# SAFETY TALK - June 2006



The more complex our diving equipment and configuration, the more opportunities exist to overlook a simple crucial check before the dive. How many of us have forgotten to pack our weight-belt or a Thinsulate prior to leaving home? The concept of a pre-prepared check list is not new and formulating aide memoirs are extremely advantageous.

Students attending a 'technical diving' course today are provided with pertinent preformatted checklists to prevent omission of crucial checks ensuring that their equipment is safe to dive. The introduction of rebreathers into 'sport diving' has brought with it an inherent higher level of complexity of preparation above that required for simple scuba and necessitates the use of pre-prepared systematic checklists to prevent obvious but, potentially fatal omissions. The checklists are typically adapted and laminated following the courses by the user. 10+ years after my first rebreather dive I still use simple checklist to ensure that I follow a methodical approach.

Jeff Reed (NDC Technical Group Leader)

#### Pre Dive Checks

The importance of pre- dive checks is one that is stressed throughout diver training. There is sometimes a tendency for such practice to fall into misuse as greater experience is gained often due a feeling of familiarity with equipment and diving buddies. Whilst the Diving Incident Report does not specifically highlight weaknesses in this area diver training emphasises the important role that such checks play in the prevention of incidents. A recent Research Report published by the HSE 'Formal risk identification in professional SCUBA' considers the use of Fault Tree Analysis (FTA) to consider the risks associated with diving. This report having considered a particular fault tree analysis identified that Poor pre-dive checks can have significant implications for faults occurring during a dive.

# Personal preparation

Begins with ensuring you have all the necessary equipment before leaving home or loading the boat. Examples of such checklists can be found on the BSAC Website but should be developed to match your own equipment and diving needs. Following a formal Buddy check and making use of a consistent sequence such as BAR (Buoyancy, Air, Releases) or ABC (Air, Buoyancy, Clips) will help ensure that all important items are checked and all members of the dive party are familiar with the equipment being used.

### **Technical diving**

Including the use of Rebreathers and mixed gases still requires the same level of preparation and checking. Indeed depending on the circumstances and specific equipment this type of diving will require greater attention to detail. The BSAC Rebreather Courses stress the value of pre-prepared Checklists for the preparation of the equipment and the conduct pre dive checks. For mixed gas diving it is important to emphasise the MOD for different gases carried and in both instances the options for safe Alternative Gas Supplies for the buddy are important to identify.

#### Other factors

Regular practice and attention to pre-dive checks should minimize many risks before even entering the water. Such checks should not be rushed divers should not pressured either by the marshal or the need to hit slack water.

The debilitating effects of Sea sickness should also be considered and suitable steps taken to minimize its impact.

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