

Kent Scouts Rocket Team - Risk Assessment – **Water Rocket Flying**

The following is the responsibility of the Range Safety Officer during rocket flying events.

Risk	Description	Mitigation
Rocket hits person or property during ascent	There is a risk that a rocket could hit a person or property during the powered ascent phase of the flight.	<p>Set up a range in accordance with Fig 1.</p> <p>Angle the rocket at a MINIMUM 45 degree angle from the vertical, AWAY from the participants and spectators. No launching near-vertically, lest the rocket veer towards the participants.</p> <p>Brief all participants on the RANGE OPEN / RANGE CLOSED procedure, such that no participants are in the range whilst it is CLOSED, and no participants are pumping whilst it is OPEN.</p>
Rocket hits person or property during descent	There is a risk that a rocket could hit a person or property when descending. Note that the descent rate of water rockets is not great; major injury is unlikely even if hit.	<p>Fly in an area of suitable size for the rockets to be flown, such that a normal flight and descent should land within that area. Ensure that control of that area is owned by the RSO. Ensure no active roads are within normal flight range.</p> <p>On all flights, all spectators should keep an eye on the rockets and be prepared to move if necessary. No sitting down!</p>
Participant trips over, or runs into launch rail	There is a risk that a participant will trip over whilst running, in their excitement to recover their rocket. Worst case, they might collide with the launch rails, which are angled metal stakes.	<p>Instruct participants to WALK, not run!</p> <p>Instruct participants to return to their launch pad from the back / side. Do not allow participants to return by running straight back towards the launch rails. Range Safety Officer should stand in front of launch rails whilst participants are recovering their rockets to issue friendly reminders! See also Fig 1.</p>
Participant injures himself whilst pumping or preparing	There is a (very small) risk that a participant might injure himself whilst pumping – for example by trapping finger in the pump. There is also a risk that the participant might injure himself trying to lift too heavy a water container.	<p>Encourage care and a calm approach throughout activity.</p> <p>Provide water containers of suitably low capacity that participants can easily lift them.</p>
Rocket hits aircraft	There is a (minutely small) risk that a rocket could hit an aircraft.	<p>RSO to encourage everyone present to shout “HALT” if an aircraft is spotted during launching.</p> <p>If flying rockets at the same event as organised aviation (e.g. microlight), RSO to liaise with chief pilot to ensure separation of airspace.</p>

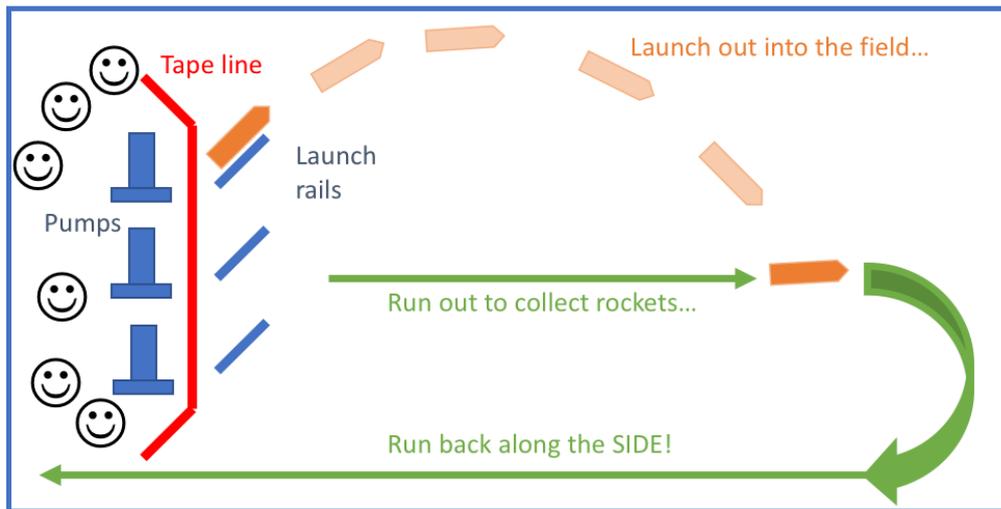


Fig 1 – The Range layout

Add any site-specific or event-specific risks here:

Name and date of Event:

Name of Range Safety Officer:

Signed and dated: