

## THE THIRD OPEN WATER DIVE

### Lesson Objectives

This lesson will further extend students' depth experience, consolidate buoyancy control and develop awareness of the underwater environment. Buddy rescue (AS) skills will also be developed while dive leading skills will be more formally introduced.

### Achievement Targets

At the end of this lesson students should:

- Be competent and confident in their ability to carry out a near vertical descent
- Be competent and confident in their ability to clear their masks of water
- Be competent and confident in their ability to perform an AS ascent as both donor and recipient
- Have further developed their buoyancy control, finning action and swimming attitude
- Have further increased their awareness of the underwater environment and of their impact upon it
- Have extended their depth experience to between 12 and 15m
- Have been introduced to dive leading skills
- Have performed an exit as if for a boat or onto a jetty

## Lesson Contents

This lesson will require a site that has facilities for both a deep water entry and exit, an area at a depth of approximately 6m for skills development, and a maximum depth of between 12 and 15m.

The AS skills to be developed include ascents from 6m. It is therefore essential that students have demonstrated the competence/confidence performance standard for a vertical/near vertical ascent prior to participating in this exercise.

This lesson will include a number of ascents which, because of their nature, are likely to exceed the normal ascent rate. Because of this, these ascents should be carried out before any other diving activity exceeding a depth of 6m. Careful consideration should also be given to the decompression implications of these repeat ascents on the subsequent dive profile and any subsequent dives.

### 1. Briefing

Ensure that the students fully understand the objectives of the dive, and that the briefing includes breathing gas consumption considerations including appropriate 'turn round' and reserve values.

Decompression implications of the repeat ascents should be fully explained.

Recap the positioning for the AS ascent established in the previous lesson, if necessary giving a further dry run practice.

Ensure all the elements of a 'SEEDS' brief are covered, including any additional signals that will be used to point out items of interest.

### 2. Prepare SCUBA unit and put on protective clothing

Students should, by this time, require minimal supervision. Monitor their performance, particularly of the newer aspects, only intervening if necessary.

**Report dive plan to Dive Manager.**

### 3. Kit up and buddy check

Again, students should, by this time, require minimal supervision during kitting up. Their performance during this, and the buddy check should be monitored, only intervening if necessary. Once the students have completed their own buddy checks, the instructor should then perform a check of their own equipment for the benefit of all students.

To recap on the AS exercise in the previous lesson, include a dry run of the appropriate position for access to the buddy's AS and for control of buoyancy during the ascent.

### 4. Deep water entry

Partially inflate BC, breathing from demand valve, secure mask and regulator with one hand, strap to back of head with other hand, enter water by stride or backward roll, once surface regained turn to face other divers, give 'OK' signal (unless not OK).

### 5. Vertical/near vertical descent to 6m

Following a visual datum, such as a rock face or shot line, perform a vertical or near vertical descent to 6m. When ready to descend, exchange 'OK' signals and then 'descend' signals. Vent gas from BC and then from dry suit until just negatively buoyant. Monitor rate of descent by visual reference and increasing pressure on the ears. Control descent by introducing gas into dry suit in short bursts. Arrest descent just clear of bottom.

At the end of this exercise the students should be **competent/confident** in their ability to perform a controlled descent.

### 6. Skills at 6m

- Partial mask clear

Lift lower skirt of mask from face to allow a small amount of water to enter, hold top edge of mask against forehead, breathe out steadily (but not forcibly) through nose, tilt head backwards

- Fully flooded mask clear

As for partial flood but lifting mask skirt off face to completely flood the mask

- Remove & replace mask

Flood mask completely as above, remove mask, identify nose pocket to check mask is correct way up, place strap out of way over front of mask, place mask on face, run finger round edge of hood to check clear of mask skirt, replace strap over head, hold top of mask against forehead, breathe out steadily through nose, tilt head backwards

- AS ascent

Recipient signals 'out-of-gas', takes donor's AS from stowage, removes own mouthpiece and replaces

with donor's AS, recipient and donor make positive contact by holding shoulder strap or other convenient hand-hold. Once the recipient is breathing from the AS and positive contact is made, donor and recipient ascend at a normal rate to the surface, controlling their buoyancy by venting air from their dry suits as necessary. At the surface, donor inflates own BC and supports recipient. Recipient inflates BC by mouth or emergency cylinder (if fitted) while treading water.

Initially students should act as donor to the instructor, with the roles subsequently being reversed.

At the end of these exercises the students should be **competent/confident** in their ability to perform all the above exercises.

## **7. Dive leading demonstration during exploratory dive to a maximum of 12-15m**

As in the previous dives, the object is to provide time for the students just to enjoy being under water while providing further opportunity to consolidate buoyancy control, finning action and swimming attitude. Instructors should continue to monitor the students' performance throughout the dive and their general awareness of the underwater environment, taking corrective action where necessary. This element also provides the opportunity to more specifically demonstrate dive leading skills:

- Buddy monitoring  
Frequent exchange of 'OK' signals, periodic checks of breathing gas consumption, relative positions enable divers to see buddy, distance between buddies appropriate to both underwater visibility and the need to be able to render assistance if required
- Depth, breathing gas and time management  
Management of dive to observe agreed depth limit. Management of dive time and profile observing agreed 'turn round' and reserve breathing gas contents
- Pilotage  
Identification of topographical features to follow and significant landmarks. If landmarks required for return leg, look at aspect that will be seen in the return direction
- Interest  
Point out any interesting topography or underwater life so that students learn to observe their surroundings

## **8. Vertical/near vertical ascent**

Controlled ascent, with visual contact being maintained and judging rate of ascent using a visual datum such as a rock face or shot line. Briefly pause at 6m check depth to ensure buoyancy is fully under control before continuing with final slow ascent to surface. At surface inflate BC.

## **9. Deep water exit**

This exit should be into a boat or onto a jetty (or equivalent conditions) where the exit is from greater than standing depth. This should be either via ladder or as for a small boat, as appropriate to local diving practice.

- Ladder exit  
With positive buoyancy from air in BC, secure hold of ladder established with one hand while fins removed with other. Continue breathing from demand valve until safely on dry land. Other divers remain safely at one side of ladder until exiting diver clear
- Small boat exit  
Breathing from demand valve take secure hold of boat, release weights/weightbelt, hand up to boat crew, release BC waist and chest connections, disconnect dry suit direct feed, break BC shoulder connection on opposite side to demand valve hose, swing BC around for crew to establish hold, release BC and demand valve, crew removes SCUBA unit from water. Maintain secure hold of boat throughout  
Grip suitable handholds with both hands, duck down in water, pull with hands/fin hard to lift torso out of water and over edge, swing legs round, remove fins

**Report back to Dive Manager.**

## **10. De-kit**

As with kitting up, students should by this time be sufficiently competent that they only require monitoring.

Although it is better to debrief the dive while it is still fresh in students' minds, depending upon weather conditions, and whether the students have got cold on the dive, the instructor should decide whether it is better to remove protective clothing before or after the debrief.

## **11. Debrief**

Check that all students have enjoyed the dive and remind them of both interesting features/life that they saw.

Specifically remind them of dive leading aspects including the features used for pilotage. Review their performances, both generally during the dive and of the specific exercises, highlighting areas of good performance and offering constructive criticism where necessary.

## 12. Equipment care

Remind student to clean and dry their equipment on their return home.

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## Adapting this Lesson

Irrespective of the standard of protective clothing, this lesson extends the students skills to depths beyond their previous experience. While the detail of how buoyancy is controlled (ie. via BC rather than dry suit) will vary, the overall content remains valid for all standards of protective clothing.

## Skills Performance Standards

At the end of this lesson, the students should be sufficiently competent to achieve the following skill performance standard(s) without supervision, in the water conditions experienced:

**Descent** – while maintaining visual contact with a fixed reference (eg rockface, shotline etc.) students can control their rate of descent, can arrest the descent at any time without contact with any fixed reference (eg for clearing ears) and can arrest their descent at the target depth without contacting the bottom.

**Mask removal and clear** – with their mask removed, students continue to breathe steadily, check correct orientation of the mask before refitting it, expel water by breathing out steadily through the nose and tilting the head either back or forward as appropriate to the type of mask. Completely clearing all the water from the mask in one breath, while desirable, is not essential.

**AS ascent as donor** – donor provides clear access to AS for recipient, takes secure hold of recipient and allows receiver to establish a stable breathing rhythm. After exchange of 'OK' signals ascends with recipient, venting own buoyancy device as necessary to control ascent. At surface maintains a secure hold of the recipient until the recipient's BC is fully inflated.

**AS ascent as recipient** – recipient removes donor's AS from stowage, clears it of water and commences to breathe from it, takes secure hold of donor, when breathing rhythm stabilised exchanges 'OK' signal with donor and then signals 'up'. recipient ascends with donor, venting own buoyancy device as necessary to control ascent. At surface recipient orally inflates BC fully.