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|  | **Safe Operating Procedure****Lost Buddy Procedure****& Dive Buddy Procedures** |  |
| Personal Protective Equipment Required | SCUBADivingequipment |  |  |  | University RegisteredDivers |
|  |  |  |  |  |  |
| SOP Number | RA Number | RA Score |  Date: |
| **SOP-ARLBP01** |  | **Medium** | **01 Oct 2017** |
| SOP prepared by | SOP reviewed by |  Contact Details |  Review Date : |
| **John Naumann****Maritime Arch Tech officer** | **Matt Lloyd****(Maritime Safety Officer)** | (JN) **8201 5533**(ML) **8201 2534** | **01 Oct 2022 (**or when procedures change) |

**Before Work Commences**

* All diving procedures must adhere to Flinders University Diving and Snorkelling Safety Policy and Procedural Manual.
* All divers must be suitably trained and experienced, maintain a current AS2299 Occupational Dive Medical, Provide First Aid, CPR and Oxygen.
* A full Dive Plan and Risk Assessment must be submitted to the Maritime Safety Officer for review and approval 72 hours prior to the commencement of the trip.
* All dives are underpinned by DCIEM dive tables, with no decompression diving permitted.
	+ Maximum repetitive group of H (G if hyperbaric chamber is >2 hours away).
	+ Maximum of **7 ascents** in a day.
	+ Dive profile deep to shallow.
	+ Minimum surface interval of **15 minutes** between dives.
	+ Maximum depth (i.e. Restricted Student Diver **<12m**, Limited Scientific Diver **<21m** and General Scientific Diver up to **30m**).
	+ Low minimum air **50 bar** (on surface).
	+ Ascent rate of **9 metres per minute**.
	+ Maximum of 5 days repetitive diving permitted with the 6th day free of diving.
	+ Minimum 24 hours surface interval if flying after diving.
* All dive gear used must be serviced annually and in good working order.
* On the dive site the Dive Coordinator must complete the (a) **Daily Diving On-Site Risk Assessment** then issue the (b) **Daily Dive Safety Briefing**.
* Diving requires a minimum of 3 people; 2 divers in the water and a Dive Coordinator/ Dive Attendant as Top-Side support. The Dive Coordinator must nominate the Dive Leader. Divers must be allocated in buddy pairs, with less experienced divers paired with experienced divers. Note, ‘Restricted Student Divers’ must always dive with a ‘General Scientific Diver’ as the in-water Dive Leader.
* Use of tethers such as Life-lines, Float-lines or Buddy-lines to eliminate the possibility of a lost diver should be considered with communication signals understood.
* Prior to entering the water the diver and equipment are checked via the (c) **Pre- Dive Equipment Checklist**.
* All dives will have adequate emergency planning, trained personnel with Oxygen and First Aid kits on hand.
* All dives are recorded on the (d) **Daily Dive Safety Log**.

**Safe Operating Procedure**

**Lost Buddy Procedure**

**& Dive Buddy Procedures**

**In Operation – Safe Procedures**

* Under the supervision of the Dive Coordinator and watch of the Dive Leader, divers must remain in buddy teams at all times.
* It is vital that each buddy pair stays within visual range and maintains air, depth, buddy and time checks. In poorer visibility a buddy line should be considered.
* In-water communication such as hand or rope signals must be understood.
* All divers must be aware of task loading and the possibility of becoming task fixated when undertaking scientific diving.
* In an event that a diver/s is noticed missing; look 360**o** around including above. Continue to look around and move 3m up off the bottom depending on visibility and proceed back to the last point they were seen. If still not found slowly spiral to the surface (9 m/min) to meet up there **no later than 5 minutes** after losing contact. Note, the other lost buddy should be mirroring this system as well.
* On the surface use the crests of waves and inflate BCD to gain height. Notify Topside support/ Dive Coordinator. Look for float line or exhaust bubbles. Use your knife (or other metal object) to bang on your cylinder under the water line to draw attention to your lost buddy.
* After a few minutes, if other lost buddy does not surface, mark the spot with an anchored float descend and conduct a full circular search of the area using the marked centre point conducting circular searches of increasing radius with your finger spool and compass.
* If still missing after a further 5 to 10 mins of searching, Topside support/ Dive Coordinator will issue a full diver recall to all divers i.e. 4 revs on the motor or 4 pulls on life-line or float-line repeated.
* If the lost buddy does not surface with the main dive team the Dive Coordinator will arrange the entire dive team to undertake a full underwater search of the area. NB - Ask boat or jetty on-lookers to assist in spotting bubbles or divers.
* With more people doing search patterns, if nothing found 10 min after end of air, call emergency services via phone or radio.
* Stay on site. Keep a look out. Maintain “last-seen” GPS locations or float location. Resist the urge to search on the bottom.
* Write full details of the dive incident including dive times, current details, area searched etc.
* In an event an unconscious non-breathing diver is found contact emergency services phone 000 or VHF Ch 16, administer First Aid, DRSABCD, perform Oxygen assisted CPR and prepare for transport to the nearest medical facility or boat ramp accessible to emergency services.
* In the event of an major incident tag out dive gear write down all events leading up to the incident and be careful not to tamper with any equipment leaving air on.

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| **Hazards Identified** |
| Lost buddy | Gear failure | Panicking buddy |
| Out of air situation | Sea life |  |
| Entanglement |  |  |

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| **Applicable Standards and References** |
| Flinders University Diving Procedures Manual |
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