

SALISBURY CIVIL SERVICE SUB-AQUA CLUB



GENERIC RISK ASSESSMENT OPEN WATER DIVING

Contents

Introduction	2
Existing Practices	2
Control	2
Definitions	2
Risk Evaluation Matrix	3
Risk Assessments are to be reviewed	3
Risk Assessment - Appendix 1	4 - 10

Introduction

The purpose of this Risk Assessment is to provide safety information on the associated risk to those participating in Open Water diving activities with Salisbury Civil Service Sub-Aqua Club (SCSSAC) and British Sub-Aqua Club (BSAC) as a whole.

This Risk Assessment should be read by all members and guests that participate in diving activities to make themselves aware of the potential hazards associated with such an activity and its surroundings and have contingency plans in place to implement in the event of an incident or hazardous occurrence developing.

It is the Club Chairman's responsibility to carry out; or ensure the carrying out via a nominated person a periodic risk review based on this generic risk assessment, taking due regard of a change in conditions. The periodicity of review periods is explained further below.

Any hazards identified should be continuously monitored during the activity.

Existing Practices

Risk assessment is already inherent in the way in which BSAC Branches go about organising diving activities. For example, the BSAC Instructor Manual includes many considerations for diving activities that are designed to assess and control risk; and is nothing more than a structured way in which to address these activities so that they are performed most efficiently and safely.

Control

It is the responsibility of each club individual to undertake personal risk control measures as befits them, their colleagues and anyone within their surroundings, where appropriate and take any necessary action as the situation requires.

Definitions

In any risk assessment there are standard terms used. The following is an example of such commonly used terms:

- 'hazard' - anything with the potential to cause harm.
- 'risk' - the likelihood that harm from the hazard will be realised.

Many risks may be 'generic', with common factors while others are more 'specific' that require individual consideration depending upon the activity or location.

Risk Evaluation Matrix

RISK EVALUATION MATRIX						
	Severity	Fatal	Major Injury	Moderate Injury	Minor Injury	Trivial Injury
Frequency of Occurrence						
Very Common		High	High	High	Medium	Low
Frequent		High	High	Medium	Medium	Low
Occasional		High	Medium	Medium	Low	Low
Rare		Medium	Medium	Low	Low	Low

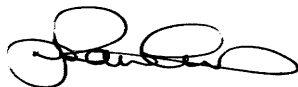
Risk Assessments are to be reviewed:

- Periodically.
- If there is reason to doubt the effectiveness of the assessment.
- Following an accident or near miss.
- Following significant changes to the task, process, procedure or controlling body.
- Following the introduction of more vulnerable personnel.

Reviewed by: N.G. Rawlins

Position: Club Secretary

Signature:



Date Reviewed: 12th January 2017

GENERIC RISK ASSESSMENTBranch: Salisbury Civil Service Sub-Aqua ClubLocation: Open Water DivingDate: 12th January 2017

Hazard	Who at Risk	Frequency	Severity	Risk Evaluation	Controls	Immediate measures to deal with consequences if risk does occur
Diver separation Underwater.	All Divers	Occasional	Major Injury	Medium	Dive Manager to use tide tables where appropriate and to brief divers on tidal information. Ensure diver separation procedures are included in briefing and divers to consider use of a buddy line. Contact to be maintained throughout dive. If not diving with SMB use DSMB for ascent.	Divers to abort dive and surface immediately (subject to decompression requirements) and re-establish contact. Render assistance if/as required. Apply first aid or hospitalise as required.
Diver(s) swept away from marked site or losing contact with boat cover.	All Divers	Rare	Trivial Injury	Low	Dive Manager to use tide tables where appropriate and brief divers on tidal information. Divers to agree dive plan with boat handler/skipper. Where required, set maximum dive times. All divers to carry surface detection aids such as DSMB, torch, strobe, EPIRB, flag, whistle, etc.	Divers to use SMB or DSMB for ascent. Divers to use surface detection aids to attract assistance.
Equipment failure/malfunction.	All Divers	Rare	Fatal	Medium	Divers must perform a complete buddy check before every dive. Equipment must be well maintained and regularly serviced. Divers should include an octopus rig as part of their rig configuration to cover their primary second stage setup.	Divers are to abort the dive and return to the surface. Divers are to provide buddy assistance as required in line with BSAC best practice and training. Buddy assistance to be provided as necessary.

Hazard	Who at Risk	Likelihood	Severity	Risk Evaluation	Controls	Immediate measures to deal with consequences if risk does occur
Ear Damage	All Divers	Occasional	Moderate Injury	Medium	Trainees receive specific instruction in 'ear clearing'. Divers to avoid diving when suffering from a cold or sinus problems.	Divers are to abort the dive and return to the surface. Medical assistance should be sought as soon as possible.
Mask Squeeze.	All Divers	Rare	Moderate Injury	Low	Only mask which encloses both eyes and nose in the same airspace used. Trainees receive specific instruction in mask equalisation.	Assistance to be rendered by Instructor or buddy.
Injury from falling cylinders.	All Divers	Rare	Moderate Injury	Low	Divers are to avoid leaving cylinders standing upright, particularly if unattended and more so if not properly secured, especially when in the RIB. Trainees to be taught to always lay heavy equipment down.	First aid to be administered as necessary.
Running out of air.	All Divers	Occasional	Fatal	High	All dive sets are to be fitted with a pressure gauge and air usage should be monitored by the diver at regular intervals throughout the dive. Divers to agree a gas reserve at which point they should leave the bottom and make their way to the surface, taking heed of any safety/decompression stops. The Dive Manager should record divers 'gas in' and 'gas out' on the dive slate.	Divers are to use the Alternative Air Supply (AAS) from their buddy.
Heart attack.	All Divers	Rare	Fatal	Medium	Divers are to complete a medical self-declaration/referral to a medical referee.	Basic Life Support (BLS) is to be instigated. Dive manager and/or boat handler (or other diver) to contact emergency services.

Hazard	Who at Risk	Likelihood	Severity	Risk Evaluation	Controls	Immediate measures to deal with consequences if risk does occur
Rapid ascent.	All Divers	Occasional	Fatal	High	Divers to ensure they are correctly weighted. Divers utilising dry suits are to be adequately trained in their use and ensure inflation and dump valves are suitably serviced and in good working order.	Oxygen administration equipment and trained administrators are to be available on site. Diving activity to be monitored by shore/boat cover able to provide/direct assistance.
Reduced underwater visibility.	All Divers	Frequent	Major injury	High	Diver numbers in the water are to be controlled and monitored boat/shore cover. Diver separation procedures are to be included in pre-diving brief, training and regularly rehearsed. Divers are to carry a strobe and buddy line and connect to their buddy with the line as required.	Divers are to abort the dive in the event of adverse reduced visibility. Dive Manager to abort all further diving if adverse conditions dictate.
Deteriorating weather.	All Divers	Frequent	Fatal	High	Dive Manager to plan the dive using latest weather information and have a contingency dive site planned. Dive Manager/Cox'n to continuously monitor conditions both prior to and during dive and take action accordingly. Diver recall procedure to be known by all divers. NOTE: Deteriorating weather would include rough sea, poor visibility (fog or rain), low sun preventing divers from being seen or wind hampering the picking up of divers.	Dive Manager cancels diving or changes to back-up dive site. Diving terminated using diver recall procedure. Advise Coastguard of any updated plans and/or timings notified to them prior to departure.
Nitrogen narcosis.	All Divers	Frequent	Fatal	High	Divers to should agree the dive plan with the Dive Manager and dive the plan.	

Hazard	Who at Risk	Likelihood	Severity	Risk Evaluation	Controls	Immediate measures to deal with consequences if risk does occur
Nitrogen narcosis. (Con't)					<p>Divers should progressively build up depth experience.</p> <p>Progressive work-up dives for all divers who are going beyond their previous diving experience.</p> <p>Experience to be gained in the company of an instructor or diver with greater experience at that depth.</p>	Assistance to be provided by instructor or dive buddy.
Entanglement in nets/lines/kelp/under-water obstructions.	All Divers	Rare	Fatal	Medium	<p>Dive Manager to brief divers on any known underwater obstructions or if the site is known to be prone to collecting nets or fishing lines.</p> <p>Divers to streamline their equipment configuration to avoid dangling equipment as far as possible.</p> <p>Divers must carry a diving knife, line cutter or wire snips.</p>	Dive buddy to provide assistance as necessary.
Slips, trips and falls.	All Divers	Occasional	Minor	Low	<p>Dive Manager to advise all divers of any possible obstacles whilst moving about the site.</p> <p>Dive party should exercise caution while carrying diving equipment.</p> <p>All equipment must be kept tidy and securely stowed while on the boat.</p> <p>Divers should be aware that wet decks are slippery.</p> <p>Divers should not put fins on until at or near point of entry, however, divers should not be exposed to the risk of falling in without fins on.</p>	<p>Remove casualty from danger and administer first aid.</p> <p>Hospital as required.</p>

Hazard	Who at Risk	Likelihood	Severity	Risk Evaluation	Controls	Immediate measures to deal with consequences if risk does occur
Missed decompression stops.	All Divers	Rare	Fatal	Medium	<p>Divers should agree a dive plan with the Dive Manager, ensuring they have sufficient air for any planned decompression schedule and/or safety stops if not decompression diving.</p> <p>Divers should ensure they are correctly weighted and capable of making a controlled ascent.</p> <p>Have a contingency plan if diving on computers in case of computer failure.</p> <p>Dive Manager to ensure oxygen kit and administrator is available.</p>	Dive Manager/boat handler and other divers to monitor all divers for signs of DCI.
Separation from boat while diving especially during night dives.	All Divers	Rare	Fatal	Medium	<p>Divers should agree the dive plan with the Dive Manager/cox'n/boat handler with proper observation on dive times being maintained.</p> <p>Divers to utilise the shot line for their ascent or deploy their SMB/DSMB.</p>	All divers to carry surface detection aids such as DSMB, torch, strobe, EPIRB, flag, whistle, etc.
Boat launching and recovery.	All Divers	Rare	Moderate Injury	Low	<p>Dive Manager to ensure that everyone participating in the day's activity are familiar with the procedures for launching and recovering the boat.</p> <p>General public are to be kept clear of the immediate area during these operations.</p>	First aid to be administered as necessary.
Injury from other boat traffic or users.	All Divers	Rare	Major Injury	Medium	<p>The dive boats 'Alpha' flag is to be flown at all times divers are in the water.</p> <p>Boat cover to monitor all other surface traffic while divers are in the water.</p> <p>Shipping lanes are to be avoided where possible.</p>	<p>First aid to be administered as necessary.</p> <p>Emergency services to be contacted as necessary.</p>

Hazard	Who at Risk	Likelihood	Severity	Risk Evaluation	Controls	Immediate measures to deal with consequences if risk does occur
Injury from other boat traffic or users. (Cont'd)					Divers to ascend up the shot line where possible and no ascents are to be made in open water without an SMB or DSMB, unless in an emergency and unavoidable. Divers are to look and listen for boat traffic at all times throughout the ascent	
Contact with dive boat/propeller.	All Divers	Rare	Fatal	Medium	Only trained cox'ns/boat handlers to operate the boat. Trainee cox'ns/boat handlers are to receive specific training instruction on boat exit/entry techniques. All diver entry to and exits from the boat are controlled by the con'x/boat handler.	First aid to be administered as necessary. Emergency services to be contacted as necessary.
Decompression illness.	All Divers	Occasional	Major Injury	Medium	Dives times and depth limit should be planned and conducted in accordance with BSAC 88 Decompression Tables or dive computer. Aggressive dive profiles should be avoided and ensure sufficient gas is available for planned decompression schedule and safety stops. Buoyancy control should be properly managed and reviewed to ensure divers are capable of managing a safe and controlled ascent. Divers are to remain fit to dive, hydrated and avoid excessive exercise after diving.	Remove casualty from water and provide first aid. Administer 100% oxygen. Contact emergency services immediately to arrange recompression. Advise coastguard of any change in plan or return to base times.
Disorientation during wreck penetration.	All Divers	Rare	Fatal	Medium	Divers to avoid entering wrecks unless they have a clear exit or are suitably trained and equipped.	Assistance from buddy.

Hazard	Who at Risk	Likelihood	Severity	Risk Evaluation	Controls	Immediate measures to deal with consequences if risk does occur
Engine failure.	All Divers	Rare	Fatal	Medium	<p>Engine to be serviced regularly.</p> <p>Dive Manager to check that the boat is sufficiently fuelled.</p> <p>VHF radio, flares and other emergency equipment are to be serviceable and readily available.</p> <p>Notify the coastguard of position, estimated duration in advance.</p>	<p>If unable to repair seek assistance from other boats in the vicinity.</p> <p>Advise coastguard of any problem as it arises.</p> <p>Recall divers if a dive is in progress and if necessary arrange for other boats within the vicinity to pick up any straggling divers.</p>
Cold water temperature.	All Divers	Occasional	Major injury	Medium	<p>Divers are to choose and wear appropriate equipment for the environment.</p> <p>Equipment to be well maintained and regularly serviced.</p> <p>Avoid breathing from regulators on surface before the dive.</p>	<p>Abort the dive and surface if necessary.</p> <p>Use your buddy's AS if catastrophic gas loss is experienced.</p> <p>First aid to be administered and emergency services to be contacted as necessary.</p>
Diver falling from vertical ladder when exiting water or generally during entry/exit.	All Divers	Rare	Major injury	Medium	<p>Divers are to ensure they are never beneath a diver who is ascending/descending a ladder on entry/exit.</p>	<p>Recover casualty to a safe place and administer first aid and/or contact the emergency services.</p>
Drowning.	All Divers	Rare	Fatal	Medium	<p>Divers in dry suits are to have the zip closed when on-board at all times.</p> <p>Non-divers/boat handlers are to wear a life jacket at all times.</p>	<p>First aid to be administered and emergency services to be contacted as necessary.</p>
Hot Weather.	All	Rare	Moderate Injury	Low	<p>Divers/boat handlers are to take precautions against overheating and the sun. Avoid dehydration and carry water.</p>	<p>First aid to be administered and emergency services to be contacted as necessary.</p>