

# HARDBOAT DIVING – A Beginners Guide

(Please use in conjunction with Pages 104 – 109 BSAC Diving Manual – Boat diving)

## ❖ DIVER HEALTH AND SANITY WARNING

- THE FOLLOWING NOTES ARE MEANT TO BE HELPFUL IF YOU ARE RELATIVELY NEW TO HARDBOAT DIVING.
- THE BEST WAY TO LEARN THIS IS TO IGNORE THE BLURB, GET OUT ON SOME BOATS AND ENJOY YOUR DIVING.
- IF YOU FEEL THAT KNOWING A BIT MORE ABOUT HOW IT ALL TENDS TO WORK WOULD HELP YOU TO ENJOY YOUR DIVE TRIP, THEN READ ON.
- IF NOT – GO AND DIVE AND ENJOY YOURSELF.

## 1) Types of Hard Boat

The following boats are examples of ‘typical’ hard boats which are to be found around the UK. Their appearance in this article are merely for example.

### DAYBOATS



“James Alexander” out of Poole

- Licensed for 12 divers
- Toilet and cooker
- Kit up at front
- Some cylinder / stab / reg sets stored on racks in front of cabin some laid on deck forward of bench / racks Kit stored in goody bags under bench / racks
- Entry by Fall/Roll off the side
- Exit by ladder



“Flying Eagle out of Largs

- Boat Type Lochin 33
- Speed 9 knots
- 9 divers or passengers
- Entry by roll off the side
- Exit by ladder
- Large wheelhouse (can get most people in)
- Loo under the steering wheel inside cabin



Flying Eagle - Deck view

- There are only 7 people on deck – think two more + kit + spare tanks
- Kit stored in goody bags behind cabin
- Tank/stab/regs assembled and tied around side of boat.
- Spare tanks beside them or under bench at back

## LIVEBOARDS



Jane 'R' – based Scotland (Oban) or Norway

- Converted trawler
- Accommodation below decks in shared cabins sleeping 2 or 4 in bunkbeds
- 2 showers and toilets
- Kit stored in racks at the front
- On-board compressor with in-situ tank reaching whips.
- O2 available for Nitrox fills
- Water entry by stride-entry from 'gate' forward of the bridge.
- Water exit by ladder



MV Salutay – based Scotland (Oban) & N. Ireland

- 59ft purpose built motor yacht
- Accommodation below decks in shared cabins sleeping a maximum of 10 passengers
- Kit stored at the front.
- On-board compressor at stern.
- O2 available for Nitrox fills
- Gases available for technical diving
- Water entry by stride-entry from platform immediately forward of the bridge.
- Water exit by ladder

- The range of hardboats is enormous
- No two boats are the same – even identical boats will have been fitted out differently and will have different diving practices

- Room onboard varies enormously with the type of boat and how many divers they are licensed to carry
- Cost can vary tremendously depending on the boat and the proximity of the dive sites.
- Day boat costs will tend to be between £30 and £45 per day for two dives, which does not normally include lunch or air fills.
- Live-aboards cost around £400 - £700 per person per week, but this is fully inclusive of diving, air, accommodation and full-board food.

## 2) IS THIS TRIP FOR YOU?

- Because there is such a wide variety of boats it can be helpful to establish some facts before you agree to go on the trip:
  - Who is planning the trip and what dives are planned
  - Is it a Day boat or a Live-aboard?
  - Is the boat fully chartered by the club or are other non-club involved - in which case who has the say over what dives are done (You could find the skipper going to dive sites that the other party want to do but you don't fancy. Can/Will the skipper accommodate both parties and do different dive sites to please all?)
  - What type of boat is it – consider weather protection, space, entry/exit.
  - Are you out for the full day or returning to a base between dives. If not returning (as is usual with hardboats), how many dives are planned? How many cylinders will be you need?
  - If you are returning to a base, how long will you be there between dives? What facilities are available, e.g. food / drink / air fills
  - What are the arrangements for storage (check dry storage availability for spares, kit and dry warm clothes, food and drink, valuables; deck space and storage arrangements for kit (can you take boxes on board? Dive bags? Or is it goody bags only).
  - Food – you need water, warm drinks, and food for the day/s – some boats provide everything, (let the organiser know about special diets), some just warm drinks, some none at all.
  - Liveaboards – what is provided – food / drinks/ bedding/ towels etc. Charging facilities – voltage / adaptors will there be enough points to get all your equipment recharged?
  - Cost – Overall cost; Deposit; Balance and how these are going to be paid (most skippers are as happy to accept plastic for your share of the balance, as organisers are to sub you for your share when there isn't a cash point on the beach!!).
  - Remember the cost of fills especially if you are using nitrox.
  - Weather - different boats perform differently in different conditions The Salutay (with stabilisers) was brilliant in huge seas around the North of Ireland and would be perfectly comfortable in quite high seas that would be impossible in one of the smaller boats with a shallower draft. If you have problems with seasickness in particular you may want some advice on how the boat performs.

### 3) GETTING THERE

- Hard boats tend to be further afield and some harbours / piers can be difficult to find if you don't know them
- Make sure you have clear directions to the embarkation site, and to your accommodation if you are staying overnight first You also need contact numbers – the trip organiser's mobile is invaluable.
- Make sure you get to the site in plenty time to get your gear out of the car and onto the boat and then park up – remember on some trips and some harbours (e.g. Seil Island, Dunbar, St Abbs) loading can be tide dependent so there may be quite a tight schedule (and some difficulty!).
- Remember if you need medication for seasickness you may want to start it the evening before.
- Remember your club dive card with your personal details next of kin etc – saves having to fill out forms on a rolling boat.

### 4) LOADING

- Stow your gear as instructed by the skipper / dive marshal. This is usually done by setting up tank / BC / regs and securing them upright tied securely to the side of the boat or to a purpose built bottle rack.
- Make sure you carry out a full equipment check **BEFORE** the boat sails. Once checked ensure that the cylinder valve is turned **OFF** for the journey. Spare cylinders may be stored in the same way or laid down in a designated area – **IF NOT SURE, ASK.**
- This is the point to check with your buddy and get your kit stowed beside each other.
- Other items of kit – in box / bag or goody bag will be stored on deck – as near sets as possible. Some boats have crates to store the bags in, some wedge in near the gear, some are kept all together in a designated area. Know exactly where you have put yours, keep it all together and please be able to recognise it instantly. Six (off) white string goody bags full of dive gear all look the same in a swell with rain driven by a force three wind!
- Weight belts, if not in a crate with your gear, will often go all together in one place – know where yours has gone and be able to recognise it.
- Dry kit / spares / tool kit / valuables usually go in the cabin. **ASK** where you can stow them and check the rules for going into the cabin. Some boats have very strict wet / dry areas some are relaxed and some none at all.
  - **SPACE IS ALWAYS AT A PREMIUM**
  - **DON'T TAKE MORE THAN YOU NEED**
  - **KEEP IT TOGETHER AND TIDY**
  - **KNOW WHERE IT IS**
  - **DOUBLE CHECK THAT YOU HAVE EVERYTHING BEFORE THE BOAT LEAVES HARBOUR**

## **5) GENERAL RULES AND RESPONSIBILITIES**

### **DIVE MANAGER'S WORD IS LAW ON DIVING**

- The Dive manager for the day is in charge of the diving – who does what, when, how and **IF** it is done or not.

### **COX/SKIPPER'S WORD IS LAW ON THE BOAT**

- Decides how and where kit / boat equipment is stored
- Will give a safety brief on the boat covering the following:
  - Safety equipment – Radios / fire extinguishers / life rafts / life preservers / O2 kit(s)
  - Boat procedures wet/ dry areas, drinks (if available) Loo(s) and how to work them (usually with gory stories of culprits ignominious attempts to unblock them).
  - Diving procedures – signals to enter water / method of entry / diver recall system / use of SMB or DSMB / signals for exit / procedure for exit
  - Will often at this stage give an idea of what is available for that days diving and in discussion with the dive marshal decide where to go and roughly how long it will take.

**YOU SERIOUSLY NEED TO KNOW THIS INFORMATION.  
IF IN DOUBT OR IF YOU MISSED ANY OF IT ASK AT THIS POINT**

The skipper also ....

- Gives permission / signal to enter water
- Decides on how to pick up divers and on the order of picking up
- Gives permission to enter boat
- Will advise the dive marshal on the appropriate dive sites and assist with dive briefing (in practice the dive marshal will be advised by the cox / skipper but the responsibility for the decision on whether a dive is suitable for the party rests with the manager for the day)

## **6) KITTING UP**

- Hardboat trips are usually longer than RIB journeys – the hardboats have a much longer range than most ribs and in general are better equipped with high spec. GPS / SONAR etc. It may take an hour or two to get to the dive site.
- You may not want to be in your suit all this time – it is common for divers to wear under suits with a waterproof jacket on top (gloves and woolly hat if necessary) with sensible footwear (boots can be a good idea) – unless of course the weather is beautiful and it's T-shirt and shorts (well maybe in the Red Sea).

- If you haven't suited up you need to be aware of time and what is happening. It can be surprising how long it can take to get suited up on a crowded boat.
- Remember if you are properly hydrated you always want a pee as soon as your suit is zipped up so go before (unless you have a pee zip, lads – in which case remember to do it up - sorry Graham).
- Everyone else thought the same though and there is only one loo! – start the process in plenty of time – unless (boys) you have a pee zip and are confident, then why bother queuing! (Also beware becoming a 'man overboard'!).
- **A LOT OF HARD BOAT DIVES ARE TIDE DEPENDENT. THAT MAY MEAN YOU HAVE TO BE READY TO GO AS YOU REACH THE SITE OR MISS THE DIVE.**
- The skipper usually gives updates you on ETA at the site and when to start kitting up
- The skipper may give a dive brief before you start kitting up. Sometimes circumstances mean that the brief will come whilst you are kitting up
- **START EARLY**
- **TAKE YOUR TIME**
- If it is warm, have some water while kitting up.
- Kit up beside you buddy
- Get all the gear you need for this dive together and as compact as possible
- Watch out for and respect other peoples kit (a misplaced weight belt or tank can smash a computer; Turn round carelessly with your tank on to pick up a fin and you can catch your neighbour in the face; a torch on a purge button and someone's dive is over.)
- Help your buddy and accept help – no good being ready to go and your buddy is still waiting for you to zip his suit up
- Give your details to the dive marshal – cylinder size; air in etc if you haven't already done this.
- **AIM TO BE READY TOGETHER**
- **ALWAYS BE READY IN TIME TO DO A FULL BUDDY CHECK**
- **ALWAYS ENSURE THAT YOU AND YOUR BUDDY HAVE HEARD, UNDERSTOOD AND DISCUSSED THE DIVE BRIEF – IF NOT SPEAK UP – NEVER GO IN WITHOUT UNDERSTANDING THE DIVE.**

## 7) DIVING ENTRY



- Smaller boats usually a form of backward / sideward roll over the gunwales (side), this is considerably higher than a rib and can be a bit disconcerting at first – REMEMBER :
  - ✓ Air in jacket
  - ✓ Air in suit
  - ✓ Reg in position
  - ✓ Hand over mask / reg.
  - ✓ Other hand over loose equipment – torch etc.
  - ✓ Check fins clear.
  - ✓ Roll back on the agreed signal.
  - ✓ Signal OK to the boat and join up with YOUR buddy.
- You will go further down and take longer to surface than you expect. Your reg. and mask are in position, all you need to do is WAIT, you have masses of buoyancy and will come back to the surface in a reasonable position. If you fin / swim you tend to drive yourself down / dislodge equipment, and may catch you buddy / other divers if as sometimes happens a pair will go in together. Once back on the surface give a good clear OK signal to the boat and to your buddy (unless you're NOT OK!)
- Larger boats are exited invariably by a side entry usually through a “gate” in the gunwale. This is a standard stride entry but extra care needs to be taken to hold on as you make your way there and are preparing to enter. Consider putting your fins on once at the “gate”.



## 8) PICK UP



- You will have been briefed on the agreed surfacing procedure.
- If ascending on an SMB or DSMB the boat will acknowledge and then pick you up as soon as possible but this may not be immediately as there are other divers in the water and the skipper may need to pick them up first.
- If you come up a shot line the boat will usually be close and you may have to fin away from the shot for the boat to pick you up. The skipper will not risk putting the propellers near the line in case of entanglement or injury to other divers.
- Keep an eye on the boat and pay attention to the skippers instructions (if any!)
- The boat will come alongside with you on the side of exit usually ladder side or the stern in the case of a tail lift.
- There will be a grab rope / handle / tyre for you to hang onto and work your way to the ladder.
- Some ladders (SELKIE – St Abbs) you will need to remove your fins to climb up the ladder. In these instances, hand your fins up to the skipper or another diver first.
- Most ladders have a central spine with rungs out either side of a metal spine.
- Hand up loose (or valuable!) equipment (DSMB and reel, camera etc)
- Climb the ladder slowly and steadily (Excess exercise increases risk of DCI)
- Inflate your BCD/Wing and keep your mask on and regulator **IN** until you are safely back on the boat



- **WAIT** until a diver has **FULLY** climbed the ladder and is safely back on the boat **BEFORE** you leave the grab rope and go to the ladder (Divers have been known to fall off ladders and being hit by a diver in full kit falling from 6 feet is **NOT** recommended!)
- Once on the boat you will usually be guided to a seat near the ladder and helped to dekit. Do this as quickly and neatly as you can then move your gear to “your” place to allow room for the next diver
- Give your dive details to the dive manager (Air Out, Dive Time, Maximum Depth and Decompression Stop details).

## 9) BETWEEN DIVES

- Get yourself settled and dekitting including getting out of your suit if there is to be a reasonable surface interval usually expect 2-3 hours but not always - **DO CHECK**
- Have a warm drink and some water to rehydrate
- Be prepared to help other divers exit / get drinks etc.
- Collect your kit together and put it back into your crate or bag in the order you are going to get it out for the next dive or, if you are finished for the day, then you can start to collect it together and stripped for unloading, if appropriate.
- Don't leave your kit lying around – it gets mislaid or broken it is **YOUR** fault and there is little worse than hunting around the deck trying to find a glove with all your kit on and everyone else busy kitting up
- Straight after a dive is often the best time to change to a new cylinder for the next dive and to stow your empty cylinder.
- Keep warm/cool (as appropriate!)
- Keep well hydrated (drink water as well as warm tea or coffee)
- Have something to eat (not just the biscuits – they're for the skipper/dive marshal!)
- Stay alert for the next dive briefing and for the signal to start kitting up again.

## 10) UNLOADING

- By the time you are back and tied up in port all your gear should be dismantled and put in bags ready to take off the boat
- Unloading is generally a team effort – lend a hand where you can.
- It may well be necessary to form a chain to unload heavy items e.g. cylinders, weights, bags etc.
- Divers with unusual or exceptionally heavy items e.g. rebreathers / twinsets usually see to their own
- However much unloading is a team effort, **YOU** are responsible for making sure **ALL YOUR** kit comes off the boat and you get reunited with it = keep it together and tidy and try to keep track of it while helping unload.

## HARDBOAT CHECKLIST

- ✓ **Directions**
- ✓ **Accommodation details**
- ✓ **Organisers mobile number**
- ✓ **Meeting place and time**
- ✓ **Parking arrangements**
- ✓ **Loading arrangements**
- ✓ **Money (boat / fills / accommodation / food and drink)**
- ✓ **Club dive card**
- ✓ **Full Dive kit**
  - **Mask**
  - **Fins**
  - **Snorkel**
  - **BCD**
  - **Regulator (1<sup>st</sup> stage 2<sup>nd</sup> stage AAS + console with depth and contents gauge as minimum – compass if possible)**
  - **2 full cylinders**
  - **Pony + Regulator (optional)**
  - **Torch (fully charged + backup torch + spare batteries/recharger)**
  - **Knife / scissors**
  - **DSMB & Reel**
  - **Goody bag**
  - **Drysuit & Undersuit (+ thermals if needed)**
  - **Weight belt and weights (check adjusted for sea water)**
  - **Computer (or watch/tables)**
- ✓ **Spares (O rings; fin straps; mask straps; spare mask; spare torch, spare batteries; spare hoses; spare 2<sup>nd</sup> stage mouthpiece) if you have these bring them**
- ✓ **Toolkit (optional)**
- ✓ **Dry clothes (Zips; neck seals; wrist seals; all “go” if you get soaked then the boat can be very uncomfortable)**
- ✓ **Water (essential)**
- ✓ **Warm drinks / food (if not provided)**