DPGC GUIDANCE FOR COXES On-Water Safety

Factors to Consider regarding on-water safety and potential need for wearing lifejackets

Lifejackets - General

Sufficient lifejackets are available in each gig for a maximum of 7 crew (6 rowers plus the cox). For a lifejacket to be effective in use, it must be properly adjusted to fit the individual wearing it, including the crotch strap. These adjustments can take a considerable time to be carried out due to the variability of crew member's shapes and sizes, even for experienced users of lifejackets.

It is vital that coxes understand this time factor when considering whether lifejackets should be worn by the crew. If there is the slightest chance that lifejackets may be necessary during the session, it is not only unacceptable to keep the lifejackets stowed in their bag but also to have them "ready to use" beside each rower.

If and when lifejackets are needed "in anger", there is simply no time available to don them.

In such circumstances, during a period of high stress and probable panic, it would be necessary to stop rowing, putting the vessel and crew further at risk, physically don the lifejacket with the consequent bodily manoeuvring required further destabilising the crew and boat, before finally carrying out the necessary adjustments for correct fitment.

Taking all these factors into account, lifejackets must be donned and correctly adjusted at the beginning of the session if there is the slightest chance that conditions may require them to be used.

Wearing of lifejackets does not imply that the session may take place in conditions more extreme than would otherwise be the case if not worn. They are purely a precautionary measure.

Swimming Ability / Juniors

Coxes, Juniors and non-swimmers must, WITHOUT EXCEPTION, wear a lifejacket at all times when afloat.

Ability of Crew

A fit young crew will have better survival prospects compared to an older, less fit crew.

A less fit or inexperienced crew may be unable to reach shelter and consequently be exposed to risk for much longer and may be more likely to require 3rd party assistance in deteriorating conditions.

Conversely, a strong and experienced crew will be better able to handle deteriorating conditions and consequently be able to reach more sheltered water if required.

Breaking Waves

Breaking waves may be caused by a number of specific conditions such as ground swell, heavy sea or wind over tide. A gig encountering such conditions is liable to either swamping or broaching with a consequent risk of capsize and several such events have been reported (see photos of broaching and capsize incident at Salcombe in summer 2022).

Coxes should bear in mind that unlike a surf-boat, which is specifically designed to be manoeuvrable in waves and uses a steering sweep instead of a rudder, with a following or, to a lesser extent a quartering sea, the gig's rudder efficiency can be drastically reduced and in order to achieve even limited directional control it may become necessary to use the oars to steer. In such circumstances directional control can be difficult at best and once a broach has commenced it is virtually impossible to prevent.

Remember, capsize due to broaching does not require a large wave. Seas of less than 1 meter have been known to cause a broach and subsequent capsize.

While it is recognised that crews need to gain “rough water experience” during training, the potential for capsize or MOB in such conditions is significant. Only experienced coxes and crews should take part in this training. If breaking seas are likely to be encountered during such training lifejackets must be worn by the entire crew.

Windspeed

Always check multiple weather forecasts before each session. When gusty conditions are forecast or an approaching weather front is expected – especially a cold front – be particularly aware that conditions can change dramatically in a very short space of time and with little warning, from flat calm to a howling gale in a matter of minutes.

The effect of strong winds will vary depending on direction and location. In the waters around Mylor wind from the N, NE, E or SE will blow directly onshore. In winds of Force 5 or above (>20kts) this can result in a confused, short, steep and difficult seastate which can be exaggerated by wave interference from the nearby steep-to shores.

In short and breaking seas, it is possible that the gig will take on water due to a combination of rough water and heavy rolling. If a heavy roll coincides with a breaking wave, flooding may be rapid and substantial, leading to a reduction in stability which further exacerbates the situation. Strong SE'ly winds can also generate large swell waves which combined with the locally generated sea can cause a very confused seastate.

Local topography can focus and increase windspeeds significantly, with SW-NW winds likely to be funnelled down Falmouth Harbour, Mylor, Restronguet and to a lesser extent, Pill Creeks. Conversely, shelter can also be found from these wind directions by remaining in the lee of the higher ground between Mylor and Loe Beach.

When stopped and not making way through the water the gig will naturally lie across the wind, beam-on to the wind and sea, particularly in strong winds. If this is in open water with a significant sea running, this can result in heavy rolling with significant potential for shipping seas and the risk of swamping, together with rapid sideways drift downwind.

If stopped in strong winds when there is any sea running, the boat must be maintained as closely as possible either a head-to-wind or stern-to-wind by use of the oars. In such conditions the crew must not leave their positions in the boat.

Swell

Swell waves are generated by winds remote from the area and should not be confused with sea waves generated locally by strong winds.

Swell waves that do penetrate the open waters of Carrick Roads, particularly when combined with locally generated seas due to strong winds can produce relatively large, steep faced or breaking waves.

These waves may be found in "sets" with a series of increasing height and steepness followed by a period of relatively flat water, particularly in areas where the bottom shelves rapidly from deep water, such as in the vicinity of North Bank and along the Roseland side of Carrick Roads to the SSE of The Vilt buoy.

The shore between Penarrow Point and Trefusis Point is very steep-to and the resulting wave reflection interference can raise a difficult and confused seastate in the vicinity.

The area between St.Anthony's Point and Pendennis Point, and especially around Black Rock is at greatest exposure to swell waves which reduces significantly in the waters N of Penarrow Point.

Wind Over Tide

When the wind is blowing in the opposite direction to the tide e.g. a N'ly wind (which blows in a S'ly direction) against a N-going (flood) tide any seastate will become exaggerated in height and in some cases "standing waves" are formed. Similarly, if the tide is ebbing against a swell entering Carrick Roads, the size and steepness of the waves will increase.

There are specific locations within Carrick Roads where this can occur in different wind directions and mostly during periods of the strong tidal streams associated with Spring Tides, notably off Penarrow Point and in the approaches to Restronguet Creek. The effect can be more noticeable where the windspeed is higher, such as in the middle of more open waters and the area S of Penarrow Point out as far as Black Rock.

Tidal stream direction can be modified by coastal features such as the counter-current which can be experienced off Mylor. A particularly strong counter-current can be found close inshore on the N side of the entrance to Restronguet Creek during both the flood and ebb tides which will reduce the effect of wind over tide as well as being very useful for making headway against an otherwise foul tidal stream. Areas where a counter-current is running can be identified by observing the direction of turbulence around mooring buoys or if moored boats are lying in a different heading to others in the vicinity.

Wash/Wake

Groups of steep sided waves may be encountered on Carrick Roads resulting from the wash/wake created by powerboats. Relatively small craft can cause significant waves and the magnitude of the waves may increase significantly when “coming off the plane” as it slows down e.g. when approaching the Mylor Yacht Harbour entrance channel.

At times of busy traffic during summer there is an increased likelihood of encountering such waves, often in otherwise calm conditions.

There are zones on the E side of Carrick Roads where water-skiing is permitted, and gigs should where possible avoid such areas. Remember that waves propagate outwards from these areas and can cause considerable rolling when they are encountered.

Busy Marine Traffic – Collision

Collision risk is increased when in the vicinity of marinas and moorings. Keep well clear of other water users when possible, but be constantly aware of the location, speed and movement of other boats as well as fixed objects such as buoys.

In the immediate vicinity of Mylor when proceeding towards or from Carrick Roads, it is good seamanship to use the approach channel, remembering to stay on the starboard side of the channel whenever possible, rather than manoeuvring through the moorings, particularly during the “season” when boats are on their moorings. If proceeding N towards Restronguet Creek or the N part of Carrick Roads, the area to the W of the moorings is also safe to use and if weather conditions dictate, it is also acceptable to keep close to the S shoreline past Restronguet Sailing Club towards Penarrow Point, being particularly vigilant to keep at a safe distance while passing the Mylor Yacht Harbour pontoons.

Always aim to avoid close quarters situations with other vessels or obstructions such as buoys, but if it becomes necessary when in close proximity pass astern, down-wind or down-tide to minimise risk of collision.

When manoeuvring in the vicinity of moored boats or pontoons ensure that plenty of sea-room (clearance) is given to minimise the risk of collision with vessels that may be hidden from view.

Even a minor collision can result in injury, capsize, swamping, damage to the gig, breakage of thole pins and breakage or loss of paddles. Even relatively small waves will exacerbate the situation.

High-speed craft may be encountered within Carrick Roads and these can pose a significant risk due to both collision and heavy wake/wash.

Other Boats on the Water

If there are few or no other boats out on the water, particular care needs to be taken. In marginal conditions, this may be due to others not taking the risk of venturing out and should be a clear signal that the session should be deferred or cancelled until conditions improve. If there are 2 (or more) club gigs going out together but few other craft on the water, they should stay within visual range of each other and ideally stay nearby so as to be able to provide rapid response support to each other if required.

Temperature

Cold air or sea temperatures will result in reduced survival times in the event of people in the water (PIW) from whatever cause.

High temperature and/or high humidity can lead to heat exhaustion, heat stroke, dehydration and sunburn. Coxes must ensure that crew have ample time for rehydration and promote use high factor sunscreen as a precaution.

Poor Visibility / Low Light

Rowing in poor visibility, such as fog or heavy mist, is not permitted. If you can't see across Carrick Roads to St.Just then rowing should be postponed or cancelled. If visibility deteriorates during a session, it should be curtailed.

While rowing in darkness is not permitted, low light levels may be encountered during evening rowing sessions, particularly if there is heavy cloud cover. At such times extra vigilance is required to ensure potential collision risk is avoided and also that the gig is clearly visible either having a torch ready for immediate use or by displaying an all-round white light.

In fog and during the hours of darkness, it is standard small craft practice for all crew members to wear a lifejacket. Coxes must also ensure that there is a suitable sound signalling device (horn or trumpet) onboard and immediately to hand if such conditions are encountered.

Equipment

Coxes should check that the safety equipment box has the correct items within and, together with the boathook and quant-pole, are within their easy reach.

The VHF radio should be checked, switched to Ch.16 and securely attached to the cox, not lying loose in the boat.

They should also check that sufficient lifejackets are available in the stowage bag and that other basic items of equipment such as balers, spare thole pins, boathook, quant-pole, fenders and both fore and aft painters are in place onboard and in serviceable condition.