

RISK ASSESSMENT FORM FOR ACLE MODEL FLYING CLUB

Section 1	Club Details
Name of Club	Acle Model Flying Club
Location	Off A1064 near Acle Bridge Pub
Site owners name	Trevor
BMFA Club Number	CL000749

Assessor's name	Stephen Knight	Signature	<i>S Knight</i>	
Position	Safety Officer			

Assessor's name	Clive Campion	Signature	<i>C Campion</i>	
Position	Secretary			

Risk Assessment checked and authorised by club committee on	Date:	September 2020	
Next review of risk assessment due on	Date:	September 2021	

Section 2	Subject of risk assessment:
The operation of radio controlled model aircraft at the site above	

Section 3	Persons at Risk
1	Club members
2	Visitors
3	Owners & employees of adjacent (over flown) land
4	Public - Road users
5	Livestock

Risk Assessment Scoring Criteria				
Score	Severity	Score	Likelihood	Risk Rating : Severity x Likelihood = Risk Score
1	Trivial	1	Highly unlikely - may never occur	0 to 5 - Risk is LOW
2	Minor Injury	2	Possible to occur	6 to 12 - Risk is MEDIUM
3	Serious injury	3	Quite possible	12 to 18 - Risk is HIGH
4	Fatality	4	Likely to occur	16 to 25 - Risk is VERY HIGH
5	Major- Multiple deaths	5	Highly likely - Almost definitely will happen/unavoidable.	If after control/safety measures and precautions Severity or Likelihood are Zero there is no Hazard and no Risk

Relevant club three word locations are:	
Field Entrance:	Scaffold.Quantity.Lame
Field Shelter:	Model.Footpath.Honestly
Middle of the field:	Insects.Slippery.Miss
Equipment/Tractor Shed:	Recliner.Rots.Index
South Drain Bridge:	Divorcing.Raves.Anchorman
North Drain Bridge:	Twins.Configure.Less
Main Drain Bridge:	Mastering.Regrowth.Condition

Section 4 : RISK ASSESSMENT									
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
1	Persons accessing the flying field whilst flying is in progress	<p>Access:</p> <ul style="list-style-type: none"> The AMFC flying field is on privately owned land with access for members, visitors accompanied by members, landowner and farm workers only. Access is via an unmade track along and across a grass field to the field shelter (Approx 400m). <p>Club rules:</p> <ul style="list-style-type: none"> Flying area is clearly defined in the club rules. Hours of operation are clearly defined in the club rules. Discipline for controlling access onto the approach, landing and take-off strip. No access to field without confirmation from all active pilots that it is safe to do so. When flying is in progress pilots only allowed on field for purpose of recovering an aircraft or taking off and must obtain permission from all other active pilots before doing so. Verbal confirmation to flying pilots when entering and leaving the flying area. Over flying the car parking area, field shelter and active pits area and pilot box is not permitted. Over flying vehicles on the approach track from the road is to be avoided. Limit to the number of fixed wing model aircraft flying at one time being three plus one trainee under instruction. No fixed wing aircraft are permitted to fly whilst a helicopter is flying. <p>Geography of the site:</p> <ul style="list-style-type: none"> The site is a strip field 40m wide running SE to NW and bounded by drainage dykes on each side and at the NW end. Wooden pedestrian bridges have been constructed to allow access over each of the dykes to the adjacent farm land. Access is from the A1064 to the SE via an unmade track along and across a grass field to the field shelter. The only structures on the site are the club field shelter, a storage shed and privy located at the SE end of the landing strip offset on the south side of the flight line. There is also a storage shed for the grounds maintenance equipment and machinery at the NW end of the field. Parking area is laid out to the SE of the field shelter also on the south side of the flight line. The field is set out with 4 pits areas each with its own pilot box area. Members select the most appropriate pits area dependent on the prevailing conditions, wind direction and position/transit of the sun for the time of day. Main takeoff/landing runway is SE-NW and can be used in either direction to suit wind direction. Secondary takeoff/landing direction is SW-NE as a cross field direction and can be used in either direction to suit wind direction. 							
1.1	Injury or death of club members due to impact or collision from an aircraft	<ul style="list-style-type: none"> The main flying area is to the north of the landing strip and the two pits areas on the south side of the field are most commonly used as they allow clear view of the field and the flying area whilst the pilots stand with their backs to the sun. The pits and Pilot Box Areas (PBA) are demarcated by grass "eyebrows" of a height maintained to prevent most model aircraft taxiing into the area. The active pilot box is marked by a flag on the edge of the eyebrow and this defines the demarcation between pits area and pilot box area. To ensure good communication between all pilots. <p>Competence of pilots:</p> <ul style="list-style-type: none"> All pilots are assessed for competence before being allowed to fly. Only pilots who have a Club A or a BMFA A certificate or higher are permitted to fly without supervision. Qualified Pilots new to the site are not permitted to fly until they have been familiarised with the site and have satisfied the inducting member that they fully understand and will comply with the club rules and operating procedures for flying safely at this site. Trainees are supervised at all times when preparing to fly and when flying under buddy box control by a club approved instructor. <p>Pre-flight checks:</p> <ul style="list-style-type: none"> Each pilot is responsible for checking that his/her aircraft is airworthy and safe to fly under his/her control including battery charge status and radio range check. Trainee pilots are supervised by their instructor <p>Aerobatics:</p> <ul style="list-style-type: none"> Club rules: Aerobatics shall be performed at a safe distance. Aerobatics to be practised over the adjacent field and away from the pilot box. <p>Limit to size of aircraft:</p> <ul style="list-style-type: none"> Aircraft over 100" (2.54m) and/or weighing more than 7kg may only be flown at this site by pilots holding a BMFA "B" Certificate. <p>Restriction on Jet engines:</p> <ul style="list-style-type: none"> Jet or turbine powered aircraft are only permitted to be flown at this site by pilots holding a BMFA "B" Certificate. 	Members	Members not following club rules	4	2	8	ALARP	
		<ul style="list-style-type: none"> The main flying area is to the north of the landing strip and the two pits areas on the south side of the field are most commonly used as they allow clear view of the field and the flying area whilst the pilots stand with their backs to the sun. The pits and Pilot Box Areas (PBA) are demarcated by grass "eyebrows" of a height maintained to prevent most model aircraft taxiing into the area. The active pilot box is marked by a flag on the edge of the eyebrow and this defines the demarcation between pits area and pilot box area. To ensure good communication between all pilots. <p>Competence of pilots:</p> <ul style="list-style-type: none"> All pilots are assessed for competence before being allowed to fly. Only pilots who have a Club A or a BMFA A certificate or higher are permitted to fly without supervision. Qualified Pilots new to the site are not permitted to fly until they have been familiarised with the site and have satisfied the inducting member that they fully understand and will comply with the club rules and operating procedures for flying safely at this site. Trainees are supervised at all times when preparing to fly and when flying under buddy box control by a club approved instructor. <p>Pre-flight checks:</p> <ul style="list-style-type: none"> Each pilot is responsible for checking that his/her aircraft is airworthy and safe to fly under his/her control including battery charge status and radio range check. Trainee pilots are supervised by their instructor <p>Aerobatics:</p> <ul style="list-style-type: none"> Club rules: Aerobatics shall be performed at a safe distance. Aerobatics to be practised over the adjacent field and away from the pilot box. <p>Limit to size of aircraft:</p> <ul style="list-style-type: none"> Aircraft over 100" (2.54m) and/or weighing more than 7kg may only be flown at this site by pilots holding a BMFA "B" Certificate. <p>Restriction on Jet engines:</p> <ul style="list-style-type: none"> Jet or turbine powered aircraft are only permitted to be flown at this site by pilots holding a BMFA "B" Certificate. 	Members	Loss of control due to equipment failure	4	2	8	ALARP	
1.2.1	Injury or death of visitors due to impact or collision from an aircraft	<p>Club rules: No more than 2 visitors per member at any time. The member bringing the visitor(s) is responsible for ensuring they comply with the club rules for safe use of the field and that they do not enter the flying area.</p>	Visitors	Visitor is not kept under control, or ignores instruction	4	2	8	ALARP	

1.2.2	Injury or death of visitors - Children and/or vulnerable adults due to any circumstance including impact or collision from an aircraft	Young Children or vulnerable adults only permitted at the field if accompanied by an adult who can provide dedicated supervision : Not a pilot intending to fly. Junior members (Age limit??) and "capable" vulnerable adult members are encouraged on the basis that they are supervised in all aspects of conduct and discipline on the field and in safe handling and flying of model aircraft whilst under close supervision as appropriate to their level of competence.	Visitors; Children & vulnerable adults	Accidents still possible under close supervision. Dedicated instruction and supervision required appropriate to the individual's capabilities and level of engagement.	4	2	8	ALARP	Members should only bring children or vulnerable adults to the field if they are capable of engaging with the sport. Leaving them in the car or to their own devices on the field without supervision is not permitted. This would result in a HIGH risk score!
1.3	Injury, death or damage to people, vehicles, livestock or machinery on the overflowed adjacent land.	Club rules: AMFC has permission to overfly the adjacent privately owned land and has clearly defined flying zones outside which flying is not permitted. Do not over fly people or vehicles accessing the adjacent land and actively avoid them.	Owners & employees of adjacent land	Loss of control due to equipment failure	4	1	4	ALARP	
		Lack of visibility due to crops, livestock or vegetation especially to furthest extent of flying zone.		4	1	4	ALARP		
1.4	Hitting people or vehicles on the A1064 roadway.	Club rules: Flying over the A1064 is not permitted. The A1064 is outside of the permitted flying area. Avoid over flying vehicles approaching or departing on the access track.	Public - Road users	Loss of control due to equipment failure	4	1	4	ALARP	
1.5	Unplanned access by non-members	Members present meet and greet any unknown visitors and ensure they stay safe.	Public- Non-members	uninvited non-member enters flying area whilst aircraft are flying.	4	1	4	ALARP	General warning sign -Beware RC model aircraft fly on this site - enter at your own risk. Actual likelihood of a collision with aircraft in the airport control area is extremely low - approaching 0 (Zero). Likelihood of light aircraft flying illegally below the 500ft low flying limit is still very low and incredibly unlikely.
1.6	Collision with Full Size Aircraft including aircraft in the Norwich Airport control area above 1500ft and light aircraft flying beneath it.	CAA regulations prevent flying model aircraft above 400ft or 120m. The club is affiliated to the BMFA and as such has exemption to allow members to operate "conventionally piloted" model aircraft (not including multi-rotors) of less than 7kg above 400m. In this case maximum altitude is 1500ft due to Norwich airport control area restrictions. Conventionally piloted model aircraft (not including multi-rotors) of less than 3.5kg are permitted to fly up to 1000ft when flown using first person View with a "Competent Observer". Club rules require members to keep a look out for full size aircraft and to take avoiding action to avoid near miss or collision situations should full size aircraft fly into/through our flying area. Good practice is to return to the 400ft altitude limit if commercial aircraft using the airport are flying over or to land at the earliest opportunity if low flying light aircraft are in or approaching the club's permitted flying area.	Public - Full size Aircraft	Fly away/out of control aircraft	5	1	5	ALARP	
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
2	Persons accessing the field whilst model aircraft are being ground run for pre-flight checks	Members are responsible for ensuring; •their models are set up and effectively restrained for ground running prior to starting them. •that where possible radio control failsafe features are enabled and active to prevent uncontrolled operation of their aircraft in the event of a loss of signal or inadvertent deselection or switching of control signal. •the danger area in front the aircraft is clear of other people both at time of starting and during any test running. •When test running engines or motors in the pitted aircraft must be restrained at all times and never left unattended.	Member or Visitor	Uncontrolled model released accidentally whilst pointing at somebody/people	4	1	4	ALARP	Ensure strong emphasis is put on ground handling and restraint of models for static running. First aid kit available and clearly accessible in the field shelter.
2.1	Injury to members including trainees due to engines or motors being statically run pre-flight air worthiness checks.	Members may use set up tables provided or other means of restraint suitable to the aircraft in question and taking into account its size, weight, power source (IC/Electric) and configuration (Propeller, helicopter rotor, multi-motors/IC engines, or Electric Ducted Fan(EDF). In all cases the flight preparation tables or other restraint must be orientated so that models are tail on to the field. (Pointing directed towards the drainage ditch and adjacent field.) - Jets and turbines may only be flown at this site by pilots holding a BMFA "B" Certificate. - Aircraft of over 100" (2.54m) wingspan and/or weighing more than 7kg may only be flown at this site by pilots holding a BMFA "B" Certificate.	Members inc. Trainees and visitors	Injury due to being struck by rotating propeller or rotor of a static model during ground testing.	3	2	6	ALARP	Ensure strong emphasis is put on ground handling and restraint of models for static running. First aid kit available and clearly accessible in the field shelter.
2.2	Injury to member or visitor due to inadequate restraint of aircraft during ground testing of engines and motors.		Member or Visitor	Injury due to being struck by rotating propeller or rotor or other part of an aircraft of an inadequately restrained model during ground testing.	3	1	3	ALARP	Aircraft should be pointing away from people but if uncontrolled could vere into somebody as per above. Ensure strong emphasis is put on ground handling and restraint of models for static running. First aid kit available and clearly
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
3.1	Noise	All IC model aircraft must be tested to prove that they do not exceed 82dB(A). Noise tests are recorded, published and scrutinised. Models that have passed the noise test are issued with a pass sticker which they must display in a prominent	Members inc. Trainees and visitors	Injury due to miscommunication whether due to noise or not.	4	2	8		Ensure strong emphasis is put on good communication between pilots and those wishing to access the field for take off or to recover an aircraft after landing.
3.2	Noise - disrupting or preventing clear communication	Pilot box areas are demarcated from the Pitts area to ensure good communication between active pilots, instructors and trainees.							
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments

4.1	Slips trips & falls	The site is an unmade field. Although the landing strip is generally well maintained the surrounding access ways, parking area, pits, PBA and field(s) are uneven ground subject to becoming muddy and slippery when wet. Members are responsible for their own safety and should wear suitable footwear for the prevailing conditions underfoot and be aware of the ground conditions taking care to watch where they are stepping. Especially when carrying aircraft or equipment.	Members inc. Trainees and visitors		3	2	6		General advice to members to wear appropriate footwear and take care of uneven ground.
4.2	Danger of slip/tripping into one of the drainage dykes or main drain	As above	Members inc. Trainees and visitors	Injury or drowning	4	1	4		The main drain is the biggest hazard. Is it covered in our club information with advice to avoid going into it?
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
5	Drowning - Drainage dykes & main drain	The drainage dykes either side of the field and the main drain at the NW end of the field all are step sided and can be full of water. The main drain is fenced off????????(Is that true). Members are advised to take care when walking close to the edge. Check the condition of the bridges before using them to ensure they are safe to use. Not to go into the dyke or main drain to retrieve an aircraft but get assistance from another and to use a lasoo or recovery pole.	Members inc. Trainees and visitors	Danger of drowning or becoming stuck and unable to climb out without assistance	4	1	4	ALARP	The main drain is the biggest hazard. Is it covered in our club information with advice to avoid going into it?
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
6.1	Cars - Collision with people	Normal highway code rules of the road apply - Pedestrians have right of way/giveway to pedestrians	Members inc. Trainees and visitors	None					General comments in club information about rough ground, give way to pedestrians, notional speed limit of 10mph.
6.2	Car accident - driving on slippery uneven ground	Drive slowly and with due care and attention to avoid car sliding out of control.		None					
6.3	Car sliding out of control could fall into the drainage ditch	As above		None					
6.4	Car gets stuck in field	Advice to monitor ground conditions taking into account recent weather conditions and not use the access road if there is a risk of getting stuck in the mud. Also taking into account the type of vehicle and its off road capability.		None					
Risk is calc	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
7.1	Fire - Fuel	No smoking is allowed in the pits during fueling and defuelling. There is a Fire extinguisher in the field shelter.	Members inc. Trainees and visitors	Ignorance - uncontrolled fuel being ignited by a smoker	4	2	8		Is there a rule about not smoking in the pits??
7.2.1	Fire- Storage fuel (Glow/Nitro Fuel)	Members are responsible for ensuring that they carry fuel in a suitable container and keep their fuel containers closed to prevent spills and avoid fire hazard. Fuel and similar flammable material must not be stored in the field shelter and it is not permitted to do so.		Uncontrolled fuel being ignited by any means	4	1	4		Rules for storage of fuel in the field shelter: Fire proof fuel storage container! Inside or outside? Or say NO FUEL STORAGE in the field shelter?
7.2.2	Fire - Storage and use of Petrol for model aircraft	Petrol is much more flammable than glow fuel and therefore demands greater caution and respect in using it safely. Members using Petrol are responsible for ensuring that they carry fuel in a suitable container and keep their fuel containers closed to prevent spills and avoid fire hazard. It is not permitted to store fuel in the field shelter. Members using petrol fuel for their aircraft must carry a suitable Fire extinguisher with the fuel and have it available for use in the Pits if necessary.		Uncontrolled fuel being ignited by any means	4	1	4		Is this a formal rule? - Should we require pilots flying petrol engined models to carry a fire extinguisher OR to ensure that a suitable fire extinguisher is available in the pits before they can fuel their plane.
7.2.3	Fire - Storage and use of Petrol for club machinery and equipment	Petrol for club machinery is stored in the equipment shed at the end of the field remote from normal flying activities. Only club members carrying out field maintenance work have access to it. Club members carrying out field maintenance have been familiarised with the equipment and fuelling it up safely with care to prevent fuel spills and contamination. Members are not permitted to operate or fuel the equipment unless under supervision of an experienced senior member or committee member. A fire extinguisher is kept with the fuel in the equipment shed in case of inadvertent ignition.		Uncontrolled fuel being ignited by any means	4	1	4		Fire Extinguisher in the equipment shed? Do we have one?
7.3	Fire - Electrical	Members are responsible for ensuring the electrical safety of their model's electrical power supply and control circuit. Guidance can be sought from club members on safe electrical practice for use of battery powered aircraft to prevent inadvertent short circuits causing fires.		None					
7.4	Fire - Batteries - incorrect charging and/lack of monitoring of charging of Lithium based batteries could lead to a fire.	Use the charging area provided with fire proof surface and flame deflector. For charging LiPo batteries LiPo fire proof liPo charging bags must be used. The club has a LiPo charging bag available for members' use, it is kept in the field shelter. Ensure the fire extinguisher is in place and available for use if needed.		Ignorance	3	1	3		Do we have a fire extinguisher? Where is it? Is it suitable for electrical fires?
7.5	Fire - Battery overload due to mismatched motor/esc/battery combination - could occur in flight	Members are responsible for ensuring the electrical safety of their model's electrical power supply and control circuit. Guidance can be sought from club members on safe electrical practice for use of battery powered aircraft to prevent mismatch of components causing fires.		Unexpected occurrence	3	1	3		Field fire? - Call 999.
7.6									
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
8.1	Poisoning - Fuel containing Nitromethane	Members are responsible for their own safety. Follow safety instructions provided with fuel. DO NOT consume fuel or eat food items that have been contaminated with it. Wash hands if splashed or contaminated with fuel and before eating.	Members inc. Trainees and visitors	None.					Club information
8.2	Poisoning - Lead	General advice - Lead is poisonous and builds up in the body over time. Do not consume it. Wash hands after handling lead and before eating.	Members inc. Trainees and visitors	None.					Club information

8.3	Rat Poison	Rat poison is put out under and around the field shelter in short sections of pipe fixed in position. A sign is posted on the outside of the field shelter stating that the grey pipes contain rat poison.	Who	None					Club information
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
9	Inherent health risks - Tics & Lymes disease	Animals grazing the adjacent fields may carry tics. Members are advised that tics may be present in the long grass or in the adjacent field and to check for Tics after having been into any of those areas.	Members inc. Trainees and visitors	None					Club information
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
10	Animals								
10.1	Dogs	Dogs are not permitted on the flying field area or pits when any flying or ground running activity is in progress. Dogs must be kept on a lead under strict control anywhere else on the field under the control of the member responsible for them who shall follow club rules.	Members inc. Trainees and visitors	N/A					
10.2	Swanns	Swanns from time t time occupy/use the drainage dykes and can be territorial			2	1	3	ALARP	
10.3	Cattle	Cattle graze the adjacent field - be aware of them and their movements if accessing the field to recover aircraft.			3	1	3	ALARP	
10.4	Sheep	Sheep graze the adjacent field - be aware of them and their movements if accessing the field to recover aircraft.			2	1	2	ALARP	
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
11	Field Maintenance equipment & Machinery. Club members use a tractor, grass cutter, roller and other mechanically propelled equipment to maintain the flying field in good condition for flying model aircraft.								
11.1	Member using field maintenance equipment is injured by a flying model aircraft	No Flying permitted whilst field maintenance is in progress	Member (equipment operator & assistants)	None					
11.2	Member injured as a result of using the club's or personal field maintenance machinery	Members using machinery must be competent and familiar with the equipment and use it in accordance with the manufacturers safety instructions, including use of PPE. Children/minors are not permitted to operate the equipment. Only those members undertaking the field maintenance are allowed on the field whilst work is in progress. All standard safety covers and guards remain in place on the equipment whilst it is in use. Use with covers or guards missing is not permitted.			3	1	3		
ID	Hazard	Control Measures	Who	Residual Risks	Severity	Likelihood	Risk value	ALARP STATUS	Comments
12	Severity of injury is amplified by Lack of First Aid	First aid kit is kept in the field shelter and maintained by the club safety officer or other members.	All	None					
13	Illness, injury or incapacity during Solitary access to the field for flying models, maintaining the field or for any other reason	First member arriving at the field opens the field shelter door allowing members to call in to verify if there is somebody at the field. Members accessing the field on their own should always ensure that they have informed others of their whereabouts if accessing the field by themselves. Also encouraged to carry a mobile phone so that they can call for help or assistance if they become ill or incapacitated or get injured in any way. Members are encouraged to fly in company with at least one other member. Club	Members	Member is unable to raise assistance due to illness, incapacity or injury	4	1	4	ALARP	

- The club field three word locations are:**
- Field Entrance: Scaffold.Quantity.Lame**
 - Field Shelter: Model.Footpath.Honestly**
 - Middle of the field: Insects.Slippy.Miss**
 - Equipment/Tractor Shed: Recliner.Rots.Index**
 - South Drain Bridge: Divorcing.Raves.Anchorman**
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