



LEIGH-ON-SEA SAILING CLUB
SAILING DINGHY RACING RISK ASSESSMENT

LSC/RA/001
Issue: 01
Revision 2
30.03.2016

1 INTRODUCTION

This safety protocol addresses the assessment of risks associated with dinghy racing events. This risk assessment is intended to cover all Open and Club racing events. The Race Officer shall make an event specific risk assessment if any additional hazards are present.

The risks associated with a sailing event should be assessed well ahead of the event so that the risk factors that are seen to be serious may be addressed during the planning stages for the event. The risk assessment needs to be quantitative to facilitate giving the most serious risks the most attention.

Some risks are inherent to sailing and racing, some are due to local factors and some are dynamic, for example, the weather, sea state and tidal currents. Consequently the risk assessment should be considered also dynamic and reviewed when conditions change.

2 References

The following documents were used in the preparation of this protocol.

- RYA Risk Assessment for Organised Sailing Events
- Racing Rules of Sailing 2013-2016
- Port of London Authority - Recreational Users Guide- Broadness to Sea Reach
- Leigh on Sea Sailing Club Support Boat Guidelines
- Leigh on Sea Sailing Club Handbook and Sailing Instructions


3 RISK ASSESSMENT PROCESS

3.1 Definitions.

| | |
|----------------------|--|
| Hazard: | The potential for something to cause harm. |
| Risk: | The probability that harm will occur from the hazard and the severity of its consequence. |
| Risk Factor/ Rating: | The product of the likelihood and the severity/impact of the Risk being realised. |
| Control Measure: | The method used to minimise the Risk Factor. The guiding principle should be to implement strategies that reduce risk factors to as low as reasonably practical. |

3.2 Process.

The risk assessment shall be prepared by members of the sailing committee and approved by the Leigh on Sea Sailing Club committee. The Race Officer shall review the risk assessment before each race and add any additional hazards and control measures, if necessary.

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|  | LEIGH-ON-SEA SAILING CLUB SAILING DINGHY RACING RISK ASSESSMENT | LSC/RA/001 Issue: 01 Revision 2 30.03.2016 |
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The first step shall list all perceived hazards associated with the sailing, the event itself and the sailing area. Then define the risks associated with each hazard. Using simple judgement, for each hazard assign the likelihood that the risks will occur and the severity/ impact they would have if they did occur using a scale of one to three. The Risk Factor/ Rating then is the product of the values assigned for likelihood and severity/ impact as shown in the following table.

| | SEVERITY/IMPACT | | |
|-------------------|------------------------|----------|----------|
| LIKELIHOOD | 1 | 2 | 3 |
| 3 | 3 | 6 | 9 |
| 2 | 2 | 4 | 6 |
| 1 | 1 | 2 | 3 |

Risk Factors for each hazard will have values 1, 2, 3, 4, 6 or 9. Then use the following table to assess the importance of implementing the control measures.

| RISK FACTOR | FURTHER ACTION REQUIRED |
|--------------------|--|
| 1 or 2 | Low risk factor, consider improvements |
| 3 or 4 | Medium risk factor, control measures should be implemented |
| 6 or 9 | High risk factor, control measures <i>must</i> be implemented. |

3.3 Implementation of this protocol

The following pages contain a risk assessment for dinghy sailing racing held in the Leigh racing area. The racing area includes an area bounded by Southend Pier to the East, Benfleet Yacht Club to the west, the shore to the north and West Leigh Middle buoy to the south.

The decision to participate in a race or continue shall be made by the helm and crew. (RRS part 1, 4 Decision to Race shall apply).

The risk assessment shall be implemented by the LSC committee and the control measures implemented by those detailed within the risk assessment.

This risk assessment shall be displayed on the notice board within the LSC clubhouse.



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| | | | |
|---------------------------------|-------------------------------------|--|---|
| EVENT | Club and open meeting dinghy racing | EVENT DATES | 2016/2017 |
| RACE OFFICER | See racing programme and duty sheet | NUMBER OF SUPPORT BOATS PLANNED | 1 or 2 for club events. |
| NUMBER OF BOATS EXPECTED | Less than sixty. | SAILING AREA. | Thames Estuary bounded by Southend Pier to the East ,Benfleet Yacht Club to the west and West Leigh Middle Buoy to the South. |

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|---------------------|-----------------------|--------------|------------|-------------------|---------------|
| PREPARED BY: | LSC Sailing Committee | DATE: | 30.03.2016 | AGREED BY: | LSC Committee |
| REVIEW DATE: | 29.03.2017 | | | | |



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|---|---|-------------------|-----------------------------|------------------------|--|--|
| Capsize/ Man overboard | Persons in water at risk of drowning or hypothermia. Persons trapped within boat (Helm and crews) | 3 | 3 | 9 | Buoyancy aids/ life jackets worn at all times. Support Boat/s to attend as soon as possible. "Righting lines" advised to aid in righting a capsized boat. Helm and crew shall be competent in the capsize drill. Support boat/s to carry rigging cutters/ or similar and knife. Helm and crew to stay with boat. Helm to ensure the boat is seaworthy and well maintained. Helm and crew to be aware of changeable wind direction, in particular when the wind is from the north. | 3 |
| Cold Water/ Conditions | Hypothermia (Helm and crews) | 3 | 3 | 9 | Helm and crew to wear suitable clothing/ wetsuit/ dry suit for the conditions and are responsible for its adequacy and maintenance.(weather forecast to be monitored) Support Boat/s shall carry thermal blankets for hypothermia cases. / Support boat/s crews to follow "Leigh on Sea support boat guidelines" | 3 |
| Injury as a result of collision or other accident | Cuts, sprains, bruising, breaks, blows to head, rope burns. (Helm and crews) | 2 | 3 | 6 | Where reasonably practicable, tactical positioning of Support Boat/s eg gybe marks. Support Boat/s shall remain vigilant. First aid kit carried in support boat. Injured crews recovered to Leigh Beach or other suitable location. Race Officer shall liaise with emergency services. Race Officer shall have mobile phone available. PLA Guidance shall be followed (displayed on LSC notice board) | 3 |



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|-------------------------------------|---|------------|---------------------|----------------|---|--|
| Gear failure and damage to boat | Disablement, sinking, or loss of manoeuvrability. Inability to return to shore. (Helm and crews) | 2 | 2 | 4 | Support Boat/s to remain vigilant . Damaged boats towed to shore if sufficient Support Boats are available. If boats cannot be retrieved immediately, the crew is to be taken on board the Support Boat and all Support Boat crews and the race team are to be advised by VHF radio that there is a boat without crew aboard. | 2 |
| Collision between competitors | Injury, MOB. Damage to boats (Helm and crews) | 2 | 2 | 4 | Racing Rules of Sailing and Collision Regulations apply. Congestion minimised by course design and timing of starts. | 2 |
| Capsize with entrapment under hull. | Potentially leading to drowning. (Helm and crews) | 1 | 3 | 3 | Support Boat/s crews to be ready to right the boat. Rigging cutters or similar and knife carried. Tactical positioning of Support Boat/s and ratios minimises time to attend. Support Boat drivers competent in line with the support boat guidelines and attend as soon as possible. The Support Boat crew is to prioritise righting of the capsized boat. | 2 |
| Medical conditions | Fatigue, dehydration, hypothermia, other condition. (Helm and crews) | 1 | 3 | 3 | Support Boat/s to remain vigilant . Race Officer calls emergency services as necessary. Race Officer takes account of time on water in prevailing weather. | 2 |



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|--|--|-------------------|-----------------------------|------------------------|--|--|
| Collision between competitors and other vessels. | Injury, MOB. Damage to boats (Helm and crews) | 2 | 2 | 4 | Racing Rules of Sailing and Collision Regulations shall apply . Support Boat/s advising other vessels to keep clear and report problems to Race Officer. Race officer mindful of busy channels used by other boats constrained by draft, when setting courses . Special care when towing. Competitors to be aware of the channels that are used by larger vessels eg Ray and Leigh creek. (Chart displayed in the Leigh Sailing Club) Helm/crew shall follow sailing instructions. | 2 |
| Moving/ Rigging Boats | Impact with boats and rig (members of the public) | 2 | 2 | 4 | Helm and crew to rig and move boats away from members of the public. Helm and crew to be aware of changeable wind direction | 2 |
| Slipway | Slips, Trips, Falls Falls from height (Helm and crews) | 2 | 2 | 4 | Persons to wear suitable footwear Care shall be taken on slipway due to wet slippery surface Where reasonably practicable, persons to stay away from the edge.(when not boarding or alighting) | 2 |



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|--|--|-------------------|-----------------------------|------------------------|--|--|
| Competitor incompetence/inexperience | Potential to cause accidents (Helm and crews) | 1 | 2 | 2 | RRS rule 4. Vigilance by Support Boat/s, - encourage retirement if in difficulty. | 1 |
| Deterioration of weather or sea conditions. | Support Boat/s may not be able to support all dinghies in difficulty. Many capsizes. (Helm and crews) | 2 | 2 | 4 | Helm / crew to obtain detailed weather forecast prior to sailing.(eg TV, Radio, Internet etc) Race Officer to monitor weather conditions (by visual means) and shorten course or abandon race in the event of very bad weather. Call coastguard if Support Boat/s cannot maintain cover. | 2 |
| Tide, strong current, wind over tide conditions. | Risks of groundings and capsizes (Helm and crews) | 2 | 2 | 4 | Helm / crew should make themselves familiar with local conditions, drying heights, tide heights, currents and charts (displayed within the LSC) Support Boat/s to provide assistance. Call Coast Guard /RNLI if further assistance is required. | 2 |
| Communications lost due to distance, interference or equipment failure | Loss of control of event and safety on the water. (Helm and crews) | 2 | 2 | 4 | All teams to follow the risk assessment and control measures, and to follow them independently until communications re-established. Race Officer shall have a mobile phone available. Spare VHF radios to be available within the race office. | 2 |



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|--|--|-------------------|-----------------------------|------------------------|---|--|
| Support Boat problems, crew unwell, breakdown etc. | Support Boat needs assistance and draws resources. Unable to return or function. (Helm and crews) | 2 | 2 | 4 | Problem reported to local sailing boats for assistance. Race Officer informed and race shortened or abandoned as necessary | 2 |
| Unsuitable weather conditions before going afloat. | Many competitors may not be able to deal with the conditions. Support Boat/s may not be able to support all dinghies in difficulty (Helm and crews) | 1 | 3 | 3 | Race Officer to obtain current weather forecast to assess conditions before starting the race. Dinghy helmsman has responsibility for going afloat. | 2 |
| Fog | Possibility of lost competitors. Dinghies unable to find way back. (Helm and crews) | 1 | 3 | 3 | Race Officer to shorten or abandon race. Support Boat/s with local knowledge and compass to escort fleet home. Helm to carry compass or kept on boat, should fog be forecast. | 2 |
| Competitor, boat or race team personnel missing | Prolonged missing situation could lead to risk of hypothermia or drowning. (Helm and crews) | 1 | 3 | 3 | Race Officer to count boats and report missing/ unaccounted boats. Where reasonably practicable competitors to inform support boat/s if retiring. Identify boat missing from trolley left on slipway. Support Boat/s to search for missing persons and other race team boats. Coast Guard/RNLI called in early. Race Officer to inform support boat/s when all dinghy's have finished the race. | 2 |
| Support Boat activity | Injury to Support Boat crew, or sailors in the water, damage to capsized dinghy or collision with other boats.(Helm and crews) | 1 | 3 | 3 | All Support Boat helm and crew to follow Leigh on Sea support boat guidelines and the PLA Recreational Users Guide (displayed on notice board) | 2 |



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|----------------|--|------------------------|-----------------------------|------------------------|--|--|
| Major incident | Fatality or serious injury involving a call to emergency services. (Helm and crews) | 1 | 3 | 3 | Race Officer shall cancel racing and take responsibility for initial coordination with the emergency services. | 2 |
| Becalmed | Fleet unable to sail home. (helm and crews) | 1 | 2 | 1 | Towing by Support Boat/s. Care when taking long tow into channels. | 1 |

Conclusion

The highest risks are sailors in the water and/or injured after capsizes or collisions and at risk of hypothermia or drowning.

The competence of helm and crew is the most important control measure.

The control measures detailed above shall be implemented and reduce our risks to an acceptable level.