

# Safety Checklist for underwater survey work

### **PLANNING:**



- Designate a team leader who should coordinate planning
- Team leader to delegate tasks and make decisions
- Allocate personal gear to users for individual responsibility
- Establish a work plan and discuss with team members
- Designate a contact person who knows the work plan
- Study the survey location using maps and local information
- Ensure you have effective communication by radio or mobile phone
- Arrange secure packing of gear and materials

# **DIVING CREDENTIALS AND INSURANCE:**



- Check that all divers have a minimum open water level certification
- Only allow active divers who have dived in the last 6 months to participate
- Check that all divers have insurance and a valid annual medical clearance to dive
- Ensure you can contact the local emergency agency
- Ensure someone in the group knows relevant first aid procedures

# **WEATHER AND GENERAL CONDITIONS:**



- Monitor daily weather forecasts
- Seek local advice where necessary
- Plan activities according to daily weather conditions and tidal changes
- Avoid diving in rough seas and strong tidal currents
- Always dive in the same direction as the current
- In channels always dive into the lagoon
- Avoid areas of poor visibility

## **HEALTH:**



- Do not dive if you have a head cold or are not feeling well
- Change daily plans to suit the needs of the team if necessary
- Keep a medical kit onboard
- Ensure at least two team members have basic first aid skills
- Don't dive under influence of alcohol or drugs, even the night before
- Have oxygen equipment on board when diving to depths of over 40 m

# **BOAT SAFETY:**



- Ensure the boat is a suitable size and design for the work plan
- Check that all basic safety gear is onboard (see SPC sea safety booklet)
- Check engine and keep additional fuel onboard, crosscheck with operator

- Safely stow objects onboard
- Ensure the boat operator knows the whereabouts of all divers and be alert for other swimmers and fishers in the water
- Stay away from ascending divers (10 m at least); move in when they have surfaced
- Position the boat into the wind and swells in all operations
- Ensure there is an assistant onboard to help divers back into the boat
- Do not leave boat unattended or move away from work site
- Ensure that enough food and water is onboard in case of delayed return

# **DIVE EQUIPMENT:**



- Ensure all equipment is serviced regularly
- Pack an additional set of equipment
- Check gear for proper fit and leakage; replace with spare set if faulty
- Ensure divers know their weight system
- Check regulator and BCD for leaks and trapped hose
- Be familiar with your equipment; avoid subserviced and unfamiliar gear
- Keep fragile equipment in cases out of sun and saltwater when not in use

# **BEFORE-DIVE CHECKS:**



- Check that your buddy's gear is in good order
- Secure, within easy reach, a spare octopus, regulator and dive computer
- Test air supply, check weight system and depth gauge before and on descent
- Be clear on your dive plan before entering water; ask if you are
  unsure
- Ensure your writing slate is in order and pencil and record sheet are ready
- Ensure all divers have basic understanding of standard dive sign language

# **UNDERWATER:**



- Never dive alone
- Maintain the same depth as your buddy and stay within view of each other
- Stay focused and do not stray from the dive plan
- Signal immediately if you sense a
- problem (e.g. tiredness, air running low, gear failure)
- Adjust your weight belt and buoyancy system
- Fix problems as soon as they happen, don't let them build up
- If you lose your buddy, stop work and look around the area for 2 minutes; if you cannot locate your buddy, ascend safely and alert the boat operator



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# **USING A COMPRESSOR:**



- A person should be in charge of the compressor
- Ensure the machine is serviced before aoina into the field
- Secure sufficient fuel to run the compressor
- Check for clean air before refilling
- Take care of the machine and keep a spare one if necessary

# **DETECTING PROBLEMS:**



- Observe yourself and your buddy regularly for signs of problems
- Signs of problems include: rapid breathing, no response to signals, awkward kicking, tears in eyes, eyes wide open, jerky movements, using arms to

swim, ejecting mask and regulator, bolting to the surface

On the surface, problems include: lagging behind, choking, coughing, vomiting, moving the head back, treading high out of the water, using hands and arms, and no snorkel or regulator in the mouth

### ASCENDING:



- Always ascend together; follow decompression stop rules
- Ascend up the wall face if near a reef wall
- Always face your buddy when ascending in mid-water
- Stay closer together in low-visibility waters
- If using a sausage float, use exhaled air to fill the sausage
- In deep dives, keep spare scuba tanks and regulator at least 10-15 m below the boat
- Always check above for the boat or objects before surfacing
- Keep watch on the boat when moving closer and getting onboard
- Be careful when removing weight belts, as they can fall off easily

# **ENVIRONMENTAL DANGERS:**



- Avoid actions that attract sharks such as fishing: stay away from fishers
- Wear full wetsuits, boots and gloves for maximum protection
- Follow local advice
- Do not touch anything if unsure
- Stay away from estuaries and murky waters in countries where crocodiles are endemic

## **ACCIDENT:**



- Implement responses to accidents that you have practiced. e.g. throw life-float to victim
- Ensure that the process of assisting the victim does not endanger the life of other team members
- Work out a plan of action with the others onboard
- Bring the boat closer to the victim, extend anything available to reach the victim
- Place the diver gently in a comfortable position onboard
- Commence ABC checks (airway, breathing, circulation)
- Allocate tasks to team members
- Alert relevant authorities for assistance as soon as possible
- Record changes in condition of distressed diver, activities and time of events

# **AFTER DIVE CHECKS:**



- Remove gear and safely stow it
- Put fragile equipment GPS, computers, mask, camera - in cases
- Turn off dive tanks onboard and keep tanks secure when the boat is moving
- Avoid free diving immediately after a deep dive
- Wear a wind breaker on cold and windy days
- Check that all data are recorded before leaving a site
- Ensure safe keeping of completed record sheets
- Do not travel by plane within 24 hours of completing a dive

# **GENERAL CONDUCT:**



- Seek permission from the community and local authorities for access to work site
- Use a local guide at all times and follow his or her instructions
- Respect local rules, code of conduct and culturally significant sites
- Team leader is responsible for maintaining order at all times
- Maintain good behaviour
- Ensure good communication is maintained at all times

# This Safety Checklist should be used alongside:

The SPC Manual for Safety at Sea, a scuba dive regulation manual, and any marine environmental safety guide.



