

SOLAS, weather and time planning

SOLAS info and passage plans	See SOLAS sheets at end
Weather forecast areas	(see trip website for areas covered in diving area)
Weather forecast	Print off and attach to plan to take with you. Check a few days before trip and night before trip (via radio and websites). And throughout trip via VHF radio and Radio 4.
Weather websites	http://www.bbc.co.uk/weather/ukweather/ http://www.onlineweather.com/v4/data/MetOffice.html
Shipping forecast on Radio 4	0536 1201 (LW only) 1754 0048am
VHF broadcasts for Inshore Waters Forecast	(see trip website for times)
VHF broadcasts Shipping Forecasts	(see trip website for times)
Schedule for shore sites. Draw up a timetable on a slate and then insert additional column with actual times. Throughout the day, compare how the time is going with the plan. If time is slipping, adjust plan.	Time to meet at stores Time to leave Bath Time to arrive at shore site 1 st wave of divers in by 2 nd wave of divers in by 3 rd wave of divers in by 4 th wave of divers in by Diving stopped by Time to leave Time to arrive in Bath Time to finish washing kit
Schedule for tidal sites. Draw up a timetable on a slate and then insert additional column with actual times. Throughout the day, compare how the time is going with the plan. If time is slipping, adjust plan.	Time to arrive at launch site: Boat launched by: Boat to leave by: Boat to arrive at 1st site by: Shot and divers in by: Leave site/arrive back by: Leave for 2nd site by: Boat to arrive at 2nd site: Shot and divers in by: Etc.

People Planning

This will help you decide whether you have the right number of qualified people on the trip.

Plan for the day (date)	
Dive Marshall. (Overall charge, rescue manager)	
Deputy Marshall. (Checks people are present and deputizes)	
Boat marshal/Helmsman: checks boat and equipment	
Navigator: ensures staying on course and navigational equipment. Communicates nav info to marshal	
Equipment marshal: checks personal and group gear. Keeps deck tidy, task gear present	
Safety Marshal: checks safety equipment	
Records marshal: ensures dive log is filled in, and materials are in boat/on shore	
Primary boat handlers on trip (must be 1 on trip)	
Qualified Boat Handlers (must be 1 on boat at all times)	
Oxygen Admin people on trip (must be 1 on boat or shore at all times)	
VHF/GMDSS people on trip (must be 1 on each boat)	
Next of kin numbers	Make a list of all those on trip and whom to contact in case of an emergency

Dive Marshal's Check list and Briefing. MES Jan 04

Use these sheets to sort out buddy pairs and who will be marshalling on shore/boat.

Wave 1	<i>Approximate time of day</i>
Cox left on boat/marshal left on shore	
O2/radio person left on boat/shore	
Pair 1	
Pair 2	
Pair 3	
Wave 2	<i>Approximate time of day</i>
Cox left on boat/marshal left on shore	
O2/radio person left on boat/shore	
Pair 1	
Pair 2	
Pair 3	
Wave 3	<i>Approximate time of day</i>
Cox left on boat/marshal left on shore	
O2/radio person left on boat/shore	
Pair 1	
Pair 2	
Pair 3	
Wave 4	<i>Approximate time of day</i>
Cox left on boat/marshal left on shore	
O2/radio person left on boat/shore	
Pair 1	
Pair 2	
Pair 3	

Use these sheets to sort out buddy pairs and who will be marshalling on shore/boat.

Wave 1	<i>Approximate time of day</i>
Cox left on boat/marshal left on shore	
O2/radio person left on boat/shore	
Pair 1	
Pair 2	
Pair 3	
Wave 2	<i>Approximate time of day</i>
Cox left on boat/marshal left on shore	
O2/radio person left on boat/shore	
Pair 1	
Pair 2	
Pair 3	
Wave 3	<i>Approximate time of day</i>
Cox left on boat/marshal left on shore	
O2/radio person left on boat/shore	
Pair 1	
Pair 2	
Pair 3	
Wave 4	<i>Approximate time of day</i>
Cox left on boat/marshal left on shore	
O2/radio person left on boat/shore	
Pair 1	
Pair 2	
Pair 3	

THE CHECKLISTS

Use the other people on the trip to help you! Most of the planning should be done by this stage, so now is the time to start delegating! And checking you've remembered everything.

DIVE MARSHALL'S CHECKLIST

- Everyone knows what to check

DEPUTY DIVE MARSHAL CHECKLIST

- Check everyone is fit and present: rollcall
- Check VHF radio – fully charged?
- Check flares tub is on board and flares are in date
- Check EPIRB is on board

SAFETY MARSHAL CHECKLIST

- Check first aid tub is on board and kit is complete
- Check oxygen bottle full, assembled and depressurised
- Yellow Rescue rope
- Personal buoyancy aids for non-divers
- Lifesaving Signals sheet
- BSAC Incident Sheets available
- Mayday/radio call sheet plus callsign

EQUIPMENT MARSHAL

- Checks everyone has personal gear
- Organises Chain to Load Gear
- Check all kit is stowed neatly and not likely to bounce out of the boat
- Shotlines correct length?

RECORDS MARSHAL CHECKLIST

- Check blank dive logsheets are available
- Pencil to write dive times on board
- BSAC 88 Tables on board

NAVIGATOR CHECKLIST

- Voyage plans on board
- Nav Aids fully charged?
- Echo Sounder and Transducer set up
- GPS and GPS Aerial set up. Correct datum on GPS?
- Compass on board

BOAT MARSHALL'S EQUIPMENT CHECKLIST

- Check fuel level and sufficient fuel for trip
- Killcord
- Spare prop (in white tub)
- Fire extinguisher
- Tool kit + spares box
- Rampatch kit
- 2x Paddles
- Bailer
- Boat pump
- A-flag on pole
- Anchor + chain + rope. Set up and ensure if ready to deploy if needed
- Shot + line + buoy, deco bar, various lengths of rope, transfer lines
- Radar reflector
- Check all tubes are fully inflated including the keel

Diving Equipment Checklist

Club Kit to borrow

Name																				Total
Suit																				
Cylinder 1																				
Cylinder 2																				
BC size																				
Regulator																				
Compass																				
SMB																				
Reel																				
Weightbelt																				
No of leads																				
Out of stores																				
Back to stores																				

Personal kit to bring

Mask, fins, snorkel, slate, gloves, boots, computer, tables, hat, boat coat.

MARSHALL'S BOAT & SAFETY EQUIPMENT CHECKLIST

Although you may have delegated most jobs, it is worth checking these important bits of kit.

<p>Checks to be made at least 2 days before trip As the Marshall you need to check that everything is going to work on the weekend.</p>	<p>VHF radio: Check that it is charged and working. Navigational aids: Check that battery for nav aids is charged. Oxygen equipment: In black box. Ensure bottle and reg are there. Check that bottle is full. First aid equipment: In black cylindrical tub and green material case. Check contents OK. Flares: In white tub with red lid. Check contents: (2 × red rocket/parachute, 2 × large orange smoke, 2 × red pinpoint). In date? EPIRB/fire extinguisher: In white tub with red lid. Check present SOLAS stuff: Check radar reflector, laminated sheet of Lifesaving signals, emergency radio call sheet. Boat equipment: marine oil - is there enough? tool kit and engine spares box complete (spark plugs, etc.) tools to fit them Check state of fuel in tanks (oiled??) Ensure trailer is in good condition and tires are inflated</p>
<p>Extra checks to be made by the marshal when packing boat or just before leaving</p>	<p>Oxygen equipment: Set up before diving commences but depressurise. SOLAS stuff: You will need: radar reflector; laminated sheet of Lifesaving signals; Emergency radio call sheet with call sign of radio. Bathub's call sign is T104313. Diversity's call sign is T107636. Personal buoyancy aids: each person needs a BCD even if not diving. Boat equipment: A-flag on pole Shot weight plus various lengths of shotline and buoy</p>

Extra/small items that need to be on the boat before you set off for the dive site:

- Pencil, slate/notebook to write down dive times
- BSAC 88 Tables

PRE-DIVING DAY BRIEFS

A few days before the trip, let everyone know what is happening:

- Type of diving and what dive sites
- Be at stores/launch site by
- Return to Bath by
- Costs
- Any other questions

ON THE DAY

(Some of this is not applicable to most club trips, or club boat trips, but is applicable to ahrdboat trips.)

Dive Briefing

- Get everyone together at campsite or in car park on arriving at site.
- Detail Marshals for the day.
- Emphasise Records: dive plans (time, direction), surface detection aids
- Ask what is on DSMBs
- Time to Site

Dive Marshal's Check list and Briefing. MES Jan 04

- Time to Slack/1st Dive Pair in
- Last pair to fill lifting bag on shot?
- Expected depth over wreck and to seabed
- Tidal info before/after
- Site details include: history/lay/hazards, e.g., nets/fishing lines/sharp edges, Viz, where to go
- If divers drift off site, put up DSMBs
- Diver recall and diver emergency signals
- Get someone to organise loading of boat

After Boarding/before leaving

- Got food and drinks for time at sea?
- Begin hard-boat briefing. Name of Boat. Name of Skipper (remind that skipper is in charge). Introduce assistants
- *Safety brief:* Man Overboard Drill. Position of VHF radio + call card. Diver Recall and Diver Emergency Signals. Position of O2 and First Aid Kit. Keep gear out of gangways. Slippery deck. Mind your head. Dive entry & exit points, ladders
- *Housekeeping:* No wet gear below or in wheelhouse, No smoking area, Heads/loos, Bin bags for rubbish
- *Dive info:* Dive Site, Time to Site, Slack water window. Please help by giving dive plans rather than us chasing! What is marked on DSMBs?

When leaving harbour

- Call HMCG informing of day's plans

En-route:

- Get regular updates from Navigator. Communicate any change in ETA
- Think of passenger safety and comfort

Site Location:

- *Dive Marshal:* Support Boat Handler in site location. Check shot is ready for deployment
- *Boat Handler:* Use Echo Sounder/DGPS/Transits. Confirm site depth. Give Order to Deploy Shot.

During Dive:

- Monitor divers and weather
- A-Flag should be raised
- Diver Recall signal
- Recover Shot/Equipment

Unloading (Transfer to Tender)

- Organise Team for transfer
- Check all equipment collected from Hard-Boat

Dive Debrief

- Review Trip/Dive/Safety

Aftermath

- Paperwork/Records/Signatures

EMERGENCY ACTION CHECKLIST

Rescue Manager's Checklist

1. Appoint some to monitor casualty in water
2. Boat to casualty
3. Find out what the problem is
4. Dispatch rescuers
5. Secure casualty at the surface
6. Alert HMCG if necessary
7. Set up O2 set or first aid
8. Recover casualty into boat - how?
9. Continue to monitor and give first aid
10. Use incident sheets
11. Take records of incident and first aid
12. Casualty assessment
13. Apply TLC to buddy
14. Get dive computers used, NOK details
15. Separate diving equipment
16. Recall other divers?
17. Prepare boat for helicopter

Overdue Diver

18. Mark site/last known position
19. How overdue?
20. How long will air last?
21. Alert HMCH with Pan Pan call
22. Bubble search - upwind and downstream
23. Post look-outs
24. Standby divers available?
25. Diver recall signal?
26. Ask neighbouring boats to help search

Boat engine malfunction

- Anchor boat to stop drift
- Test fuel, fuel lines, etc.
- Try to fix
- Do we have a tender we can use for towing?
- Call up neighbouring boats for help
- Divers to put on gloves, hoods if cold
- Alert HMCG, Pan Pan, Mayday, depending on situation (use Mayday if boat is going to be smashed on rocks, or if someone is going to die)

Weather blows up while divers down

- How long 'til divers surface?
- If too long recall divers
- Stay vigilant to where divers are

Fog descends out at sea

- Take position quickly
- Post look-outs
- Head into shelter
- Get out of shipping lanes
- Hoist radar reflector
- Put on steaming/nav lights
- Keep at slow speed in case of collision
- Sound signals if under way
- Keep log of time, course

Broken bones

- Call HMCG with Pan Pan call. Ask for medical advice
- Appoint someone to give TLC and reassurance to casualty
- Appoint 2 people to apply traction
- Immobilise fracture
- Only move if necessary
- Keep warm and comfortable

NOTIFY COASTGUARD OF INTENTIONS BEFORE ALL DIVES

(Diversity callsign T107636)

<Check VHF that channel 16 is clear for 30 s before transmitting>

You: "___ Coastguard, ___ Coastguard this is *Diversity* x 2, we have routine traffic, over".

C/g: " *Diversity*, this is ___ Coastguard, channel six seven (*usually*)"

You: "___ Coastguard, this is *Diversity*, channel six seven, out".

<Change to channel 67 and wait a few seconds>

C/g: " *Diversity* this is --- CG – go ahead, over"

You: "___ Coastguard this is *Diversity*, we'd just like to notify you of our dive plan for today.

We are a party of ___ divers on a *inflatable/RH/Inhard* boat. We've just launched from ___.

We'll be diving ___ then a second dive at ___ before returning to ___. Estimated time of return is ___ hours, over"

C/g: "Thank you *Diversity*. Please let us know when you are safely back. Coastguard out."

You: "___ Coastguard, this is *Diversity*, many thanks, out".

<Set VHF to dual 16/67 watch>

DO A RADIO CHECK ON ANY BACK UP RADIOS

<Check VHF that channel 16 is clear for 30 s before transmitting>

You: "___ Coastguard, ___ Coastguard this is *Diversity*, *Diversity*, radio check, over".

C/g: " *Diversity*, this is ___ Coastguard, I read you loud and clear, out"

You: "___ Coastguard, this is *Diversity*, many thanks, out".

Which HMCG to call	Portland: Portland CG Plymouth: Brixham CG Cornwall: Falmouth CG
For Decompression Illness cases RN/BHA diver helpline	07831 151 523 (England/Wales)
Radio VHF broadcasts for Inshore Waters Forecast	Falmouth 0940, 1340, 1740 Brixham 0850, 1250, 1650
Radio VHF broadcasts Shipping Forecasts	Falmouth 0940 Brixham 0850

NOTIFY COASTGUARD OF INTENTIONS BEFORE ALL DIVES

(Bathub callsign T104313)

<Check VHF that channel 16 is clear for 30 s before transmitting>

You: "___ Coastguard, ___ Coastguard this is *Bathub* x 2, we have routine traffic, over".

C/g: " *Bathub*, this is ___ Coastguard, channel six seven (*usually*)"

You: "___ Coastguard, this is *Bathub*, channel six seven, out".

<Change to channel 67 and wait a few seconds>

C/g: " *Bathub* this is --- CG – go ahead, over"

You: "___ Coastguard this is *Bathub*, we'd just like to notify you of our dive plan for today.

We are a party of ___ divers on a *inflatable/RH/Inhard* boat. We've just launched from ___.

We'll be diving ___ then a second dive at ___ before returning to ___. Estimated time of return is ___ hours, over"

C/g: "Thank you *Bathub*. Please let us know when you are safely back. Coastguard out."

You: "___ Coastguard, this is *Bathub*, many thanks, out".

<Set VHF to dual 16/67 watch>

DO A RADIO CHECK ON ANY BACK UP RADIOS

<Check VHF that channel 16 is clear for 30 s before transmitting>

You: "___ Coastguard, ___ Coastguard this is *Bathub*, *Bathub*, radio check, over".

C/g: " *Bathub*, this is ___ Coastguard, I read you loud and clear, out"

You: "___ Coastguard, this is *Bathub*, many thanks, out".

Which HMCG to call	Portland: Portland CG Plymouth: Brixham CG Cornwall: Falmouth CG
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BUSAC Diving Safety Guidelines including SOLAS info

- All diving within a BSAC Branch should comply with BSAC's Safe Diving Practices. If you don't know what they are, see www.bsac.org.
- The DO needs to know trip plans and details
- Divers must have BSAC third party insurance (i.e. be current members) or own personal insurance (e.g. Divemaster Insurance) if you are not a BSAC member.
- Divers who have not trained with the club should show their BSAC qualification books to the Diving Officer and have a check-out dive with an experienced diver.
- Please obey the Dive Marshall's instructions.
- Try to have one Advanced Diver or one 2003 Dive Leader per trip. If not possible, discuss plans with DO: pre-2003 Dive Leaders or divers who have been on PRM, O2, DPM courses, etc. will be useful.
- Club or Ocean Divers can organise a trip, but they will not be able to marshal one.
- Club or Ocean Divers cannot dive without the consent of the DO.
- The depth limit for Club Divers is 20 metres, and 35 metres for Sport Divers.
- If you are taking the boat always take at least two boat handlers, having one on the boat at all times
- Each trip should have two O2 administrators, having one on the shore or the boat at all times
- A VHF licence holder should be on each boat trip, and must brief other boat handlers on distress messages, unless they also hold the licence.
- Decompression diving can be done by Sport Divers, but you are recommended to practise stops beforehand.
- Six divers in the boat maximum, unless trip is less than half a mile offshore, e.g. shuttling to Portland breakwater from Ferrybridge or Balaclava Bay, etc.
- Delayed SMBs should be used at the end of the dive if possible, most important over popular wrecks, unless divers are capable of returning to and ascending the shotline.
- SMBs to be used on drift dives and where there is low sea vis. (fog)
- When entering the water from the boat, swim directly to the shot buoy or your buddy. Try to swim away from the boat as soon as possible; do not descend directly beneath the boat. This will avoid people being run over!

When boat handling:

- SOLAS Regulation V/35 prohibits misuse of any distress signals. These are critical to safety at sea and by misusing them you could put your or someone else's life at risk. Do not fire a flare or use any distress signal unless life is in imminent or grave danger. Anything else is not a distress situation.
- SOLAS Regulations V/31, V/32 and V/33 require you:
 - to let the Coastguard and any other vessels in the vicinity know if you encounter anything that could cause a serious hazard to navigation, if it has not already been reported. You can do this by calling the Coastguard on VHF, if you have it on board, or by telephoning them at the earliest opportunity. The Coastguard will then warn other vessels in the area.
 - to respond to any distress signal that you see or hear and help anyone or any boat in distress as best you can
- SOLAS Regulation V/29 requires you to have access to an illustrated table of the recognised life saving signals, so that you can communicate with the search and rescue services or other boats if you get into trouble. You can get a free copy of this table in a leaflet produced by the MCA. You can also find it in various nautical publications. If your boat is not suitable for carrying a copy of the table on board (because it's small or very exposed), make sure you've studied the table before you go boating. Larger boats should keep a copy on board.
- SOLAS requires you to have a radar reflector on board. Don't forget it.
- SOLAS requires you to have a voyage plan on board, that you have checked the weather forecast, the tides, that you aren't going anywhere that is not suitable for the boat, and that the people on board are adequately kitted and prepared for trip. Also make sure you are familiar with any navigational dangers you are likely to encounter on the trip. Always have a contingency plan.

- When using the boat try to let someone ashore know where you are and what time you plan to return. Or make sure you have a VHF that works! Don't rely on mobile phones.
- When launching the boat, please try not to dunk the trailer wheels in the water. Use all available hands and lift it to the water's edge.
- Please try to keep a thorough look-out when driving the boat over crowded dive sites.
- Please be prepared to get out of the way, steer off course, reverse or stop to avoid collisions. Even if it is your right of way!
- Not all divers carry DSMBs, so to avoid running them over please watch for their bubbles over dive sites
- Don't drive over or near SMBs or divers' bubbles.
- Don't drop your shot onto a site at which divers are already diving.
- Always ask divers how long they will be so that you know when to expect them to surface. If they become overdue you should start to organise their recovery or a search.
- Never face into the sun when being boat cover: you won't be able to see anything; always look down sun.
- When driving from a boat, always think of the comfort of others – i.e. don't go so fast that people are falling out from the bow.
- Never let the boat fill up with water. If you are in a big sea keep going, don't stop. By letting the elephant's trunk down and motoring, you can get rid of some of the water.
- Switch your engine off when approaching divers. However, keep engine in neutral if picking divers up from site when boat is about to be blown on to rocks, then reverse out, telling divers to keep hold until boat is out of danger, then turn off engine once clear.
- Don't come along broadside...always point the boat into the wind or tide (usually wind) and slowly approach the divers. You will never get it right if you approach broadside on as the wind will blow the boat away and you poor old divers will have to struggle to reach it (overexertion not being a good thing after a dive).

Divers Code of Conduct

The BSAC Divers Code of Conduct is designed to encourage good behaviour at dive sites and when diving, and to ensure that divers do not come into conflict with other water users.

Before leaving home

Contact the nearest British Sub-Aqua Club Branch or the dive operator local to the dive site for their advice. Seek advice from them about local conditions and regulations.

On the beach, river bank or lake side

1. Obtain permission before diving in a harbour or estuary or in private water. Thank those responsible before you leave. Pay harbour dues.
2. Try to avoid overcrowding one site, consider other people on the beach.
3. Park sensibly. Avoid obstructing narrow approach roads. Keep off verges. Pay parking fees and use proper car parks.
4. Don't spread yourselves and your equipment since you may upset other people. Keep launching ramps and slipways clear.
5. Please keep the peace. Don't operate a compressor within earshot of other people - or late at night.
6. Pick up litter. Close gates. Be careful about fires. Avoid any damage to land or crops.
7. Obey special instructions such as National Trust rules, local bye-laws and regulations about camping and caravanning.
8. Remember divers in wet or drysuits are conspicuous and bad behaviour could ban us from beaches.

In and on the water

1. Mark your diving boats so that your Club can be identified easily. Unmarked boats may become suspect.
2. Ask the harbour-master or local officials where to launch your boat - and do as they say. Tell the Coastguard or responsible person where you are going and tell them when you are expected back.

Stay away from buoys, pots and pot markers. Ask local fishermen where not to dive. Avoid diving through rafts of seabirds or seal colonies etc.

Remember ships do not have brakes, so avoid diving in fairways or areas of heavy surface traffic and observe the 'International Regulations for Preventing Collisions at Sea'.

Always fly the diving flag when diving, but not when on the way to or from the dive site. Never leave a boat unattended.

Do not come in to bathing beaches under power. Use any special approach lanes. Do not disturb seal or bird colonies with your boats. Watch your wash in a crowded anchorage.

Whenever reasonable to do so, divers should use a surface marker buoy. Obey all prevailing local Bye-Laws.

On conservation

1. Never use a speargun.
2. Shellfish such as crabs and lobsters take several years to grow to maturity; overcollecting in an area soon depletes stocks. Only take mature fish or shellfish and then only what you need for yourself. Never sell your catch or clean it in public or on the beach. Don't display your trophies.
3. Be conservation conscious. Avoid damage to weeds and the sea bed. Do not bring up sea-fans, corals, starfish or sea urchins - in one moment you can destroy years of growth.
4. Take photographs and notes, not specimens.

On wrecks

1. Do not dive on a designated protected wreck site. These are indicated on Admiralty Charts and marked by buoys or warning notices on the shore nearby.
2. Do not lift anything that appears to be of historical importance.
3. If you do discover a wreck, do not talk about it. Pinpoint the site, do a rough survey and report it to the BSAC Archaeological Adviser and the Nautical Archaeology Society who will advise you.

If you do not lift anything from the wreck, it is not necessary to report your discovery to the Receiver of Wrecks. If you do lift, you must report.

If your find is important, you may apply for it to be designated a protected site. Then you can build up a well-qualified team with the right credentials and proceed with a systematic survey or excavation under licence without outside interference.

Don't let diving down - keep to the Diver's Code.