



**Risk Assessment**  
**for**  
**Pakenham & District**  
**Aircraft Radio Control**  
**Society Inc.**

Association number: A0027172K

ABN 67 455 447 450

May 2022

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## INTRODUCTION

The safe operation of all facets of the club has always been of the highest consideration. The operation of model aircraft requires safety regulations to ensure the safety of the operators and other people and property in the vicinity. There are regulations designated by the Civil Aviation Safety Authority, the Model Aeronautical Association of Australia Manual of Procedures and the Club's Safety Rules. All members and visitors are required to operate within these published rules and regulations.

The Club has been operating continuously since 1966 and has a good safety record over this period. There have been a number of injuries relating to the operation of model aircraft, most of which have been self-inflicted lacerations resulting from contact with rotating propellers. Members are continually reminded of the dangers and to use the correct operating procedures and safety facilities provided in an attempt to prevent these injuries. This type of injury is in line with the majority of incident reports to the State/National Association's Insurance police that also requires a statement of how future incidents will be prevented.

In relation to the use of club machinery, used to maintain the property, over this period of time the club has an excellent record with only one minor injury being reported. Due to the possibility of a major injury occurring due to the type of equipment being used additional care and procedures are in place with all operators of the equipment being required to undertake a training program including the operating procedures, and safety requirements.

The operating area being used by the club has been inspected in relation to work programs outstanding and to recognise any safety hazards that need rectifying. A list of these items has been provided with the items relating to safety issues being highlighted in red.

A risk assessment is enclosed relating to these issues and a Policy Statement produced from the assessment.

## RISK ASSESSMENT - Operation of Model Flying Field

Model Aircraft Operation												
HAZARD #	IDENTIFY HAZARD	HOW WILL THEY BE HARMED	IDENTIFY WHO WILL BE HARMED	IDENTIFY THE EXTENT OF THE HARM AND HOW	CURRENT CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL	ADDITIONAL CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL
1	Models hitting parked cars	Strike Damage	Vehicles	Damage to Panels or windows	CASA 101, 30 metre Rule, MAAA MOP's	1	2	3	Designated parking areas considerable distance from the flying area and exceed the 30 metre rule. Drive not in flight zones into property	1	2	3
2	Persons being struck by model aircraft	Strike Damage	Members or public not involved in the operation of model aircraft	Impact and Lacerations	CASA 101, 30 metre Rule, MAAA MOP's	2	3	5	Field conforms to the 30 Metre Rule. There is also a ditch and long Grass "Buffer Zone" separating people from the flying area. Public viewing area in pits complies with the 30m rule. Only persons involve in the flight operation of model aircraft permitted in the Pilot areas.	1	3	4
3	Fire Hazard from crashed Model Aircraft	Damage as a result of fire	Grazing grass, Model, Fences	Possible damage to fencing	The surrounding area is either grazed by cattle or slashed for hay	1	3	4	Fire extinguisher in various locations around the site, including a fire trolley at the cross over corner of the runways	1	3	4
4	Injury due to propeller Strike	Hit by rotating propeller of Model Aircraft	Operator of Aircraft	Lacerated Hand or fingers	The club provided aircraft restraints and designated starting areas away from the pit area	3	3	6	Club flying rules lists start up safety precautions and operating procedures. Models to be restrained during start up procedures or the arming of electric models. Compliance of safety procedures continually monitored and promoted. Flight proficiency standards are required and training is provided.	2	3	5
5	Model hits full size aircraft	Strike Damage	Full size Aircraft or Pilot and passengers	Worst situation, full size aircraft crash	Low density full size aircraft traffic, field location designated and registered with CASA. With height limit of 1500ft	0	5	5	Field has a CASA approved warning beacon light installed to alert full size aircraft. Warning siren installed to warn model aircraft pilots of full size aircraft in the area.	0	5	5
6	Interference with other model aircraft due to operation on same frequency	Crashed models	Models	Demolished models	Frequency control key board in a conspicuous location for required frequencies.	1	3	4	Club flying rules state the frequency control procedure. All new members receive the club's safety rules and they are also available on the club's Webb site. Club rules are continually promoted	0	3	3
7	Models crashing in Pit Area	Model strike to persons or equipment	Persons or model aircraft or equipment	Strike or lacerations to persons or damage to models or equipment	MAAA Flight proficiency program in place.	2	3	5	All members and guests pilots are required to be of at least solo rating for the type of aircraft they fly. Large model aircraft required to be certified my MAAA Inspector. Models not up to standard are not permitted to fly.	1	3	4
8	Mid Air collisions of models	Collision between models	Model aircraft	One or both models destroyed	Club rules state, When more that two models are flying together pilots are required to fly circuits in the same direction determined by the wind direction. This rule minimizes the	1	3	4	.Additional club rules require pilots to announce their low passes and manoeuvres up the runway in front of the pilot area.	1	3	4
9	Vehicle on local road being struck by model aircraft	Model strikes the vehicle	Vehicle	Damage to Panels or windows	Local road is over 250 metres away from pilot area and has very low traffic volumes.	1	3	4	CASA 101, 30 metre Rule, MAAA MOP's. Models well over the 30 metre rule and required to be high enough to reach back to the model field property in the case of a flame out.	1	3	4
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**RISK ASSESSMENT - Property Hazards**

<b>Property Condition</b>												
HAZARD #	IDENTIFY HAZARD	HOW WILL THEY BE HARMED	IDENTIFY WHO WILL BE HARMED	IDENTIFY THE EXTENT OF THE HARM AND HOW	CURRENT CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL	ADDITIONAL CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL
1	Tripping hazard & Fall	Injury as a result of a fall down steps	Individual using clubroom's stairs in the dark	Bruising laceration or concussion		3	3	6	Luminous strips installed to show the edge of the stairs after dark.	1	3	4
2	Tripping hazards around the clubrooms, social area and pits	Injury as a result of a fall down steps	Member or guest at the flying field	Minor bruising or twisted ankle	Concreted pathways installed around the clubrooms, hay shed and toilet block. Area regularly mowed to provide a smooth walking areas and model pit	2	3	5	Property periodically inspected to identify tripping hazards. Regular inspection of facility particularly during the summer period and filling in where cracks are formed	1	3	4
3	Person being struck by a car	Injury as a result of being struck by car.	Member or guest at the flying field	Serious injury possibly requiring hospitalisation	Barriers designating parking areas.	1	4	5	Speed limit down driveway and in parking area.	1	3	4
4	Climbing fence to retrieve out landed models	Injury from barbed wire or falling	Pilot and assistants	Lacerations or twisted muscles or joints		2	3	5	Styles installed at three locations to alleviate the need to climb over the fences. Walkways mowed to the location of the styles. Gate located in the middle of fence opposite the main E-W strip	0	3	3
5	Fire Hazard	Damage to property	Damaged Fences	Replacement of burnt out fencing	Property grazed or slashed. Fire breaks around boundary	1	3	4	Area used for Model Flying regularly mowed/slashed and generally maintained.	0	3	3

**RISK ASSESSMENT - Operation of Equipment**

**Husqvarna and John Deere Ride On Mowers**

HAZARD #	IDENTIFY HAZARD	HOW WILL THEY BE HARMED	IDENTIFY WHO WILL BE HARMED	IDENTIFY THE EXTENT OF THE HARM AND HOW	CURRENT CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL	ADDITIONAL CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL
1	Feet coming into contact with the cutting blades	Mower Blades impacting persons	Operator, Visitors or persons attending at the field.	injury	Safety Cut Off switch connected to the seat of the Mower. Foot guard surrounding the cutting blades	2	3	5	Operators trained in safe operation of the Mower, including only operating cutter with the discard shoot in place, disengaging cutting blades and turning off the equipment when approached by other persons Recommended use of PPE Equipment including Steel capped boots.	1	3	4
2	Person being struck by object discharged through mower shoot.	Person impacted by discharged object.	Visitors or persons attending at the field.	injury	Safety guard around cutting blades and shoot giving unidirectional discharge of grass and objects at a low level	3	2	5	Operators trained in safe operation of the Mower, including operating in a manner that the discharge is directed away from members and visitors and clearing people away from areas to be mowed. Operator instructed to ensure the discharge guard is lowered.	2	2	4
3	Cars or Models being struck by discharge	Cars or models impacted by discharged objects.	Cars or models at the field	Minor damage to property	Safety guard around cutting blades and shoot giving unidirectional discharge of grass and objects at a low level	3	2	5	Operator trained not to engage cutting blades when moving through a car park being used by members or visitors. When mowing through the pit area operators to mow with the shoot facing away from models or preferably have owners relocate their equipment during mowing .	2	2	4
4	Loud and continuous high noise level	Damage to hearing	Operator	Damage to Hearing	Mower not of exceptionally high noise level	3	4	7	Operators trained in safe operation of the Mower, including the use of PPE Equipment in particular the use of effective hearing protection.	1	4	5

5	Machine roll over	Crush Injury	Operator	Crush injury or broken limbs	Wide wheel base stable mower	3	4	7	Operators instructed not to operate machine in steep spoon drains. Deep spoon drains are chemically treated to negate the requirement of mowing	1	4	5
6	Operator struck by model aircraft	Model impacting person	Operator	Injury or Death	CASA 101, 30 metre Rule, MAAA MOP's	3	5	8	Operators not to operator on duty runways being used to operate model aircraft. Pilot also required not to operate their model aircraft when runway is being mowed under the same rules.	0	0	0

### RISK ASSESSMENT - Operation of Equipment

Kubota Tractor Mower												
HAZARD #	IDENTIFY HAZARD	HOW WILL THEY BE HARMED	IDENTIFY WHO WILL BE HARMED	IDENTIFY THE EXTENT OF THE HARM AND HOW	CURRENT CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL	ADDITIONAL CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL
1	Feet coming into contact with the cutting blades	Mower Blades impacting persons	Operator, Visitors or persons attending at the field.	injury	Safety Cut Off switch connected to the seat of the Mower. Foot guard surrounding the cutting blades	2	3	5	Operators trained in safe operation of the Mower, including engaging the safety shields, disengaging cutting blades and turning off the equipment when approached by other persons. Recommended use of PPE Equipment in particular Steel capped boots.	1	3	4
2	Person being struck by object discharged from the cutters.	Person impacted by discharged object.	Visitors or persons attending at the field.	injury	Safety guard around cutting blades to control discharge of grass and objects at a low level	3	2	5	Operators trained in safe operation of the Mower, including not operating the equipment close to members and visitors and clearing people away from areas to be mowed. Operator instructed to ensure the discharge guard is lowered.	2	2	4
3	Cars or Models being struck by discharge	Cars or models impacted by discharged object	Cars or models at the field	Minor damage to property	Safety guard around cutting blades giving a low level discharged of grass and objects.	3	2	5	Operator trained not to engage cutting blades when moving through a car park being used by members or visitors. Mower not to be used in areas occupied by members and visitors.	2	2	4
4	Loud and continuous high noise level	Damage to hearing	Operator	Damage to Hearing	Mower not of exceptionally high noise level	3	4	7	Operators trained in safe operation of the Mower, including the use of PPE Equipment in particular the use of effective hearing protection.	1	4	5
5	Machine roll over	Crush Injury	Operator	Crush injury or broken limbs	Mower has roll bars installed. Wide wheel base stable mower	3	4	7	Operators instructed not to operate machine in steep spoon drains. Deep spoon drains are chemically treated to negate the requirement of mowing	1	4	5
6	Operator struck by model aircraft	Model impacting person	Operator	Injury or Death	CASA 101, 30 metre Rule, MAAA MOP's	3	5	8	Operators not to operator on duty runways being used to operate model aircraft. Pilot also required not to operate their model aircraft when runway is being mowed under the same rules.	0	0	0

RISK ASSESSMENT - Operation of Equipment												
MASSEY FERGUSON with Slasher, Spray Unit & Deck Mower												
HAZARD #	IDENTIFY HAZARD	HOW WILL THEY BE HARMED	IDENTIFY WHO WILL BE HARMED	IDENTIFY THE EXTENT OF THE HARM AND HOW	CURRENT CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL	ADDITIONAL CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL
1	Feet coming into contact with the slasher blades	Slasher Blades impacting persons	Operator, or other persons attending at the field.	laceration injury	Guard surrounding the slasher blades	2	3	5	Operators trained in safe operation of the Machine including only engaging the drive shaft after the slasher is lowered and no other personnel are in the vicinity. Disengaging cutting device and turning off the tractor when approached by other persons. Recommended use of PPE Equipment in particular Steel capped boots. Only operate the slasher above the ground level when no other personnel are in the area	1	3	4
2	Person being struck by object discharged from the cutters.	Person impacted by discharged object.	Visitors or persons attending at the field.	strike injury	Safety guard around cutting blades to control discharge of grass and objects at a low level	3	2	5	Operators trained in safe operation of the Machine, including not operating the equipment close to members and visitors and clearing people away from areas to be slashed. Operator instructed to ensure the slasher is lowered before drive engaged.	2	2	4
3	Cars or Models being struck by discharge	Cars or models impacted by discharged object	Cars or models at the field	Minor damage to property	Safety guard around cutting blades giving a low level discharge of grass and objects.	3	2	5	Operator trained not to engage slasher when moving through a car park being used by members or visitors. Slasher not to be used in areas occupied by members and visitors.	2	2	4
4	Loud and continuous high noise level	Damage to hearing	Operator	Damage to Hearing	Slasher not of exceptionally high noise level	3	4	7	Operators trained in safe operation of the Machine, including the use of PPE Equipment in particular the use of effective hearing protection.	1	4	5
5	Machine roll over	Crush Injury from roll over	Operator	Crush injury or broken limbs	Machine has roll bars installed. Wide wheel base and stable.	3	4	7	Operators instructed not to operate machine in steep spoon drains. Deep spoon drains are chemically treated to negate the requirement of mowing	1	4	5
6	Operator struck by model aircraft	Model impacting person	Operator	Injury or Death	CASA 101, 30 metre Rule, MAAA MOP's	3	5	8	Operators not to operate on duty runways being used to operate model aircraft. Pilot also required not to operate their model aircraft when runway is being mowed under the same rules.	0	0	0
7	Operator contaminated with chemical	Covered with or ingesting chemical spray	Operator	Contamination by chemical	ONLY personnel qualified in handling chemical sprays are to operate the Boom Spray unit to spray the runways and surrounding areas	3	3	6	Operators not to operate in an area over flown by model aircraft. Pilot also required not to operate their model aircraft when area is being sprayed. PPE equipment is to be used when preparing the chemical spray including Gloves, and Chemical respirator and safety glasses when operating the spray unit.	2	3	5
8	Model pilots contaminated with chemical	Hands being contaminated with chemical when collecting models from runways	Model Pilots	Contamination by chemical	Sign to be place in the pit area indicating that runways have been sprayed with chemical	3	2	5	Model Pilots retrieving models advised to wash their hands before eating or drinking	2	2	4
9	Crush hazard during changing components attached to the Tractor	Possible crush injury	Machine operator/assistant	Crushed hands or feet	Operators trained in the procedures required to change the attachments.	3	3	6	Attachments located in easily assessable locations and some on their own trollies. PPE equipment to be used in particular safety boots	2	3	4

**RISK ASSESSMENT - Operation of Equipment**

<b>Kubota Tractor with Front End Loader</b>												
HAZARD #	IDENTIFY HAZARD	HOW WILL THEY BE HARMED	IDENTIFY WHO WILL BE HARMED	IDENTIFY THE EXTENT OF THE HARM AND HOW	CURRENT CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL	ADDITIONAL CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL
1	Possible strike injury	Person impacted by being struck by the machine.	Member on work party or in the vicinity where machine is being operated	Serious injury resulting from being struck by the machine	Machine fitted with reversing alarm and flashing lights. Good 360 degree unrestricted vision	2	4	6	Operator instructed in safety procedures including restricted reversing distance, speed of operation, not operating in proximity to other people not involved in the project. Machine not to be operated on or within in 30m of duty runway in accordance with CASA regulations.	1	4	5
2	Cars being struck by machine	Machine strikes a car	Cars at the field	Minor damage to property	Machine fitted with reversing alarm and flashing lights. Good 360 degree unrestricted vision	2	2	4	Operator trained not to be operated in car park that has vehicles in close vicinity	1	2	3
3	Loud and continuous high noise level	Damage to hearing	Operator	Damage to Hearing	Not of exceptionally high noise level	3	4	7	Operators trained in safe operation of the Machine, including the use of PPE Equipment in particular the use of effective hearing protection.	2	3	5
4	Crush hazard during changing components attached to the Tractor	Possible crush injury	Machine operator/assistant	Crushed hands or feet	Operators trained in the procedures required to change the attachments.	3	3	6	Attachments located in easily assessable locations and some on their own trollies. PPE equipment to be used in particular safety boots	2	3	4
5	Strike injury from fork attachment when fitted	Person being struck by the forks when in operation	Member on work party or in the vicinity where machine is being operated	Serious injury resulting from being struck by the machine with forks attached	Machine fitted with reversing alarm and flashing lights. Good 360 degree unrestricted vision	2	4	6	Operator instructed in safety procedures including restricted reversing distance, speed of operation, not operating in proximity to other people not involved in the project and the arc the forks travel while turning. Forks to be lowered as soon as possible when machine is moving.	1	4	5

**RISK ASSESSMENT -**

<b>Whipper Snipper</b>												
HAZARD #	IDENTIFY HAZARD	HOW WILL THEY BE HARMED	IDENTIFY WHO WILL BE HARMED	IDENTIFY THE EXTENT OF THE HARM AND HOW	CURRENT CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL	ADDITIONAL CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL
1	Person being struck by rotating filament	Parts of the body coming into contact with the rotating filament	Operator, Visitors or persons attending at the field.	injury	Safety Cut Off switch activates on release	2	2	4	Operators trained in safe operation of the Tool, including turning off the equipment when approached by other persons Recommended use of PPE Equipment including Steel capped boots. Long sleeved shirts and trousers recommended.	1	2	3
2	Person being struck by object discharged from the equipment	Person impacted by discharged object.	Visitors or persons attending at the field.	injury	Safety guard around cutting filament with discharge of grass and objects usually at a low level	3	2	5	Operators not to operated close to other people and required to turn off equipment when approached by other people.	2	2	4
3	Loud and continuous high noise level	Damage to hearing	Operator	Damage to Hearing	Equipment not of exceptionally high noise level	3	4	7	Operators trained in safe operation of the Equipment including the use of PPE Equipment in particular the use of effective hearing protection.	1	4	5
4	Cut particles entering the eye	Eye injury	The operator or person standing next to the operator	Serious injury	The Tools come supplied with guards and hand grips that allow the tool to be held by both hands.	3	3	6	Operators not to operate these tools in the vicinity of other persons. If approached the tool is required to be switched off. PPE equipment is highly recommended in particular safety glasses.	2	3	5

RISK ASSESSMENT - Machinery Shed												
Machinery Shed & Hand Tools												
HAZARD #	IDENTIFY HAZARD	HOW WILL THEY BE HARMED	IDENTIFY WHO WILL BE HARMED	IDENTIFY THE EXTENT OF THE HARM AND HOW	CURRENT CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL	ADDITIONAL CONTROL MEASURES	LIKELIHOOD	CONSEQUENCES	RISK LEVEL
1	Crush Hazard from Hoists	Persons being crushed by the lowering of hoists	Operator of other persons in the vicinity	Crush injury	Hoists are slow moving enabling escape from crush injury and are equipped with safety locking devices to prevent accidental descent.	2	3	5	Three Hoists wired to key lock to enable only one to operate at a time. The live hoist is signalled with independent flashing light. Operators trained to ensure no other person is in striking distance and call "HOIST BEING OPERATED" as a signal to other personnel	1	3	4
2	Tripping Hazard.	Persons tripping on safety guards on hoist platforms.	Persons in the Machinery Shed.	Minor injury	Lighting in the shed is very effective	4	2	6	Persons instructed not to walk through the base of the Hoists when lowered. Always walk between the hoists whether they are up or down.	2	2	4
3	Strike or Crush Hazard in the service area.	Person being struck by machinery in operation	Persons in the Machinery Shed.	Serious injury	Only authorised personnel permitted in the Machinery Shed. The space available is small and only allows for slow operation of machinery	3	3	6	Operators are only permitted to drive machinery in to the service area when other personnel are not in the vicinity. Designated areas to be marked out for exclusive use of personnel.	2	3	5
4	Operation of Hand Tools	Lacerations, Crushed fingers	Personnel using the tools	Minor Injuries	By the nature of our interests members are adapt at using hand tools.	3	1	4	Instruction is available for members wishing to improve their hand tool skills	2	1	3
5	Operation of Electric/Battery hand tools	Eye injury or deep lacerations from Angle Grinders.	The operator or person standing next to the operator	Serious injury	The Tools come supplied with guards and hand grips that allow the tool to be held by both hands.	3	3	6	Operators are instructed to operate these tools in a manner so that the hot metal discharge is not pointed at themselves or other Persons. The tool is to be held securely to prevent it from running loose. PPE equipment is highly recommended in particular safety glasses and ear protection.	2	3	5
6	Operation of Members equipment				Only to be operated by the owner who is proficient in the operating and safety procedures or by a person the owner has instructed in the operation of the				Required PPE equipment to be used based on the requirements of the equipment being used. This may include the use of members chain saw or mulcher			

## **The Policy Statement/Conclusion**

### **Operation of Model Aircraft**

Operating Rules and Regulations are already in place including: -

- CASA (1998) Part 101
- MAAA Manual of procedures - Published on MAAA Website
- Club Flying Rules - Published on P&DARCS Website

#### **Incidents**

The majority of incidents and injuries that occur are lacerations that are self-inflicted as a result of lack of attention or not operating within the rules.

Reporting and remedial procedures are in place.

#### **Education**

New members are inducted into the club and are given instruction relating to the rules and are provided copies of the flying rules. All rules are available on the club web site. It is a requirement of Membership/Renewal to accept operating within the required rules and regulations. Continual on-going education about flying rules at club meetings and through the newsletter.

### **Condition of property**

#### **Hazards**

The property has been inspected and hazards have been identified and listed in the Project and Maintenance document together with other works that require attention.

Safety issues identified in the walk around to be addressed

### **Machinery Shed -Authorised personnel.**

Only members that have completed an induction are permitted in the Machinery Shed.

Any other personnel are required to be supervised by an authorised person.

Suitable clothing and shoes are required to protect against tripping, strike and crush injury.

The Cub Committee determines who is responsible for training and inductions.

### **Training in the use of Maintenance Machinery and Equipment**

**Apart from specific operating procedures,**

**General Instructions to include, but not limited to, the following minimum safety requirements: -**

#### **Reversing limits**

Mowers permitted to reverse to a maximum distance that allows the machine to be driven forward.

#### **Speed restrictions**

When driving in close proximity to other personnel the machinery to be driven at walking pace.

### **Operation in Car parks**

Machines not to be driven in close proximity to cars and mowers to be operated in a direction that the discharge is directed away from other vehicles.

#### **Operation in pit area when members are present**

Instruct members to relocate from areas to be mowed and mowers to be operated in a direction that the discharge is directed away from other people and models

Mower not to be used in areas occupied by members and visitors.

#### **Operation on runways and in the vicinity of the pilot areas**

Runway being mowed to be closed while being mowed. Mow the runways in an order that allows opening of runways in sequence allowing safe operation and limited interruption. CASA 101 30m separation rules apply relating to not operating models over maintenance crews.

#### **Discharge guards**

Discharge covers to be employed

Discharge away from members, models and other vehicles

Mowing through the shade shelter with the discharge cover raised can only be employed if there are no other personnel or models in the vicinity.

**Turning off machines and disengage cutters** when approached by other people.

No personnel to walk along side, behind or close to attached equipment that is operated by drive shaft.

#### **Lowest Potential Energy of attached equipment**

When leaving equipment unattended ensure all attachments are resting on the ground to prevent accidental lowering of attachments that could cause crush injuries

#### **Spoon drains**

Do not mow in deep or steep drains these areas are to be chemically treated and, in some areas, need to be fenced off.

#### **Use of PPE equipment**

PPE equipment including safety glasses, hearing protection, high visibility vests and safety boots are recommended when operating equipment or when working in the vicinity of this equipment. Full length trousers are also recommended.

Machinery without automatic cut off switch on seats require the use of safety boots unless the operator agrees to ensuring the drive shaft is disengaged and the machine is turned off before alighting from the machine.

Use of safety glasses and ear protection are required when using Whipper Snipper and Angle Grinders.

Use of safety glasses are required for mowers on windy days when the grass is dry.

Safety glasses are required when operating or in the vicinity of an operating mulcher

Ear protection required when operating PTO equipment

#### **Fire equipment**

Operators to be instructed on the location and use of fire equipment

Inform committee when extinguishers have been used so they can be serviced.

## **Safety Instructions on specific Equipment to include: -**

### **Slasher**

Operators trained in safe operation of the Machine including only engaging the drive shaft after the slasher is lowered and no other personnel are in the vicinity.

Disengaging cutting device and turning off the tractor when approached by other persons.

Recommended use of PPE Equipment in particular Steel capped boots.

Only operate the slasher above the ground level when no other personnel are in the area

### **Chemical Spray**

ONLY personnel qualified in handling chemical sprays are to operate the Boom Spray unit to spray the runways and surrounding areas

PPE equipment is to be used when preparing the chemical spray including Gloves, and Chemical respirator and safety glasses when operating the spray unit.

Sign to be place in the pit area indicating that runways have been sprayed with chemicals

### **Changing attachments to Front End Loader and MASSEY FERGUSON**

Attachments located in easily assessable locations and some on their own trollies.

Only to be done by members trained in the procedure

PPE equipment to be used in particular safety boots to prevent crush injuries

### **HOISTS**

Select electrical switch for require Hoist.

Ensure no other personnel in the vicinity before operating the hoists

Call "HOIST BEING OPERATED" as a signal to other personnel in the area.

### **Angle grinders**

Operate these tools in a manner so that the hot metal discharge is not pointed at themselves or other Persons. Safety observer should be present.

The tool is to be held securely to prevent it from running loose.

Safety glasses and ear protection are required

### **Members Equipment i.e., chain saws and mulcher**

Only to be operated by personnel experienced in their use and that adequate PPE equipment is used. Safety observer should be present

Other personnel in close proximity are required to use adequate PPE Equipment

### **Hire Equipment**

To be operated in accordance to the operating instructions as provided by the hire company.

## RISK ASSESSMENT MATRIX - LEVEL OF RISK

Table 1 - Consequence Values

	0	1	2	3	4	5
People	No Injury	Minor injury that does not require medical treatment	Minor injury that requires first aid treatment	Serious injury causing hospitalisation or multiple medical treatment cases	Permanent injury or disability (including bleeding) that may result in hospitalisation of at least one person	One or more deaths, multiple severe injuries or permanent total disability
RPAS	Any element of the RPAS is degraded but the task unaffected	A failure not serious enough to cause RPSA damage but which will result in unscheduled maintenance or repair or incomplete task	Minor RPSA damage resulting in damage to components, incomplete task and future unserviceability of RPSA	Significant RPSA damage but repairable	Complete loss of or destruction of a RPSA component (RPA, camera transmitter, sensor, etc.)	Loss of all RPSA elements
Reputation	Small delay, Internal inconvenience only	May threaten an element of the service resulting in the task or objective being delayed	Risk does not violate any law and can be easily remedied. It has some effect on reputation and/or external stakeholders	Risk does not violate any law and can be easily remedied. It has some residual effect on reputation and/or external stakeholder and while reputation is damaged it is recoverable	Risk violates a law but can be remedied. It has a residual effect on reputation and/or external stakeholders and may result in damage to reputation	Risk violates a law and is unable to be remedied. It has a significant impact on reputation and/or external stakeholders and will result in loss of reputation
Cost/Property Damage	Negligible	Less than \$1,000	More than \$1,000 less than \$10,000	More than \$10,000 less than \$100,000	More than \$100,000 less than \$1,000,000	Loss of damage exceeding \$M1
Airspace	No aviation airspace safety implication	Minor breach of aviation safety regulations or RPA Area Approval	Serious issues of compliance with aviation safety regulations. RPA Area Approval or operations resulting in potential avoiding action by a manned aircraft but no collision	Serious issues of compliance with aviation safety regulations or operations or separation or loss of separation resulting in the potential for a collision with a manned aircraft but the manned aircraft is able to land with no serious injuries or fatalities	Potential for aviation safety incidents involving multiple life threatening injuries or fatalities, to less than 10 people	Potential for multiple fatal aviation safety incidents causing multiple fatalities to 10 or more people
Equitable access of airspace	No effect on access to airspace users	Some users of the airspace may perceive or experience airspace inequality resulting in between 5 to 10 minute delay or minor detour	Some users of the airspace may perceive or experience airspace inequity resulting in more than 10 minute delay or major detour	Most users of the airspace will experience airspace inequality resulting in long delay (>30 minutes) or major detours	All users of the airspace will experience airspace inequality resulting in long delay (>30 minutes) or major detours	Airspace users are prohibited from operating in the airspace causing significant disruptions to operators and financial costs

## RISK ASSESSMENT MATRIX - LEVEL OF RISK

Table 2 - Likelihood

<b>LIKELIHOOD</b>	Almost Certain	5	> 1 in 10	Is expected to occur in most circumstances
	Likely	4	1 in 10 - 100	Will probably occur
	Possible	3	1 in 100 - 1,000	Might occur at some time in the future
	Unlikely	2	1 in 1,000 - 10,000	Could occur but considered unlikely or doubtful
	Rare	1	1 in 10,000 - 100,000	May occur in exceptional circumstances
	Extremely Rare	0	< 1 in 100,000	Could only occur under specific conditions and extraordinary circumstances

Table 3 - Risk Rating

			Consequence					
			0	1	2	3	4	5
<b>LIKELIHOOD</b>	Almost Certain	5	5	6	7	8	9	10
	Likely	4	4	5	6	7	8	9
	Possible	3	3	4	5	6	7	8
	Unlikely	2	2	3	4	5	6	7
	Rare	1	1	2	3	4	5	6
	Extremely Rare	0	0	1	2	3	4	5

### Untreated Risk Scores

8, 9, 10 (Extreme Risk) - Task is not permitted. Risk controls are required to ensure residual risk is acceptable.
6, 7 (High Risk) - Task is not permitted. Risk controls are required to ensure residual risk is acceptable.
4, 5 (Medium Risk) - Task may proceed, however, risk must be reduced to as low as reasonably practicable (ALARP)
1, 2, 3 (Low Risk) Task may proceed