

# SAA LECTURE No S5

## DIVING AIR AND DEEP DIVING



### Introduction:

Accidents happen mainly because a dive hasn't been properly planned.

Learning the correct skills and practising them is the first stage in avoiding accidents. Poor training and poor attitudes can be contributory factors. You should be fully and properly trained and you should want to make the dive – don't dive because someone else says you should.

Every dive should be planned – and the plan adhered to. Every piece of equipment should be checked – not just yours – but you buddy's too. You should know your buddy's equipment before the dive. Check and re-check-don't let little problems become big ones.

On the day you should be as relaxed as possible. Stress can often lead to accidents through panic attacks etc.

You should be physically fit:

- No cold or nasal congestion
- No excess alcohol before the dive or the night before
- Eat lightly before a dive.

### Buddy system:

Dive in pairs. **NEVER** dive alone. Keep in visual contact at all times, buddy lines in low viz or with novice diver, monitor and signal to each other frequently. The dive should be well planned-discuss it and know it-decide who is to be the dive leader (most experienced diver).

### Equipment:

Check all equipment before leaving home. Check again on site.

Remember your:

- **Air** = DV contents and pony,
- **Buckles** = weightbelt and harness,
- **Cylinders** = Mini cylinder filled and fitted,
- **Direct feeds** = BC and suit inflation and dumps,
- **Equipment** = Fins, Mask, snorkel, hood and gloves.

Learn to use your buddy's-or instructor's emergency kit.

Check breathing air-is it clean (smell it-filter it with a handkerchief) if in doubt, let it out.

Check cylinders-tested and filled-fully assemble SCUBA and STAB/ABLJ-check gauges, tubes, harness, dumps, direct feeds, connections. Diving suit: check zips, seals, dumps/connectors/inflators. Fins, mask, snorkel-check straps and adjustments. Weightbelt- is it correct for dive? Accessories-all working with batteries fully charged.

### Dive Planning

How long/how deep? Use SAA Buhlmann dive tables.

How much air is required? Begin ascent with 30% of original air.

Most accidents happen when ascending – maximum ascent rate is 10 metres per minute.

4 divers (2x2 pairs) is the usual minimum safe party, less than this is not considered to be viable safe option.

Remember, with a party of three divers, one is diving alone.

Will you become cold/tired? Keep alert to changes in visibility or currents.

Consider keeping two back-up divers standing by.

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### Diver rescue

**DO NOT** put yourself at risk during a rescue.

Someone must take charge.

Get casualty to surface safely: approach with care-they could be panic stricken (go behind)-are they trapped or injured? Have they got air? Make sure their DV is secure. Make sure they are breathing out-use their direct feed/mini cylinder. Ascent rate 10 mtr. Per minute. Vent drysuits, yours and casualty's-buddy breathing and ditching of wieghtbelt only as a last resort.

On surface: inflate casualty's jacket-remove DV and mask-administer artificial ventilation. Signal boat or shore. If casualty panics-hold firm-reassure

Towing-as in basic pool training, tow to shore or wait for boat

Rescue into boat-remove equipment, turn diver's back to boat to ease recovery-current could take legs under boat.

### Accident Management

Attend courses when qualified. Purchase DDRC's Underwater Diving Accident manual. Someone must take control-do as instructed by person in control-ask for assistance if artificial ventilation and chest compressions (CPR) are required.

Send for or contact emergency services - Coastguard – 999

Channel 16 VHF

Monitor condition of casualty continuously

Act accordingly – administer first aid – treat for shock – recovery position

Someone – (buddy diver) must go to hospital with casualty – with documentation – ie dive details and their equipment, especially their cylinders.