SAFETY TALK - August 2006



Deep Diving

I have often been asked what is a 'deep dive' and why do we have depth limits within the sport?

Recreational diving is not a competitive sport and the challenge it presents should come solely from the experience of being in an alien environment that is not designed to support life as we humans know it. There is no place within the sport for setting challenges of achieving depth for the sake of it but where a specific objective is identified, a particular wreck for example, then appropriate training and experience should be prerequisite to increasing your depth experience.

The BSAC Diver Training Programme has evolved to provide a logical step progression to building skills and experience to safely meet the additional challenges of increasing depth of diving.

Sean Gribben (NDC Diver Training Group Leader)

Depth Limits

Depth limits are often perceived as arbitrary figures introduced to limit peoples enjoyment of the sport for no apparent reason. The reality is that there are usually clear and rationalized reasons for limiting depth for certain dives and qualification levels. Confusion can equally be introduced by a failure to apply training properly.

Depth Progression

Ocean and Sport Divers are restricted to maximum depths and where a change to a new diver grade occurs it is important that subsequent progression to the new depth is conducted once the diver has the confirmed new skills to extend their experience. Consequently the current versions of the QRB makes it clear that the depth progression must only be carried out AFTER qualifying as a Sports Diver or Dive Leader.

Ocean Diver

Ocean Divers are restricted to a maximum depth of 20m and must not dive beyond that depth until they have qualified as Sport Divers. Whilst BSAC Ocean Divers have significant rescue skills in being able to conduct a CBL and support a casualty in the water, they do not have proven in water rescue skills to conduct Rescue breaths or recover a casualty to the shore. By limiting their depth experience they remain within a confined environment and are in closer proximity to adequate surface support. In addition their decompression skills and experience limit them to no stop diving and again 20m ensures they would usually remain well clear of decompression limits.

Sport Diver

On qualifying as a Sport Diver the diver can choose, if they wish, to extend their depth experience to a maximum of 35m and should do this in a sensible stepped progression. The QRB has space to record such progression. Increasing depth from 20m to 35 significantly increases the likelihood of getting into in water decompression stops and so SD training specifically addresses the skills and theory necessary to conduct this type of diving safely as well as covering the full range of rescue skills from in water Rescue breaths to full CPR on land.

50m on Air

The currently accepted limit of safe diving on air is 50m. Beyond this level the risks of oxygen toxicity become a factor for limiting the depth but more importantly the debilitating effects of nitrogen narcosis are significant at this depth. The effects of narcosis are to significantly reduce reasoning ability at a depth where the need to reason clearly and appropriately to limit decompression risk e.g. monitor time, depth, navigate back to shot, deploy equipment etc. is paramount. Increasingly more divers are choosing to introduce helium to their breathing gas for diving deeper than 40m and it is significant that most training agencies recommend accepting an equivalent narcotic depth of 30m for such dives.

Think SAFE – Dive SAFE
Jim Watson
BSAC Safety and Development manager