

SKI BOAT DRIVER LEVEL 2



STUDENT EDITION WORKBOOK 2021 V1



THE SCHEME

- The SBD2 course is a theory course for driving a ski boat on coastal waters, followed by a multi choice test paper.
- The coastal course must be completed to a satisfactory standard in order to meet the requirements of the coastal ICC.
- An additional short course is available to meet the requirements of the INLAND ICC
- There will be a practical boat driving TEST following the theory course.
- The SBD2 course, does not include boat driving tuition. Boat driving experience MUST be gained BEFORE the boat driving test
- The driving test can be taken as an assessment, prior to your boat driving lessons. However there will be a charge for a retest.



THE SCHEME

- The SBD2 is a recreational driving qualification and Instruction on how to ski is not covered.
- The SBD2. scheme is approved by the Marine Safety Agency and the Maritime and Coastguard Agency who are responsible to the Department of Environment, Transport and Regions.
- The scheme complies with the requirements of United Nations Economic and Social Council Resolution No. 40 for the issue by British Water Ski & Wakeboard of International Certificate of Competence.
- All members who pass the SBD2. and additionally are UK citizens or normally resident in the UK, may apply for an International Certificate of Competence (I.C.C.). Valid for coastal waters in Europe.
- If an additional written examination is passed an I.C.C. valid for European inland as well as coastal waters, may be applied for



Ski Boat Driver Level 2

- Benchmark standard of driving skills at clubs
- Formal proof of boat handling experience and skills
- Available to anyone over 16 years
- Pre-requisite for the UKCC Water Skiing and Wakeboarding qualifications

ICC

- International Certificate of Competence
- 2 types Coastal only or Coastal and Inland
- Standards set in the CEVNI European code
- Valid for 5 year can be renewed through BWSW



By the end of this course, you should understand;

- Types of trailer, boat, hull, and propeller.
- What equipment should be on board on costal waters and how and why it should be used.
- How to launch and recover a boat
- How to assemble an anchor, chain and rope and tie knots.
- How to manoeuvre a boat safely
- How to avoid collisions and the dangers surrounding large vessels
- How to drive at sea including reading signs, tides and charts.

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SKI BOATS

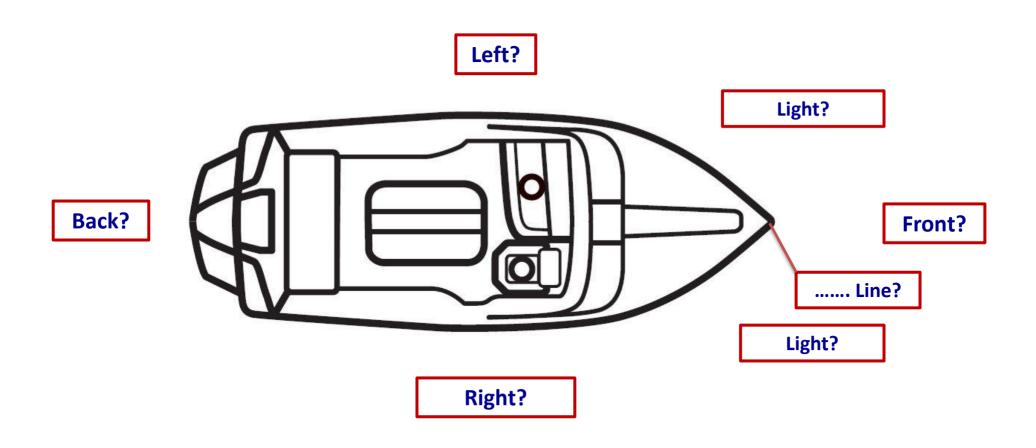


Chapter 1 – Ski Boats

- Nautical Terminology
- Types of boat
- Outboard Engines and Power Trims
- Propeller Selection
- Propeller Pitch



Nautical Terminology





Types of Boat







Flat Water Boat Recreational Boat Rigid Inflatable Boat (RIB)

Discuss the characteristics of the these boats

SKI BOATS



Outboard Engines and Power Trims



1) Why would you change the trim? 2) Which is ideal for towing a skier/rider?



Propeller Selection



Bronze alloy – shaft drive

Stainless Steel



Outboard and stern drive

Aluminum alloy



Outboard and stern drive

Discuss these propellers – what are advantages of a stainless steel propeller on an outboard engine? why could it be necessary to change the type or size of propeller?



Propeller Selection

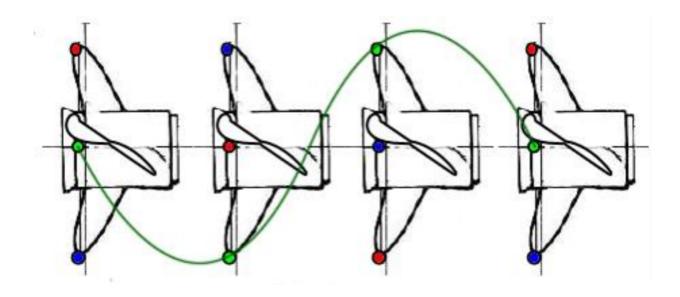


- Boat performance is, in equal parts, power and propeller so it is important to select the best prop
 for your use
- The propeller converts the horsepower, developed by the engine, into thrust to propel the boat
- Propellers can be changed to give different attributes e.g. higher top end speed, better fuel economy torque for pulling a skier out of the water
- Propellers can vary in size, number of blades and material

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Propeller Pitch



What is Pitch?

For example what does a 21 inch pitch mean?



Chapter 2 – Boat Handling

- Steering
- Steering bias
- Momentum
- Pivot Points
- Prop Torque
- Prop Walk



How a boat manoeuvres

Propeller Torque

- Tendency of the boat, when moving in forward gear, to tilt in the opposite direction of the prop shaft rotation
- Understanding torque helps you to handle abnormal balance problems in the boat
- Make the required adjustments to counterbalance imbalances caused by torque
- Waves on the side of the boat can compound the effects of Prop torque
- Do not exceed the manufacturers recommended engine size





How a boat manoeuvres

Steering

- Affected by water passing by the rudder
- Outboards have some steering without power
- Tournament boats have very little steering without power

Steering Bias

- When on the plane, a boat will probably veer to the right or left if the driver releases the helm. This is due to the rotation of the propeller
- Boat manufacturers usually compensate for this when designing the boat

Momentum

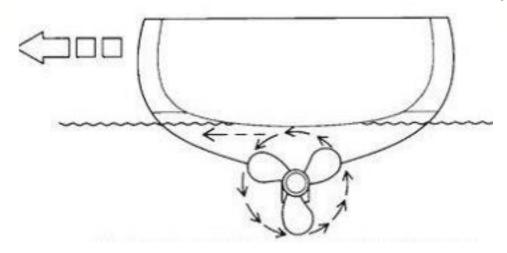
- The boat will continue to move forward after it has been taken out of gear
- Momentum can be used as part of a maneuver

Pivot Points

- The pivot point on a car is the rear axel.
- The pivot point on a boat makes it maneuver very differently to a car.
- The pivot point is usually near to where the ski pole is on an inboard boat, when moving ahead



How a shaft drive boat maneuvers IN REVERSE GEAR



Discuss...... what is 'Prop Walk or Paddle Wheel Effect'?

The illustration above shows a propeller that rotates to the right (clockwise) in forward gear.

In reverse gear the propeller will turn to the left (anti clockwise)



Chapter 3 - Equipment

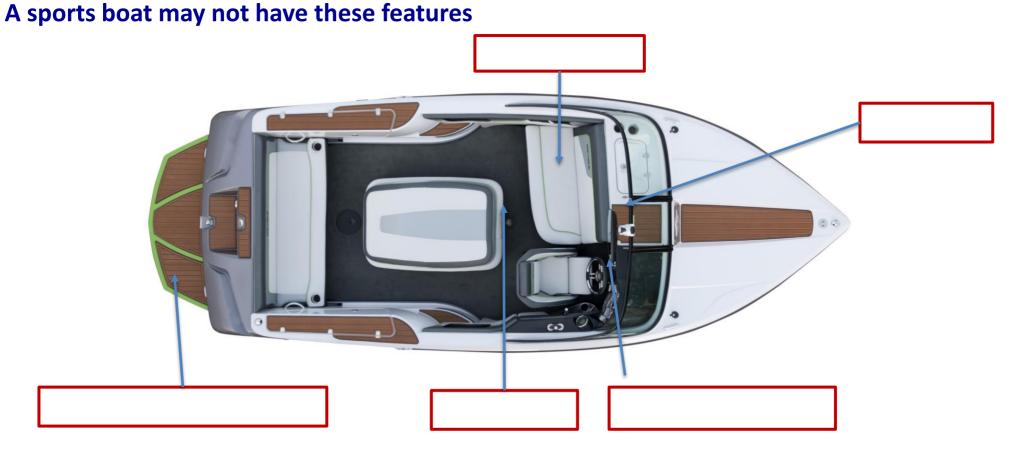
- Equipping a ski boat
- Additional Equipment
- Kill Switch
- Fire Extinguisher
- Buoyancy Aid vs. Life Jacket
- Marine Band Radio
- Trailers



Equipping a Ski Boat

What Equipment would you expect to be fitted to a Ski Boat?

The illustration below, shows features common to a tournament boat.





Discuss what equipment you would TAKE WITH YOU in the boat for coastal waters.

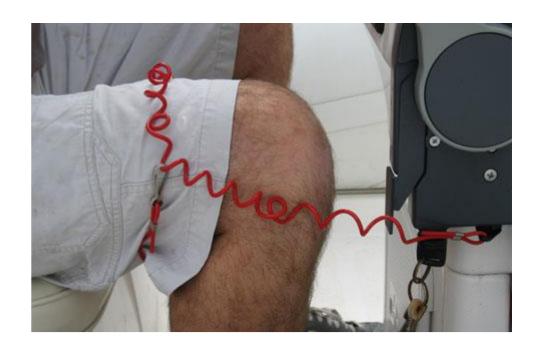


Kill Switch

• Key Points?

Other Safety Inhibitors

• What are they (on the gear/throttle lever)?



The Blower

• What is it?



Fire Extinguishers



• Discuss requirements and where you would expect the fire extinguisher to be fitted, mounted or stored



Buoyancy Aid OR Life Jacket

NOTE: Buoyancy aids and life jackets must fit correctly

Buoyancy Aid



Impact Vest



Life Jacket



Discuss the benefits, why and when the equipment above is appropriate



Discuss communication equipment

Discuss the advantages and disadvantages of a mobile phone



Mobile Phone



Marine Band Radio



Trailers

Tournament Boat Trailer

- Specifically for a tournament boat
- Trailer and boat are very heavy
- Consider the legal weight and width a car can tow



Sports Boat Trailer

- Typical for small sports boats and RIB's
- Has rollers so the boat can easily be rolled on and off
- Boat needs to be secure when towing and on the slipway



- NOTE that all water is corrosive, salt water is VERY corrosive. Trailer brakes corrode, making them very unreliable
- WHEEL BEARINGS are a consumable component, they need to be checked and replaced regularly.
- The towing vehicle should not be driven into water, especially salt water. It is bad practice to drive the vehicle's braking system into salt water or sand

LAUNCH & RECOVERY



Chapter 4 – Launch and Recovery

- Preparing to launch
- Launching procedure

LAUNCH & RECOVERY



Preparation

Things to do before launching the boat

Discuss preparation

- what do you need to do to prepare the boat/trailer?
- what are the rules for this site?
- What are the dangers to boat and crew and skier at this site?
- where is the ski/riding area?
- what can go wrong?
- what will you do if things go wrong?



LAUNCH & RECOVERY



Launch and Recovery

Why use a rope?

- Consider the surface you are launching from (steepness, surface, conditions)
- At coastal locations, launching may be allowed but there may not be a conventional slipway
- Slipways can be covered in sand, gravel or weed, making them very slippery
- Slipways may have a very shallow slope, making it impossible to launch without placing the vehicle in the water.
- At some locations, the launching will be on sand or a 'hard' area at the waters edge making it necessary to use a rope.
- Sand moves and changes, be very cautious of driving any vehicle into the water or sand



Chapter 5 – Driving at Sea

- Man overboard procedure
- Preventing collisions at sea
- Interaction
- Common sound signals
- Channel marker system
- Tides



Man Overboard (MOB) Procedure. Life threatening situation

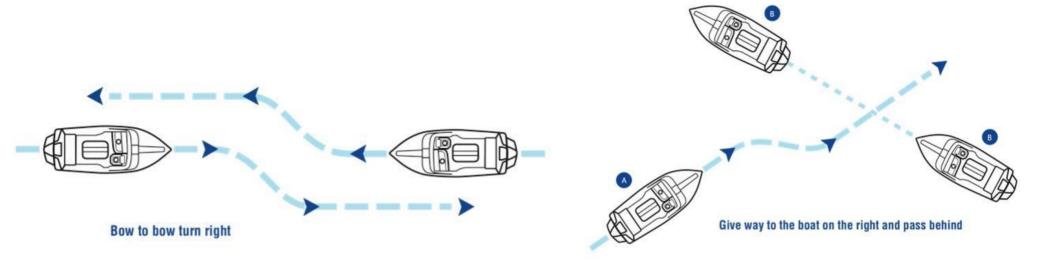
This is offshore boat driving, not water skiing. Water ski boats should not go offshore in bad conditions)

- Shout "man overboard" To alert crew
- Press MOB button on GPS or call the Coast Guard
- Send a DSC distress signal if available
- Throw a life buoy and a DAN buoy
- Observer/crew must point at MOB at all times
- Make a controlled stop and turn back towards MOB
- If down wind, go past MOB, Turn into wind and approach MOB in a slow controlled manner
- Allow the wind to bring the boat to a stop
- Get a rope around the MOB and bring him aboard





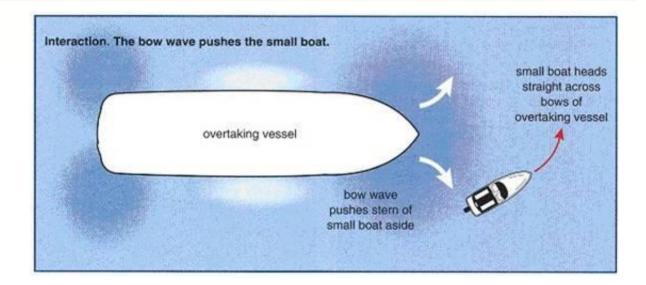
Preventing Collisions at Sea



- International "rules of the road" The rules that apply to **all** power-driven vessels
- Head on = both vessels turn to starboard (right) 'Pass port to port'
- Crossing: Vessel approaching from your port side stand on (hold your course)
- Crossing: Vessel approaching from your starboard side Turn to starboard (right)
- Take early action to avoid a collision. Make your actions clear to other vessels



Interaction



- Small boats should stay clear of large vessels
- There are pressure zones around a 'normal' (large) vessel. Especially around displacement craft
- A small boat can be sucked in at the side of a normal vessel
- Water is taken into the propellers at the side of the vessel, creating the suction zone. A person in the water could be taken under at the side of the vessel
- Propellers produce turbulence and wash at the stern



Sound Signals – Manoeuvring and Warning Signals

NB. More information can be found in the International Regulations for the Prevention of Collisions at Sea (Rule 34)

- Sound signals are usually used by 'normal' (large) vessels
- You should be aware of the general signal of 5 short blasts indicating 'imminent danger of collision'
- Repeated long blasts can be a distress signal
- Common sound signals you may hear;

One short blast: "I am altering my course to starboard"

Two short blasts: "I am altering my course to port"

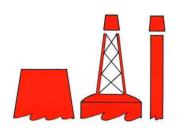
Three short blasts: "I am operating a stern propulsion"

Five short blasts: "I am in doubt about your action taken to avoid collision"

One long blast: "I am nearing a bend where another vessel may be obscured by an intervening obstruction"



Channel Marker System



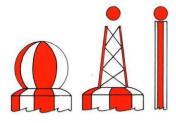
Lateral Mark Port Hand

Preferred channel to port



Lateral Mark Starboard Hand

Preferred channel to starboard



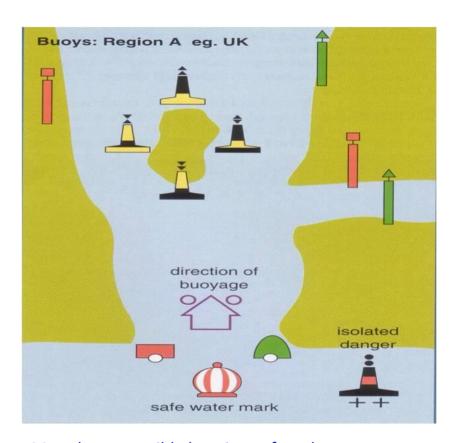
Safe Water Mark

• Indicates navigable water around the mark



Isolated Danger Mark

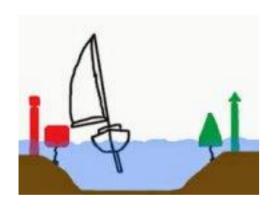
Placed on isolated danger



Map shows possible locations of markers



Channel Marker System



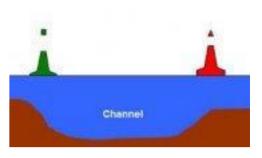
The boat is in the deep water channel

IS THE BOAT HEADING TOWARD THE SEA OR AWAY FROM THE SEA?

Using the flip chart;

The group will discuss how to navigate the marks (this subject is explained in the book 'Power Boating' by Peter White

The Course Tutor will sketch a diagram of an estuary with channel marks.



Floating lateral marks may mark a deep-water channel or a shipping lane.

IF YOU DRIVE INTO THE CHANNEL BETWEEN THE TWO MARKS, WILL YOU BE DRIVING TOWARD THE SEA OR AWAY FROM THE SEA?

A ski boat driver using inshore coastal waters will need to understand the significance of marks on posts.

The tutor will explain.



Channel Marker System

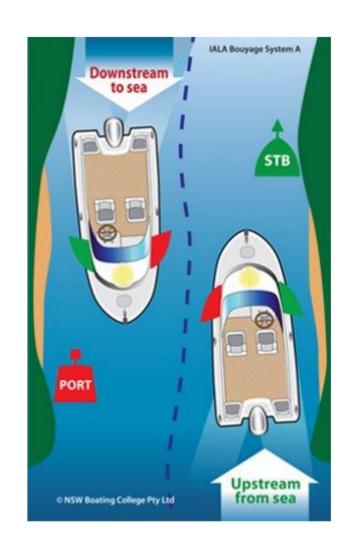
When driving into a harbour, or when entering a river mouth or estuary the entrance may be **marked by red** cans or green cones, floating or on posts, or by floating structures or a mixture of both

You should enter a harbour entrance on the starboard (right hand) side.

On a river you should drive on the starboard (right hand) side

You should enter an estuary following the channel marks, driving on the starboard (right hand) side of the channel.

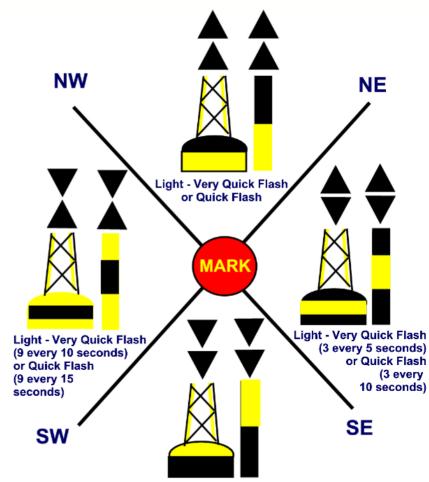
The tutor will explain.





Cardinal Marks

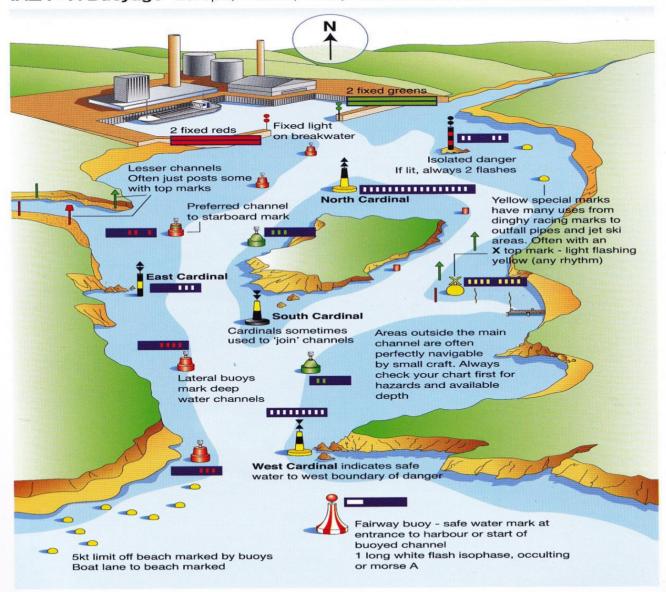
- Used to mark a hazardous area
- Triangles are compass points
- Black and yellow stripes are coordinated with triangles and flashing lights
- Usually you can only see only one cardinal mark at any one time



Light - Very Quick Flash (6 plus one long flash every 10 seconds) or Quick Flash (6 plus one long flash every 15 seconds)



IALA - A Buoyage Europe, Russia, India, Australia and New Zealand.

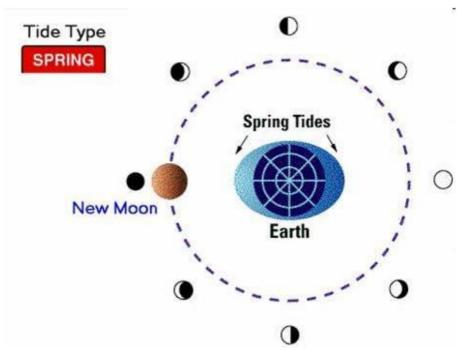




Tides

- Linked to the gravitational pull of the moon
- On a 28 day cycle (see table)
- Spring tides are extreme tides very high and very low tides

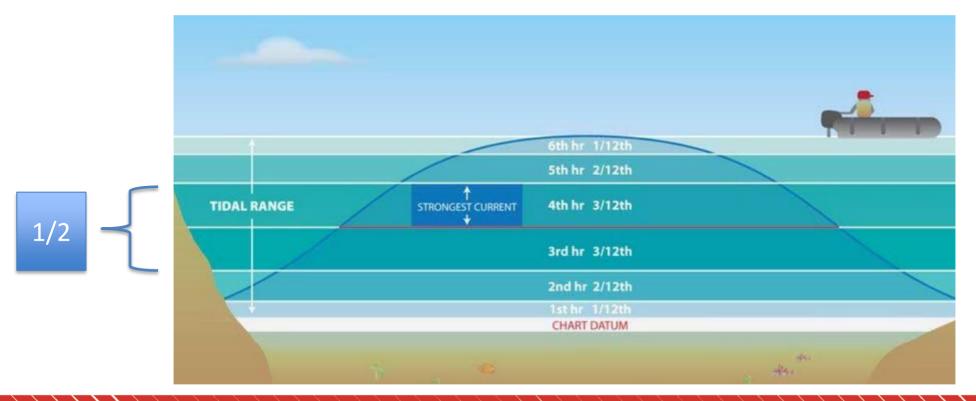
Day	Moon	Tide
Day 1	New moon	Spring tide
Day 7	Half moon	Neap tide
Day 14	Full moon	Spring tide
Day 21	Half moon	Neap tide





Rule of Twelfths

- Shows the rate at which the tide flows
- A quick way of approximating heights of tides
- Only a 'rule of thumb'



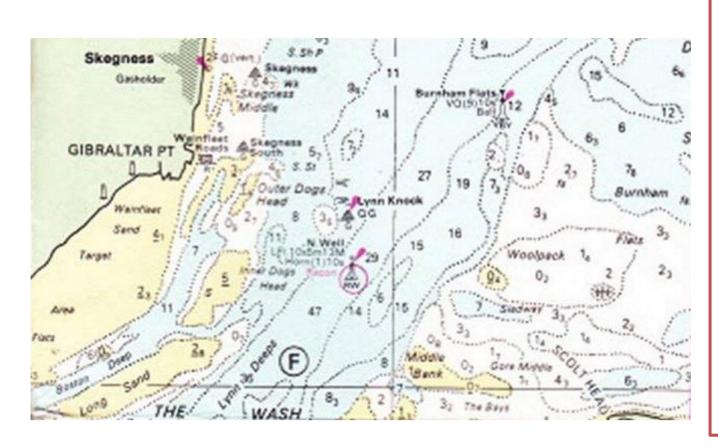


Rule of Twelfths

The Principal will explain why the rule of twelfths is important for a ski boat driver.



Chart Datum



Questions:

What does the chart tell us?
What do the numbers mean?
Identify a navigation marker.
Identify a simple passage.

The principal will explain, using the flip chart

Discussion...... What is Chart Datum?



Chart Datum

The numbers are depth of water or height of sand/rock at low water.

Using the depth on the chart, add the predicted high tide and calculate the depth at high tide.

This depth can be used later for the anchoring exercise.

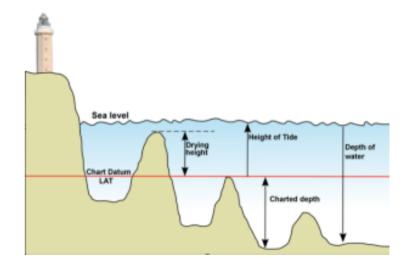


Chart Datum is the lowest astronomical tide and is the lowest water indicated on a chart
 e.g. 3m tide = 3m above chart datum.

A boat driver should be able to calculate the water depth at high tide. using the numbers on the chart

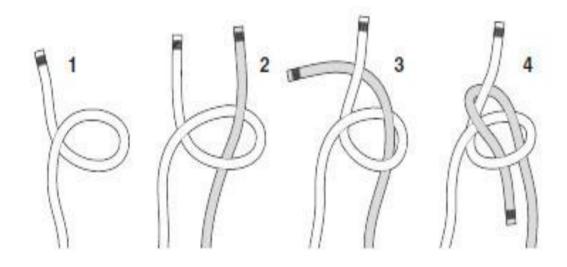


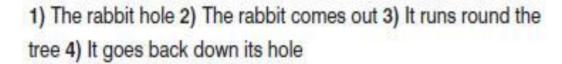
Chapter 6 – Mooring & Anchoring

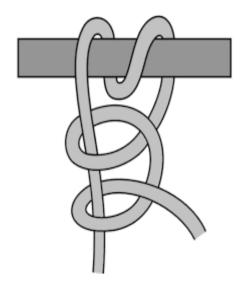
- Knots
- Types of anchor
- Anchoring



Knots





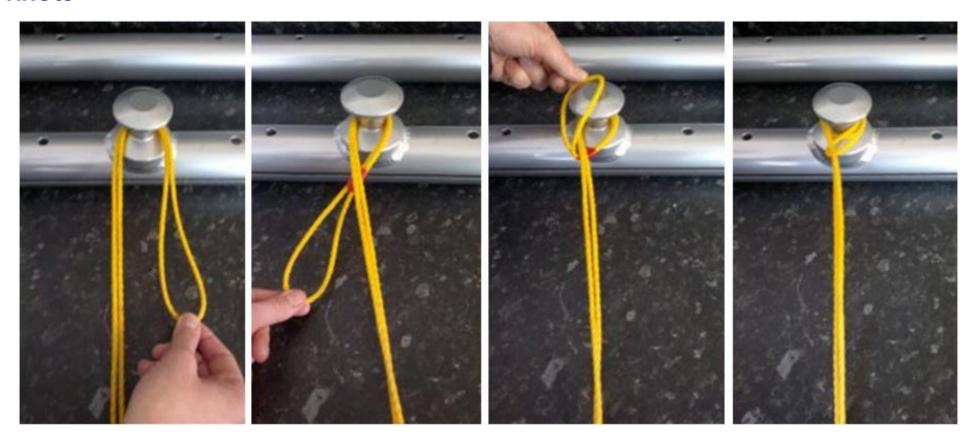


The Bowline

A Round Turn & 2 Half Hitches



Knots



The way to shorten a wakeboard line



Types of Anchor

Types of anchors used in small boats;









Grapple (folding)

- Good for small sports boats
- Easily stowed
- Very common

Fisherman's

- Not practical for small sports boats
- Used by fishing boats

Plow Type

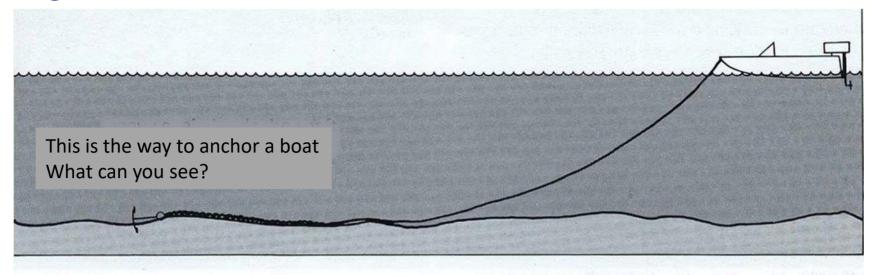
- Good for large sports boats
- Not as easy to store

Danforth

- Used by all types of boat
- Folds up so can be stored easily



Anchoring



- Why will you use an anchor
- When you anchor, how long will your rope be?
- Will you use chain? If so what type and what length?
- What sort of rope will you use?
- When will you prepare your anchor, chain and rope for use?



Anchoring

The Tutor will provide space for the group to assemble an anchor rode using the anchor, chain and rope provided.

Calculate the length of the anchor rode for the depth of water at HIGH tide which was calculated during the chart datum session.



Chapter 7 – Safety in the Boat

- Key safety points
- The boat crew
- Skier signals
- Risk Assessment
- Why accidents happen



Discuss: Safety in the Boat

- Discuss the effects of current especially when picking up and dropping off skiers (i.e. tidal flow)
- When approaching fixed objects (e.g. docks, bridge). How will the flow affect your position
- When returning to dock, picking up skiers, moorings and loose skis:
- Why should you always approach into the current or wind (whichever is strongest)?
- Why should you never reverse towards a skier or person in the water?
- Why should you switch off the engine before recovering a person from the water?



Boat Crew



- Your driver should be competent AND FIT TO DRIVE what would make him unfit?
- What boat crew do you need and why?
- Do you need an observer/ under what circumstances could you **not** have and observer?
- What makes the observer 'competent'?



BWSW Observer Card

This can be edited for your site and kept in the boat for your observer

Observer Briefing Card



An observer is expected to:

- Know the BWSW Safety Hand Signals (see diagram opposite)
- 2. Watch the skier/rider for dangers and signals
- Know how to stop the engine with the ignition or the kill cord
- Be able to use a mobile phone/radio to call for help in an emergency

REMEMBER – the driver looks forwards, the observer watches the skier/rider

SITE INFORMATION – in case of emergency

Club Name:

Postcode:

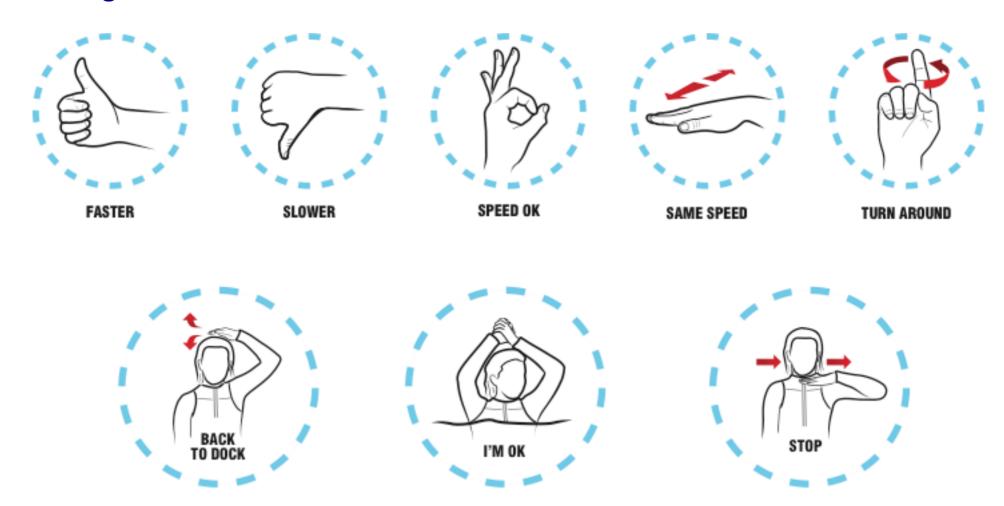
Contact No.:

In an emergency, call 999 directly





Skier Signals





Risk Assessment

• Risk assessments do not have to be complex – e.g. we carry out a basic risk assessment every time we cross the road

REMEMBER...

- Always appoint a Launch Marshall
- Assess the risks during launch and recovery

- trailer and towing vehicle brakes
- limbs or persons becoming trapped
- danger to the boat during launch
- Assess the risk to the boat and crew on the water.
- Assess the risks to the skier

- ski injury
- hypothermia
- taken by the current
- danger of other craft



Safety Points

- The driver must check the skier by looking over the right shoulder before accelerating
- The driver must be able to see all of the line, the handle and the ski/board tips
- The driver has a responsibility to ensure that the skier is safe before accelerating
- The driver must keep one hand on the throttle at all times when the boat is under way
- · All inhibitors must be in good working order
- Always have a competent observer
- The skier/rider must always wear a buoyancy aid
- When returning to a fallen skier/rider, the driver must keep the skier in view over the right hand side of the boat
- · The driver must switch off the engine whenever the stern of the boat is close to the skier/rider

Why Accidents Happen

- An accident is an unwanted, unplanned event which can often be prevented
- An accident occurs due to a mechanical breakdown or a breakdown of our "safety systems"
- Driver behavior, procedures, equipment, environment and concentration may be factors



Chapter 8 – Driving for Inflatables

- Safety for inflatables
- Visibility of the riders
- Visibility from the boat



Inflatables

Discuss the safety precautions for towing inflatables



Discuss what you see in this picture Do the riders look safe?

BWSW have a Code of Practice for the use of towed inflatable equipment – these should be read before driving for inflatables



BWSW CODE OF PRACTICE FOR THE USE OF INFLATABLE EQUIPMENT

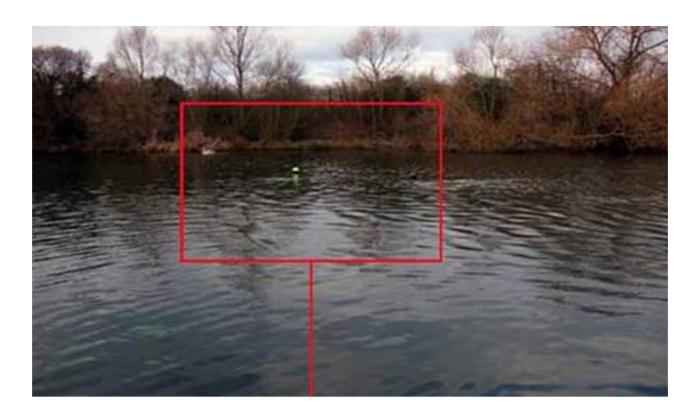
INFLATABLE RIDERS

- 1 Wear a ski vest or buoyancy aid.
- 2 Wear high-visibility, soft head protection.
- 3 Do not ride an inflatable unless you are confident in the water.
- 4 Know BWSW standard hand and aural signals.
- 5 Do not stand up on the inflatable.
- 6 Do not try to throw other riders overboard.
- 7 Do not attempt to steer an inflatable.
- 8 Do not attempt to abandon an inflatable during a tow.
- 9 Do not hold the towing rope.
- 10 Do not fasten any part of your body to an inflatable.
- 11 Do not shout hit it until the rope is taught and all riders are prepared.
- 12 If a fall takes place, put your hands in the air to indicate 'OK'.

http://www.bwsw.org.uk/resources/inflatable-recommendations/



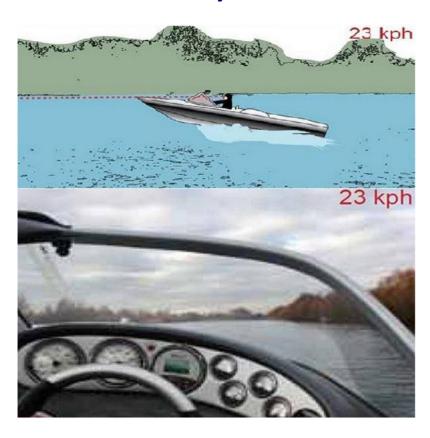
Inflatables - Visibility

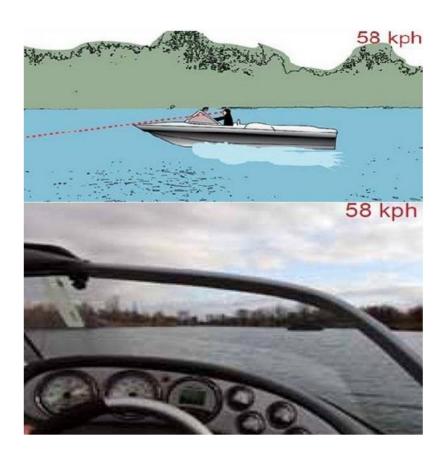


- Brightly coloured, soft helmets must be worn by the participants
- There are 2 helmets in this photo one is covered with high visibility material, the other is a standard black helmet



Inflatables - Visibility





- Sports boats are designed to go considerably faster than the recommended speed for an inflatable (around 23-25 KPH)
- But, the optimum visibility for ski boats is around speeds of 48-58 KPH



WHEN DRIVING THE BOAT FOR INFLATABLE EQUIPMENT

BOAT HANDLING

- 1 Tow in a manner suitable for the water conditions and always execute wide turns.
- 2 Do not increase speed on turns.
- 3 If an inflatable goes out on the 'whip', reduce speed.
- 4 Do not tow an inflatable over the wash of other boats.
- 5 Do not tow an inflatable over a jump or through a slalom course.
- 6 Do not use excessive manoeuvres to try to throw the rider out.
- 7 Keep away from other boats and other water users.
- 8 Do not tow an inflatable in shallow water.
- 9 Leave sufficient space to avoid all obstacles, not less than a towropes distance of any solid object.
- 10 Do not continue a tow if a rider(s) falls.
- 11 Always approach a fallen rider at an appropriate controlled speed on the Driver's side.
- 12 Always switch off the engine before boarding riders from the water.

http://www.bwsw.org.uk/resources/inflatable-recommendations/

BOAT HANDLING

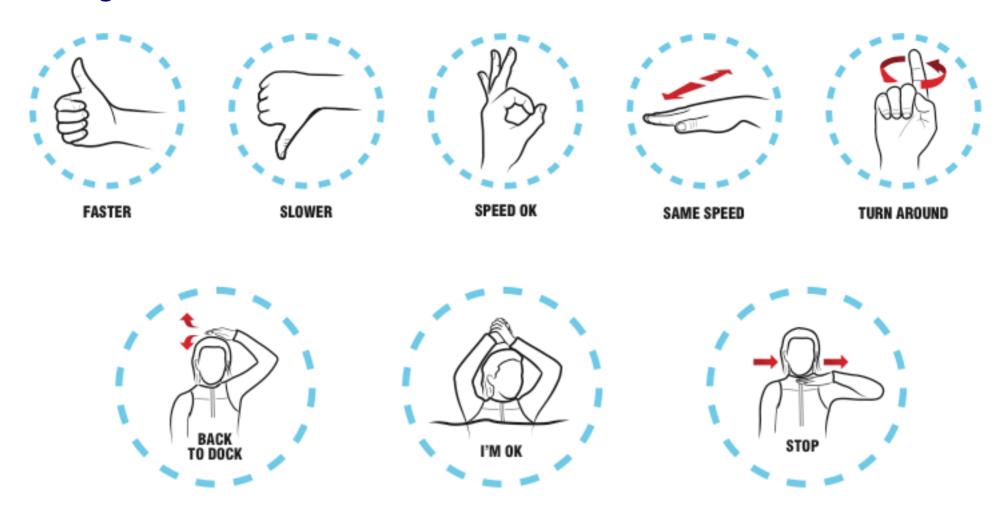


Chapter 9 – Driving for Skiers

- Pulling a skier out the water
- Turning with a skier
- Picking up fallen skiers



Skier Signals





Throttle Positions







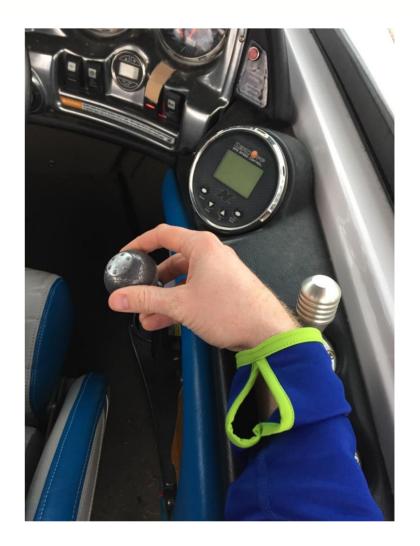
Neutral Idle Fast Idle



Holding the Throttle

Thumb and Forefinger for control Middle finger to lift the collet





ASSESSMENT



Boat Handling

You must demonstrate skill and understanding of the following;

- How a boat manoeuvres
 - Paddle wheel or prop effect
 - Pivot points
 - Momentum
 - Steering
- Slow speed handling
 - Approach a buoy and come along side
 - Three point turn
 - Drive a figure of eight around a boat lane buoy and slalom buoy

or

- In windy or coastal conditions drive around a single buoy.
- Manoeuvring a shaft drive boat or a sports boat with an outboard or inboard engine



Practical Assessment Manoeuvers

Boat Control & Slow Speed Manoeuvers

One of the most important skills of driving a boat, is the ability to control the boat at slow speed, and be able to position the boat where you want it.

This is done by careful throttle control, and understanding the steering effects without over compensating.

Always be properly seated and have one hand on the gear shift/throttle and one hand on the helm (steering wheel).

For slow speed manoeuvers you will use only the engine idle speed and only engage gear when you need power.

This driving technique is known as "in gear and out of gear" this technique is essential to control the speed and momentum of the boat is important to control the speed and momentum.

You will need to understand where the boats pivot point is and how the rotation of the propeller affects the boat in reverse gear.

The "golden rule" when learning boat control is: "Steer before gear!"



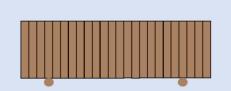
Practical Assessment Manoeuvers

You will need to be able to moor the boat along side the dock.

KEY POINTS;

- Approach the dock very slowly.
- Know the pivot point and the relationship between the bow and stern during the manoeuvre.
- Know how the boat moves in reverse.
- Take account of the wind or current.

Approaching a jetty







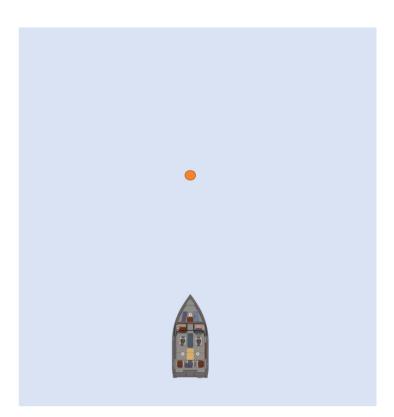
Practical Assessment Manoeuvers

This manoeuvre could be applied to picking up a mooring, a ski or presenting the boat to the person in the water for boarding.

KEY POINTS;

- Approach the buoy very slowly into the wind or current.
- Manoeuvre very slowly.
- Know how the boat moves in reverse.
- Know the pivot point and the relationship between the bow and stern during the manoeuvre.
- Bring the boat to a standstill using minimal reverse gear.

Pick up a buoy





Practical Assessment Manoeuvers

This manoeuver is used when making a 180° turn on the spot, in a harbour or marina where there is very little space.

KEY POINTS;

- Manoeuvre very slowly.
- Know the pivot point and the relationship between the bow and stern during the manoeuvre.
- Know how the boat moves in reverse.
- Position the boat to make reverse favourable.
- Take account of the wind or current.
- Use the wind or current to your advantage if possible.

3 Point Turn



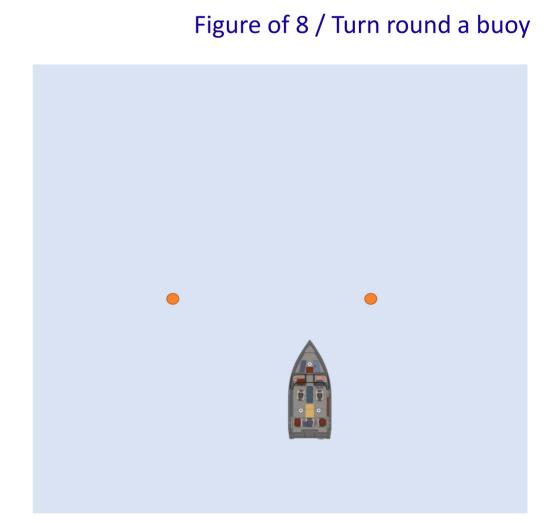


Practical Assessment Manoeuvers

This exercise demonstrates skill reversing off and reproaching the buoy, using reverse and forward gear. It is a requirement to use reverse gear correctly.

KEY POINTS;

- Manoeuvre very slowly.
- Know the pivot point and the relationship between the bow and stern during the manoeuvre.
- Know how the boat moves in reverse.
- Driving a shaft drive boat, reverse gear will be favourable around one of the buoys.
- Take account of the wind or current.





Turning with a skier

'P' Turn

Using the flip chart, the Tutor will describe the 'P' turn, circular turn and the turn for a wakeboarder



"P TURN" Boat goes back down own wash

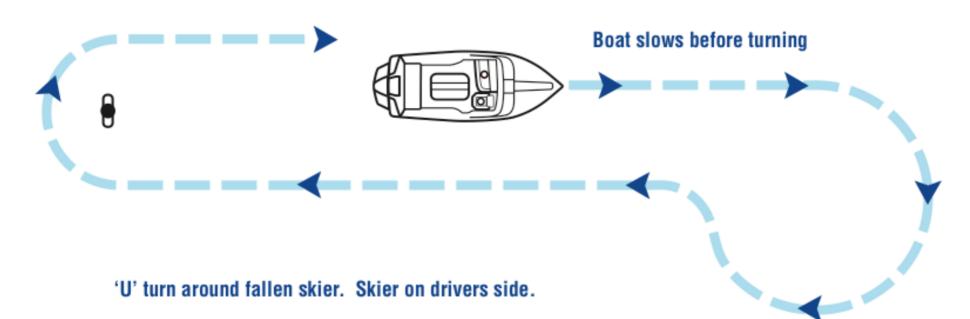
DRIVING FOR SKIERS



Picking up fallen skiers, THE TUTOR WILL EXPLAIN HOW TO SAFELY RECOVER A FALLEN SKIER

- The a main 'turn' that can be used to pick up a fallen skier the 'U' turn
- It is the driver's responsibility to know how to safely return to a skier/rider in the water

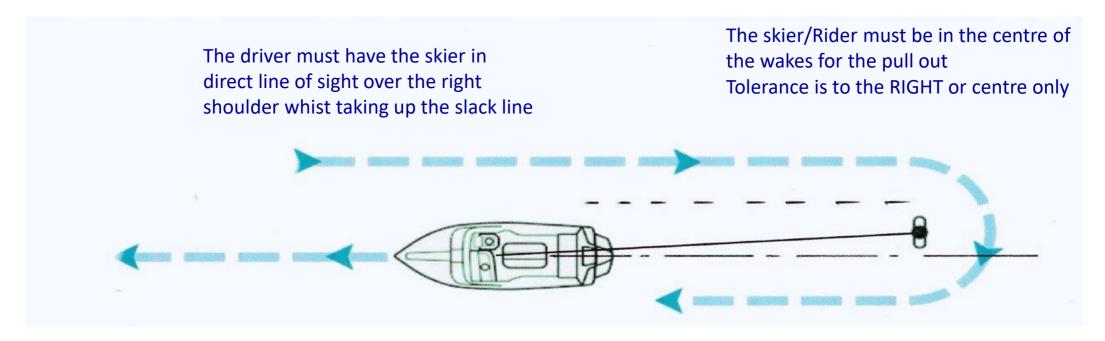
'U' Turn



DRIVING FOR SKIERS



Pulling a skier out the water



- When driving for a skier the boat must be on course to pick up the original ski run and must take off with the steering straight
- Whilst taking up the slack line, it is ideal to have the skier aligned with the side of the boat
- When the line is taught and the skier is ready to shout 'in gear', the skier must be in line with the center of the boat or slightly to the right of centre
- When the skier is ready to shout 'hit it' the ideal position is for the skier to be aligned with the centre of the boat

DRIVING FOR WAKE BOARDERS



Driving for Wakeboarders

- Discuss turning for a Wakeboarder
- Is the rider is Regular or Goofy (left or right leg forward)?
- Should you turn clockwise or anticlockwise?
- Advanced riders will expect the driver to turn in the correct direction.
- A novice rider is usually more comfortable on the heel side edge.
- A beginner will often be outside of the wake when the boat is approaching the turn.
- The driver must consider the proximity of hazards and the ability of the rider, then decide which direction is SAFE to turn.
- It is the drivers responsibility to control the speed of the rider throughout the turn.
- Driving skills for an advanced wakeboarder or skier are not a part of SBD2.
- The person towed for the SDB2 test can be a skier or wakeboarder. The turns will be one clockwise and
 one anticlockwise, irrespective of whether the rider is regular or goofy.



Recommendations for wakesurf

Wakesurf is not a part of SBD2.

Driving for wakesurf should be undertaken by a very experienced boat driver having gained additional driving skills, which are not required for SBD2

The wakesurf safety recommendations are in included here, due to the growing popularity of wakesurfing

British Water Ski & Wakeboard

Wakesurf Recommendations

This document functions as a central reference for how to safely deliver the Wakesurf discipline. The recommendations are highlighted as the most important safety practices but serves as an extension to the generic 'Safety Recommendations and Codes of Practice' AND 'Ski Boat Driving Recommendations'.



Recommendations for wakesurf

Boat / Equipment

- Only inboard-engine boats should be used as a towboat (propeller under hull but not protruding the stern).
- Only wakesurf if the throttle inhibitor (Collet) is in good working order (stops throttle moving from neutral). If the inhibitor is worn it is recommended not to continue wakesurfing until it is repaired.
- Only use a wakesurf specific line and/or handle. An exception is of beginners learning to deep water start.
- The wakesurf line length should put the rider more than 10 feet from the most aft part of the boat (the swim platform).

Boat Crew

- There should always be a competent observer on board ('Competent' can be someone who knows or has been briefed on their responsibilities). Qualified and experienced drivers may operate without an observer but only in an enclosed lake with no other water users.
- All passengers should be seated inside the boat while the boat is under power, unless otherwise instructed by the coach or driver.

The Surfer / Rider

- A buoyancy aid/impact vest should always be worn while wakesurfing (buoyancy aid for beginner riders).
- Never coil or wrap the rope around any part of the body.
- Once surfing the rider should let the rope trail on the opposite wake. It is advised that a crew member then pull the rope back into the boat.



Recommendations for wakesurf

Driving

- The Driver should have more than 60 hours of experience driving water skiers/wakeboarders before driving wakesurfers.
- The Driver must always have full forward visibility and be positioned to be able to see the rider in the mirror. The driver should always be seated while driving but having full forward visibility must be given priority.
- The Driver must always turn the engine off when a rider is getting in/out of the water AND any time the driver is out the seat.
- The Driver must always be in control of the steering wheel AND have one hand on the throttle while the boat is under power.
- When 'towing', Drivers must keep the power on regardless of how close the surfer is to the back of the boat.
- The Driver must pick up and collect riders slowly (in idle) AND on the driver's side (starboard).
- It is recommended to drive as straight as possible. However, drivers may drive with a slight turn to increase the steepness of the wave if the local rules allow and when there are no other water users.
- When nearing the end of the lake/designated surf area, and the surfer has not stopped, make a steep turn away from the rider (the un-weighted side) to 'drop' the rider off the wave and away from the back of the boat.
- Be mindful how the wake can affect other water users and stop the boat if it looks dangerous (e.g., smaller boats/PWC's/towed watersports).
- When a surfer falls, the driver should:
 - 1. Slow down gradually in a straight line.
 - 2. Make a turn on the opposite side to the rider in idle.
 - 3. Wait for the wakes (rollers) to pass the front of the boat.



Driving for Skiers/Riders

You must demonstrate skill and understanding of the following;

- Techniques
- Deep water start
- Safety
- Stopping the boat when a skier falls
- Pick up a fallen skier
- Boat course to pick up a fallen skier
- Ending the set

Driving for Wakeboarders

You must demonstrate skill and understanding of the following;

- Turning for a wakeboarder
- Pullout for a wakeboarder



The Driving Exam

If you haven't done so already.....

READ THE DRIVING ASSESSMENT

GUIDANCE NOTES





Chapter 10 – International Certificate of Competence (ICC) for INLAND WATERS in Europe

- European Regulations
- Signs
- Written exam

www.bwsw.org.uk





SKIP EUROPEAN REGULATIONS

if not completing the ICC for INLAND WATERS





The Code Européen des Voies de la Navigation Intérieure (CEVNI; European Code for Navigation on Inland Waterways) is the European code for rivers, canals and lakes in most of Europe.

Not all European countries use CEVNI for their inland waterways. The <u>United Kingdom</u>, the <u>Nordic countries</u>, <u>Spain</u>, <u>Italy</u> and the <u>Balkans</u> except <u>Croatia</u> have their own regulations.

CEVNI contains the core uniform rules applicable to the traffic on inland waterways, such as visual signs on vessels, sound signals and radiotelephony, waterway signs and markings, rules of the road, berthing rules, and prevention of pollution of water and disposal of waste.





European Regulations

- Boatmaster (ski boat drivers) must be over 16
- Ski ropes must not be trailed you must retrieve the ski rope when a skier falls
- Flashing yellow strobe lights indicate caution and imminent danger of bad weather
- Waving a flag or other suitable object in a circle indicates a boat in distress
- A series of short horn blasts indicates 'imminent danger of collision'









E22 E23 E24 E6 23

LAUNCHING INFORMATION WET BIKESANCHORING ISOLATED DANGER MARKS
VESSELS AVAILABLE ON PERMITTED PERMITTED WITH OPTIONAL BLACK
PERMITTED RADIO CHANNEL SPHERICAL TOP MARKS

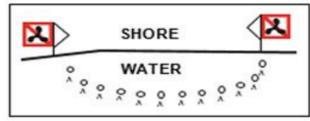


Fig. MCP

MOTORISED CRAFT PROBITTED
INDICATED BY SIGNS AND BUOYS



74a
DIFFERENT METHODS OF INDICATING DISTRESS

ICC

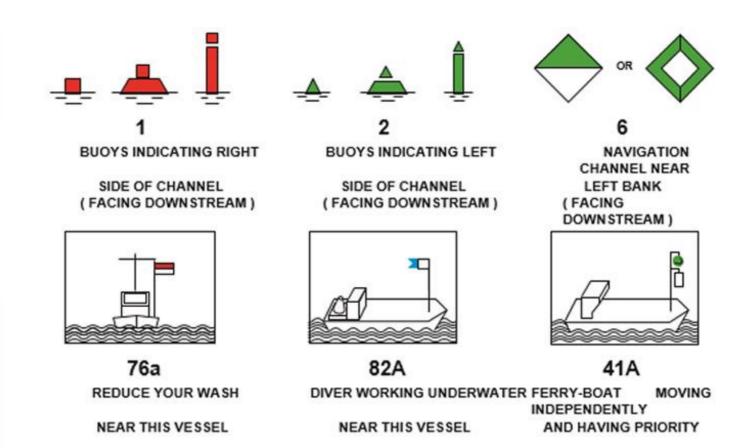


Euro Regs



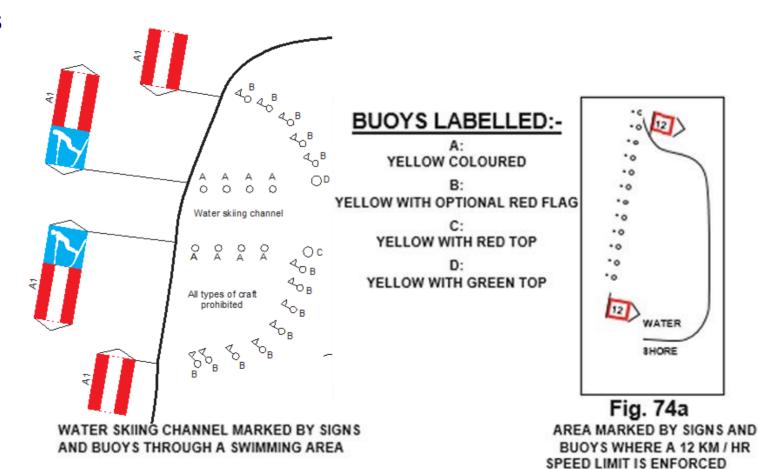








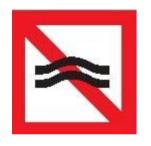








Red signs indicate prohibition

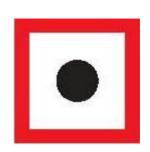




















Pass between points



No entry to the left. Water ski to the right



Blue signs indicate permitted













Caution signs



