13. ROWING CRAFT

13.1 Whilst a study of the history of rowing boat design has not been attempted, it would appear that older wooden boats previously used on all section of the Thames, above Teddington, over the area of this study and also below Tower Bridge were wider and heavier and therefore probably more stable and adaptable to adverse weather. As designs and materials have advanced for increased speed and lightness, so boats have arguably become less stable, although modern composite materials including Kevlar are much stronger than earlier boats built of wood or fibreglass.

13.2 All rowing craft are inherently susceptible to severe wash. For all boats there is the risk of swamping and, particularly for single and pair skulls, there is an inherent likelihood of capsize. The boats themselves, though, will tend to float in this situation and recommended safety actions in the event of capsize use this feature by advising the crew to stay with the boat.

13.3 Rowing craft can also be swamped as a result of excessive wave height conditions due to adverse weather. Swamping also carries the additional risk of hypothermia during most of the main rowing season. In view of the relative frequency with which incidences of swamping or capsize and resultant sinking occur we believe that it is imperative that suitable safety criteria for boat buoyancy are in place. For many years swamping incidents have occurred, including on the Tidal Thames, with a number of fatalities reported worldwide. In March 2004 during the Vesta Veterans Head of the River Race (HORR) a number of rowers had to be rescued from the water due to their boats being swamped, sunk or capsized; fortunately RNLI and other safety boats were quickly on the scene and no serious casualties occurred.

13.4 Recently, floatation has been addressed within the United Kingdom rowing community and fitting of additional buoyancy has been required under the ARA Water Safety Code in all new boats built since 1 April 2003. If after risk assessment for a planned activity a boat, new or old, is judged not to have sufficient buoyancy then more should be added. It is also the responsibility under the Code for individual Club members and Clubs to ensure that all equipment is safe for the purpose for which it is intended. Coaches are also required to take into account the athlete's capabilities and limitations and the limitations of their equipment where adverse weather or water conditions are anticipated.

13.5 In the Code there is the requirement that "Boats constructed after 1st April 2003 must have inherent buoyancy sufficient, together with their oars and sculls, to support a seated crew of the correct design weight in the event of being swamped".

13.6 In the Code's Guidance Notes "All equipment used for rowing, sculling and coaching needs to be properly and regularly maintained to ensure that it is safe and adequate for its intended purpose and to ensure that it does not expose its users to danger. All new boats constructed after 1st April 2003 must carry a plate indicating the maximum average crew weight the boat can carry and support seated in the event of being swamped. A club or individual purchasing a new boat must ask the manufacturer to supply this information". The guidance on equipment goes on to say in 2.6.1.2 i) "If after risk assessment for a planned activity, it is judged that a boat, new or old, does not have sufficient inherent buoyancy, additional buoyancy should be added".

13.7 The ARA's recommendation to boat builders for the plating on a boat is that it should indicate the amount of freeboard showing when fully swamped with its seated crew.

13.8 It has not been established during this Risk Assessment that the newer boats have become significantly more susceptible to wash and adverse weather conditions than previously. We note that boats used by experienced rowers are typically the same on the non-tidal Thames, upper tidal Thames and below Tower Bridge. This despite the fact that conditions relating to wash and waves are significantly different in the three areas. It would appear that the training, experience and awareness of rowers below Tower Bridge compensates for the increased wash and wave heights found in that area, as we understand that such incidents are rare and this appears backed up by ARA casualty data.

13.9 The ARA's risk assessment based approached into the rowing Clubs will if fully applied by everyone, from novice to veteran, assist the overall safety by removing rowers from the situations where their craft are not suitable.