Brenin Adventures

Sailing – Operational procedures

There are a number of variables that influence safe operation on the water.

You must assess these variables to ensure that the combination of factors allow safe operation.

Group abilities & experience + Boat types + Wind strength + Wind direction + Instructional ratios

In general, the stronger the wind / less experienced the group / more technical the boat, the lower the instructional ratio needs to be.

Group abilities & experience: Based on the highest scoring participant in the group.

- National squad or equivalent = 1
- Regional squad or equivalent = 2
- Good, experienced club sailor = 3
- Some experience & all basic skills = 4
- Novice / inexperienced = 5

Boat type: Based on the highest scoring boat type in the group.

- Standard single handed dinghy = 1
- Standard double hander = 2
- Cat = 3
- High performance dinghy [29er] = 4

Wind strength [maximum gust strength]

- 0 – 3 knots = 1
- 4 – 6 knots = 2
- 7 – 10 knots = 3
- 11 – 16 knots = 4
- 17 – 21 knots = 5
- 22 – 27 knots = 7
- 28 – 33 knots = 9

Wind direction

- Wind below 10 knots = 0
- Onshore breeze over 10 knots = 1
- Offshore breeze over 10 knots = 2

Instructional ratios [instructors in separate rescue craft : boats]

- 1 to 2 = 1
- 1 to 4 = 2
- 1 to 6 = 3
- 1 to 8 = 4
- 1 to 10 = 5

Calculation: Your overall score must be 18 or below.

Wind strength and direction must be monitored throughout a session as any change may alter the above calculation.

The calculation will often vary across the sailing area, and you must take into account the conditions where group members may get to [for instance if blown downwind] rather than just where you plan to operate.

In 'tough' conditions, you will need to use 'easier' boats, and reduce instructional ratios [and possibly split a group of mixed boat classes to give rescue craft dedicated to particular boat classes].

You must also consider any specific local conditions / specific needs of the group that may affect you session.

Staffing & Ratios

Appropriate qualifications: RYA Assistant Instructor [*as per 2.4.5.8 RYA Recognition Guidance Notes*] / RYA Dinghy Instructor / RYA Senior Instructor plus Powerboat level 2 & Safety Boat.

Beginners / inexperienced sailors - 1:10 max / 1:12 with trained assistant [PB2] in separate rescue craft

1:6 using access boats / double handed boats

Experienced club sailors – 1:10 max / 4 additional boats per trained assistant [PB2] in separate rescue craft

An RYA Senior Instructor must be available / contactable during sessions delivered by an RYA Dinghy Instructor

When using Llyn Clywedog; An RYA Senior Instructor must be onsite during sessions.

Weather limitations

Whilst it is possible to sail in high wind conditions, the chances of equipment failure and/or injury increase with wind strength.

The strength of wind that is acceptable will depend on the experience of the sailors, the boat class, and the instructional ratio. It is one of the 'highest scoring' factors in the operational calculation, and in general, higher winds require lower ratios.

The wind may vary considerably across the sailing area. You must take into account not just the conditions where you plan to operate, but the conditions in areas where group members are likely get to if things go less than perfectly.

The conditions may change very quickly, so you must monitor conditions throughout a session and adapt your plans accordingly.

As sailors become tired and/or cold, their ability to cope with tough conditions will diminish. You may therefore need to shorten sessions.

Safely returning to shore may be an issue in a strong onshore wind, particularly if sailors are tired or cold. You may therefore need additional onshore support to prevent injury to sailors / damage to equipment.

The air and water temperature will determine what clothing is appropriate.

- Wetsuits must be worn if either the air or the water temperature is below 12C [15C for novice / inexperienced sailors].
- If either air or water temperatures are below 5C, sailors must wear either drysuits with appropriate layers beneath, or a minimum of 6mm of wetsuit on the core. All skin must be covered with appropriate insulated clothing [no shorty wetsuits with exposed arms / legs].
- Suitable footwear [wetsuits boots / trainers / wet shoes] must always be worn. Wellies, walking boots & flip flops are not acceptable].

Safety cover

Every sailing session must have a powerboat available. Groups must be kept in the same area of the lake so the powerboat can reach all craft within 30 seconds.

The powerboat will normally act as the teaching platform for the instructor. It is acceptable for an instructor to teach from a dinghy, but the instructor must not be working alone, must be carrying a radio, and a powerboat must be available and be able to reach all boats within 60 seconds.

A senior instructor can teach in a double / multi handed boat without powerboat support, so long as they are not responsible for any other boats. They must be have a radio with them, be able to summon shore-based help if required, and the powerboat must be on the jetty ready to go [fuelled, equipped and with keys].

All rescue boats & their equipment must be checked at the start of each session, and again at the end of the session. All boats should be refuelled before being returned to the moorings – this will increase efficiency at the start of the next session.

Helmets

The use of helmets is discretionary. Instructors must use their judgement and consider the wind conditions [both strength and whether gusting / shifting], the boat type [particularly boom height], the experience of the sailors, and the session being delivered [for example gibe practice].

Instructors must be able to justify the reason **not** to use helmets.

Equipment

Participants must have a full change of warm clothing ashore, a towel, and either a hot drink or facility to make a hot drink.

All participants must wear a properly fitting buoyancy aid / life jacket. If participants use their own buoyancy aid / life jacket it must be checked by the instructor.

Instructor equipment

Instructors must have a sharp / serrated knife and a whistle attached to their buoyancy aid.

Instructors should be equipped with:

- First Aid Kit
- Wire / bolt cutters if supervising dinghies with wire stays
- Towline
- Throw line
- VHF Radio
- Spare clothing [i.e. spare hat, warm jacket, survival blanket] appropriate to the conditions

General Procedures

Before the start of any session, instructors must be fully aware of any medical conditions that may affect participation, whether each participant can swim, and any specific requirements of the group.

Powerboats and dinghies should be prepared whilst the group is changing so that the session can start as soon as the group is ready.

The area of operation will depend greatly on the prevailing conditions. Carefully consider the conditions not just where you plan to operate, but where you are likely to end up if the session goes less than perfectly. Carefully consider the conditions for returning to shore before you take a session afloat.

Ensure you brief the group fully. Your briefing must include;

- Activity description / goals
- Safety rules on and off the water
- Wind awareness
- Communication on the water
- Capsize / man overboard scenarios
- Launching & recovering boats

Group control is very important. You must keep your group together and position yourself so you can reach any participant quickly if needed.

Don't forget the rest of the group if you are rescuing someone. You priority is the person in the water, then the rest of the group, then the boat. If in doubt, get the participant safely in the rescue boat [and if required to shore] and go back for the boat later.

The risk assessment must be reviewed on arrival on site to take into account prevailing conditions and recent changes, and monitored throughout the activity session.

Risk factor	Control	Acceptable?
Drowning	Properly fitting buoyancy aids / lifejackets Identify non-swimmers Appropriate supervision	Yes
Entrapment	Mast head floats on Funboats & Stratos Boat class appropriate to experience Rope management on boats Instructors carry knife at all times Wire / bolt cutters for boats with wire stays	Yes
Hypothermia	Appropriate clothing Spare clothing, hot drinks to re-warm Monitor participants	Yes
Heat stroke	Appropriate clothing, sun screen & hats Drinks available Monitor group	Yes
Impact injuries	Helmets as appropriate	Yes

	Effective briefing / teaching Care when taking down / handling masts	
Strains & sprains	Warming up Care when moving boats & equipment	Yes
Lifting injuries	Appropriate storage of boats and equipment Appropriate manual handling training for staff Briefing & supervision when moving boats & equipment	Yes
Loss of control / communication	Effective briefing Monitor participants Ability to tow boats if required	Yes
Group drifting apart [wind / tide / current]	Effective briefing Maintain control throughout session Ability to tow boats if required	Yes
Sharp stones / rocks on shore	Appropriate footwear Launch & recover on slipways / safe shoreline Keep clear of shoreline when sailing	Yes
Water borne pollution / diseases	Monitor water quality / consult Environment Agency data Wash hands before eating	Yes
Conflict with other users	Keep clear of other water users Communication Abide by local rules / guidelines	Yes
Loss of group control	Effective briefing Monitor participants both on & off the water	Yes
Equipment failure	Boat / equipment maintenance Appropriate use of boats / equipment	Yes

Review date: 1st March 2020

Last Reviewed by: Matt Jones