. B: Scheduled official and published flying activities to have air-space priority.	2	1	2

GROUP A RISKS - HUMAN

Identity of Hazard	Severity x	Frequency	= Risk Factor
Details of Hazard: Pilot qualification - control of aircraft	2	3	6
Control Measures: <ul style="list-style-type: none"> All pilots current MFNZ members and covered by MFNZ insurance. Only pilots with MFNZ "Wings" badge appropriate to type of aircraft being flown. Other pilots must have an observer with MFNZ "Wings" badge appropriate to type of aircraft being flown. 	2	1	2

Details of Hazard: Operational Limitations – operating within approved flight envelope and geographical limits.	2	2	4
Control Measures: <ul style="list-style-type: none"> Briefing of new club members and bona fide visitors on flight envelope. No turns towards the pits or spectators. All flying down the strip and within flight envelope. 	2	1	2
Details of Hazard: Pilot awareness/co-ordination – loss of awareness of operating environment.	2	2	4
Control Measures: <ul style="list-style-type: none"> All pilots to be in Pilots' Box to facilitate communication. Large Scale models and Jets to have observer to inform pilot of proximity of other aircraft and other hazards. 	2	1	2

GROUP B SITE SPECIFIC RISKS – HUMAN

Identity of Hazard	Severity x	Frequency	= Risk Factor
Details of Hazard:			
Control Measures:	Residual	Residual	Residual
Details of Hazard:			
Control Measures:	Residual	Residual	Residual

Details of Hazard:			
Control Measures:			