

Hazard Log and Risk Assessment (RA) Form

Date	28/08/218	Assessment Risk Triggered By		New Race Venue / Race Venue Review / Air Safety Report/Safety Report		
Race Venue	Llanbedr					
Venue Owner	Snowdonia Aerospace LLC					
RA Participants (Experience)	Race Pilot & 2018 Chief Handicapper					
Reviewed by	Bob Ellis	SMS Manager				
Date Reviewed	29 August 2018					
Identified Hazard (See note)	Associated Risk (Consequence) and Stakeholder Code (s)	Existing Mitigation Measures in place	Current Level of Risk And Scores	Further Mitigation Measures	Revised Level of Risk	Action by and when
1. Take off path and race path pass over campsite near airfield	Low flying aircraft at take off with potential for aircraft accident or inadvertent road traffic accident due to sudden distraction, injury, property damage or loss of life Stakeholder: A C	CoC briefs race pilots of their obligations and of the dangers of low flying Course designed where feasible to avoid 3 rd parties	Severity: 4 Likelihood: 2 Risk: 8 Unacceptable Review Acceptable	Agree minimum altitude for Scatter and enforce via Handicapping/GPS altitude check. Racers infringing disqualified. Racers infringing both days reported to Chief steward for sanction. CoC to brief at practice and race brief.	Severity: 4 Likelihood: 1 Risk: 4 Unacceptable Review Acceptable	CoC at Race 1 st & 2 nd Sep

<p>2. Majority of race over water</p>	<p>If an aircraft suffers a loss of power (engine failure or partial failure) or other incident that requires them to land as soon as possible then;</p> <p>Potential ditching is high with limited ability to provide rescue resulting in prolonged exposure, injury, and/or loss of life.</p> <p>Stakeholder: A</p>	<p>CoC briefs race pilots of the hazard.</p> <p>CoC mandates all racers to wear lifejackets. Recommend race aircraft carry PLB/ELT & Lifejackets.</p>	<p>Severity: 5 Likelihood: 2 Risk: 10 Unacceptable Review Acceptable</p>	<p>3Rs to notify Coastguard of race times & operations.</p> <p>3Rs notify local Police service as normal procedure.</p>	<p>Severity: 5 Likelihood: 2 Risk: 10 Unacceptable Review Acceptable</p>	<p>Chief Steward to contact Coastguard at Caernarfon prior to race weekend.</p>
<p>3. High ground, rising rapidly after finish</p>	<p>Hills and high ground after finish impinge on the racers ability to maintain steady height and speed. Potential that race Potential for incident causing aircraft accident, injury, property damage or loss of life</p> <p>Stakeholder: A C</p>	<p>CoC briefs race height is a minimum above AGL and location of hills at finish. Briefs racers on procedure for finish to avoid hills.</p>	<p>Severity: 4 Likelihood: 3 Risk: 12 Unacceptable Review Acceptable</p>	<p>Enforce altitude via Handicapping/GPS altitude check. Racers infringing disqualified. Racers infringing both days reported to Chief steward for sanction.</p> <p>CoC to brief at practice and race brief.</p>	<p>Severity: 4 Likelihood: 1 Risk: 8 Unacceptable Review Acceptable</p>	<p>CoC at Race 1st & 2nd Sep</p>

<p>4. Loss of control during race/Disorientation due to tight airfield turn</p>	<p>Possible loss of control to race aircraft causing accident, resulting in injury/death to Race Crew or 3rd Party, and/or damage to property</p> <p>Stakeholder: A B C</p>	<p>CoC briefs course at each briefing session; practice, and both races</p>	<p>Severity: 5 Likelihood: 2 Risk: 10 Unacceptable Review Acceptable</p>	<p>CoC to brief regarding the extended period that aircrew will be exposed to G-force in the turn - during all briefings.</p> <p>CoC to brief additional risk of aircraft in close proximity in race and practice due to extended turn.</p>	<p>Severity: 5 Likelihood: 1 Risk: 5 Unacceptable Review Acceptable</p>	<p>CoC at Race 1st & 2nd Sep</p>
<p>5. Mixed aviation traffic at airfield now including Helicopter pleasure flights.</p>	<p>Airfield operates a mixed aviation traffic environment including helicopter pleasure flights.</p> <p>There is increased likelihood of conflict and especially accident mixing Race/GA with helicopters as demonstrated at an earlier race in 2018.</p> <p>Stakeholder: A B C</p>	<p>CoC briefs mixed traffic environment to racers and reminds them of their obligations.</p> <p>3Rs & airfield management to close airfield for period of all practice and races, Saturday & Sunday.</p>	<p>Severity: 5 Likelihood: 3 Risk: 15 Unacceptable Review Acceptable</p>	<p>3Rs committee to liaise with Helicopter Pleasure flights and airfield management to notify of activities and neutralise all other air traffic for the period of Saturday practice and race plus Sunday practice and race.</p>	<p>Severity: 5 Likelihood: 1 Risk: 5 Unacceptable Review Acceptable</p>	<p>Before race weekend.</p>

<p>6. Llanbedr ATC withdrawn</p>	<p>Llanbedr airfield management have withdrawn ATC services.</p> <p>Without positive ATC the airfield is effectively uncontrolled.</p> <p>There is potential for conflict if an uninvolved aircraft attempts to land during one of the NOTAMed periods. This could lead to an accident, injury, property damage or fatality.</p> <p>Stakeholder: A C</p>	<p>3Rs committee define procedures for weekend use of radio. Typically as an active airfield the airfield ATC will manage all other traffic for the NOTAMed periods</p> <p>CoC briefs race pilots on radio procedures for every race.</p> <p>Chief Steward/CoC to brief committee on weekend procedures.</p>	<p>Severity: 4 Likelihood: 3 Risk: 12 Unacceptable Review Acceptable</p>	<p>3Rs to define additional person, with ground license, to be responsible for radio for 30 minute buffer around all NOTAMed periods.</p>	<p>Severity: 4 Likelihood: 1 Risk: 4 Unacceptable Review Acceptable</p>	<p>Procedures defined before race with Safety committee.</p>
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<p>7. Llanbedr fire service withdrawn</p>	<p>Llanbedr airfield management have withdrawn fire and emergency services.</p> <p>Without fire cover 3Rs are outside their standard operating procedures.</p> <p>If there is an accident at or near the airfield the time to attend for normal fire and emergency services will be significantly extended over local fire services.</p> <p>Stakeholder: A B C</p>	<p>3Rs committee reviews lack of fire service cover and assesses impact.</p> <p>In the case of Llanbedr, 90% of the course is inaccessible to standard fire service as it is over water. However, the remaining 10% is at critical parts of the races; start, finish & recovery.</p>	<p>Severity: 5 Likelihood: 3 Risk: 15 Unacceptable Review Acceptable</p>	<p>3Rs committee to contact local Fire & Emergency services to ascertain if they are close by or can be stationed at Llanbedr during races.</p> <p>3Rs committee to investigate 'buying-in' fire cover from Llanbedr provider.</p>	<p>Severity: 5 Likelihood: 1 Risk: 5 Unacceptable Review Acceptable</p> <p>* IF COVER IN PLACE</p>	<p>Procedures defined before race with Safety committee.</p>
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<p>8. Llanbedr airfield effective control passed to 3Rs for weekend.</p>	<p>Llanbedr airfield management will hand effective control of airfield to 3Rs for duration of weekend.</p> <p>This is not typical and outside 3Rs standard operating procedures.</p> <p>In case of an incident that results in injury, property damage or loss of life the chain of responsibility will not include the airfield.</p> <p>Stakeholder: A B C</p>	<p>Although not typical this is little different from operation for the race and practice periods.</p> <p>3Rs committee to be fully aware of commitment and implications thereof.</p>	<p>Severity: 3 Likelihood: 3 Risk: 9 Unacceptable Review Acceptable</p>	<p>3Rs committee to review insurance requirements and availability for race weekend</p>	<p>Severity: 3 Likelihood: 1 Risk: 3 Unacceptable Review Acceptable</p>	<p>Procedures defined before race with Safety committee.</p> <p>Insurance requirements reviewed before race weekend.</p>
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<p>9. Right hand scatter & joining race course</p>	<p>A right hand scatter is recommended at Llanbedr when operating off RW15 due to prevailing wind.</p> <p>This is chosen as scatter points can be placed within the airfield and mitigates overflight of campsite (partially) and high ground/villages inland.</p> <p>They are in excess of 30degrees however they are a long way from the start meaning that there is a reduced risk due to aircraft closer to a good race speed.</p> <p>There is always the potential for an issue at a scatter point, it is higher at a Right scatter as they are unusual</p> <p>Stakeholder: A B C</p>	<p>CoC briefs right scatter at practice and at races.</p> <p>CoC also briefs joining procedure as race course goes over start. Specific joining instructions being given to racers.</p>	<p>Severity: 5 Likelihood: 2 Risk: 10 Unacceptable Review Acceptable</p>	<p>Review procedures and race course with CoC, Chief Steward, Turn point marshall and Pilot rep prior to race weekend.</p>	<p>Severity: 5 Likelihood: 1 Risk: 5 Unacceptable Review Acceptable</p>	<p>Procedure defined before race with CoC, Chief Steward and pilot rep.</p> <p>For race and practice 1st & 2nd Sep.</p>
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