

## **Ski Boat Driver Level 3 Notes 2010**



### **Introduction**

The Ski Boat Driver Level 3 (SBD3) is the next step in the BWSW Driving Qualifications after the Ski Boat Driver Level 2. A driver with this award would give any member of a club the confidence that they would be given a proficient tow in line with British Water Ski & Wakeboard safety policy.

The SBD3 should, normally, be taken in sections, to build up to developing a driver who is both safe, and who provides a high level of tow for all levels of club skiers.

The student must pass the general knowledge and boat handling paper, and be proficient driving slalom, wakeboard/skate, tricks, and with the boom.

Once all sections for the award have been signed off by the qualified examiner / tutor, the completed application form can be sent to BWSW for registration.

### **General**

Waterskiing is a 'team sport' in as much as the Boat Driver can be instrumental in the success of the set or ride. If the Driver is not proficient, the entire ski session can be ruined. Good driving is consistent and considerate driving.

These notes are primarily for the lake-based club, using a tournament type boat. But, in the main, they can equally apply to sea based driving

The principles are:

1. Know your area
2. Know your boat and equipment
3. Know your skier
4. Know your procedures
  - Signals
  - Equipment
  - The Observer
  - The Towline
  - Falls and Spills
5. Know your wake
6. Know yourself

#### **1. Know your area**

Getting to know the area in which you plan to drive is one of the most important precautions to take before "Hit It" is called. Know the depth of the water in both the skiing and landing area. Be aware of any unusual water flow conditions such as power plant outlets or currents. Determine the location of weeds, lily pads, and any submerged obstacles such as rocks or stumps. Always inspect the area before your first run - it is easier to go on a voyage of discovery before your attention is diverted by a skier. When working in an area where tournament courses are installed,

e.g. slalom, jump, trick be very aware of submerged wires, buoys, anchors etc. Crossed anchoring lines at the jump tend to enter the water at a shallow angle and are, therefore, obvious no go areas.

Check any local regulations and then plan your routes and turns, keeping the back wash effect to a minimum whilst giving the skiers the best possible route for the discipline. Decide on a docking method and direction, taking in to consideration the impact of a fitted ski boom, and brief the skiing team. For the rest of the season, keep to the agreed paths and patterns.

## **2. Know your boat and equipment**

If you have never driven a particular boat, try it first without a skier. This will give you the opportunity to familiarize yourself with the location of all controls and to determine the handling characteristics of the hull. Do not sit on the back of the seat - it puts you too far from the controls and makes it very difficult to stay in control of the boat during high speeds and difficult situations, such as a steering failure (and it wrecks the seat!).

Learn how to use the speed control system installed in your club boat. This includes making the correct settings for an accurate speed for a particular person in the current weather conditions. It is also important to understand the initial set up of the system i.e. base lines or plotting a course and to be capable of doing it. Familiarise yourself with the relevant instruction manuals for the system which, if not available at the club, are downloadable from the company's websites.

Check all safety equipment before beginning a session. Make sure that the bilge pump works or carry a baler. You should also have at least one paddle on board. Consider the amount of fuel required for the session and ensure that there is enough and that you understand how to refuel that particular boat. If on a large lake or the open sea, an anchor and a suitable flare are essential. It is also sensible to familiarise yourself with where the engine is, and make a quick check for oil levels, loose cables, belts etc.

## **3. Know your skier**

A driver should assess the skier's experience before the session and tailor the session to the skier's needs. Always use caution in the first pass and you will soon get a feel for your skier.

## **4. Know your procedures**

The driver's negligence can cause a safe sport to become potentially dangerous. It is imperative, therefore, that the driver knows all of the safety procedures as laid out in the SBD2 Manual. Always plan the session. i.e. 1 pass then stop, or spin etc, as miscommunication can be dangerous.

### **Signals**

Signal communication is the only way the skier can communicate with the driver. The universal signals that we use in the SBD2 are generic throughout the sport. If the skier is new to you, you must check that they understand the hand signals.

### **Equipment**

You will already have checked the equipment in the boat, but a good driver will not hit the throttle until he or she is sure that the skier's equipment is also in good order. Is the skier wearing a correctly sized and fitted life jacket? Is the towline in good condition, with no knots, and properly attached to the boat? Are the skis in good condition, with no protruding bolts or screws and the correct size, type for your skier for the planned session?

### **The Observer**

The rearward facing observer should be an adult who is experienced and a competent member of the team. The observer and the driver must understand the signals and the division of responsibility and communicate freely. Never ski without an observer when there is more than one boat in use on the lake. Anytime the boat is moving, the observer must be seated.

### **The Towline**

Ensure that the line is in good condition free of knots, fraying and that any splicing is sound and safe. Never move the throttle out of neutral unless you can see the entire towline. Get the observer to feed the line out ensuring it is clear of the prop or any other obstructions. During a deepwater start, make sure you can see a completely taut line running right down to the skier's handle. On a dock start, make sure that the skier works with the line coiled in clear view and that the last loops are thrown up and away so that you can see them. Never allow the skier to throw the entire line into the water as the boat pulls away from the dock. Coiled line in the water is a definite hazard. Injuries have been caused by careless handling of the towline.

### **Falls and Spills**

Inevitably, skiers fall during the course of a ride. The driver should insist on the proper "OK" signal from the skier after a fall - clasped hands over the head.

Always approach the skier on the driver's side where possible. If you are working with a qualified instructor or when using a boom it may be necessary to approach from the passenger's side. When you approach a skier in the water - or even the dock - consider the effect of wind and current. Always approach the skier so the wind is blowing the boat away, not in toward the skier. Treat currents the same way. When the boat is near a fallen skier, be careful not to back over the towline. The observer should assist the skier and watch to make sure that the line does not become tangled in the prop.

## **5. Know your wake**

The driver should always be aware of the effect that the wash is having on the ski area. Always drive in a straight line, and after the turn, drive back through your original path where possible, this will guarantee that the wash will not cause disturbances throughout the skiing area.

Some boats, especially inboards, leave a "roll" disturbance in the water when moving at a slow speed between idle and on the plane. This disturbance is at roughly 90 degrees to the direction of the boat. Always drive in a way that gives the least wake disturbance to your skier and to other skiers who may be nearby. Power turns are not considered best practise, they use more fuel, stress the steering parts and throw the passengers around in the boat. Be aware that bow wakes can cause as much wash as any other forms.

## 6. Know yourself

Experience and maturity tend to foster respect for driving. Driving a tow boat is a difficult, exacting, but rewarding task. The driver has the responsibility to make the tow fun and enjoyable giving the skier / rider the best chance to improve. If you are not sure of certain aspects of your driving please ask someone with more experience, N.B. they won't bite your head off.

### Driving with a Boom

Always load your boat correctly and position your passengers so that the boat is balanced, understand that it will affect the height of your boom and your skier's position. You must ensure that the boom is at a suitable height for the skier i.e. chest height.

Always take off into open water.

Always be prepared for a lack of steering control on take off.

At the end of the lake or ski area tell the skier to sit down as the boat is stopping, turn the boat into the boom and then the mass of the skier in the water will turn the boat round ready for the next run.

*When driving with a Boom for beginners the candidate must:*

- Execute smooth starts anticipating the sideways pull and calculating the direction of the boat once the skier is up.
- Execute a smooth 'slow and stop' keeping the boat straight whilst the skier sits back down into the water.
- When the skier falls the driver should immediately come out of gear and turn to the boom side. This will take the stern away from the skier. If the skier falls but does not let go of the boom, a turn to the boom side will help to prevent the skis or board from being pulled off by the water pressure.
- It is most important when driving with for a beginner on the boom to be one half of a team with your instructor. The instructor should not have to ask the driver to speed or slow the boat, this should be within the drivers understanding of the skiers needs.
- Consider the wash, where it will go and how it will affect the skier
- Present the skier to the dock safely with regard to their speed
- Park the boom out from dock. (This can be against the rotation of prop).N.B. If you are not working with an instructor always ensure that you have a competent observer who has experience with the training boom

### Start Methods

The main start methods are as follows:

Deep Water Start on Two Skis / Wakeboard

Deep Water Start on one ski.

Sitting Start on Two Skis / wakeboard.

Sitting start on one ski.

Stepping dock start / wakeboard

beach on one ski

The SBD3 should be familiar and experienced with all the above starts (unless there is no one within that club capable of doing a sitting or standing start on one ski)

### **Driving for Slalom**

Always load your boat correctly and use the passengers to balance the boat, understand that it will affect the wake and the handling of the boat so ultimately affecting your ability to anticipate the directional pull created by the skier.

The candidate must:

- Be able to set speed and programme their club boat's current speed control system i.e. 'Zero Off', 'Perfect Pass' or 'Star Gazer' and understand the difference between each of the settings.
- Within two passes, he must obtain a 'good time' (ie – the second pass must be within tolerance)
- Drive the slalom course at all slalom speeds with a full line skier, showing a good boat path and understanding boat placement within the course and consequences of bad boat path.
- Must be able to stop the boat and the skier at the end of the course without pulling the skier through the water. The boat should come to rest within a suitable distance of the skier to allow the driver / coach to talk to the skier.
- Pull the skier back up and into the course smoothly engaging the speed control as early as possible once in a straight line, without creating backwash.
- Be able to spin with a skier whilst changing the speed and, if necessary, making adjustments for wind direction and strength, on the speed control system maintaining a suitable towing speed and direction.
- If the skier falls mid course the boat must be brought off the plane in the direction of travel before turning back, at tickover speed (to minimise wash) to collect the skier.
- Consider the wash were it will go and how it will affect the skier at all times.
- Return the skier to the dock safely considering their speed of approach.

Stop the boat without creating backwash for the next skier, retrieve line and return to the dock promptly and park.

### **Wakeboard / Trick / Wake Skate**

Always load your boat correctly and use the passengers to balance the boat so there is an even wake of the correct size. How the boat is loaded also affects the handling of the boat. If your boat is heavy it takes longer to stop. The boat speed should be quite slow for a beginner but determined by the weight of the rider/skier.

When driving for a novice rider who has learned to ride heel side and toe side, the rider will probably want to ride on the whip during the turn, the driver should make sure that there is enough room for this. A beginner on heel side edge may not be able to control the speed and be out of control across the wake and out on the whip, the driver can help control these points by turning in the opposite direction putting the rider onto their toe side edge.

Dock Starts

As wakeboards planes at lower speeds than skis the starts are at a low speed and as the line goes taught power is applied progressively according to the weight of the rider.

The candidate must:

- Be able to pull all starts (as defined above). Always start in a straight line, especially using a tower or high pole.
- Be able to maintain a straight line away from fixed objects noting the length of line.
- Be able to maintain speed without speed control on. Anticipate loading from the rider and compensate with steering and throttle.
- Be capable of setting and using their club boat's speed control system.
- Drive a Double up controlling the speed on exit and giving a tight line and easy/smooth access to the wake for the skier / rider.
- Consider the wash, where it will go and how it will affect the skier / rider
- Return the skier / rider to the dock safely with regard to their speed; how much they have, how much they need, and how much they are generating themselves through their actions.
- Stop the boat without creating backwash for next skier and be aware of wash that can overcome the boat, water logging boat and passengers.
- Know how to adjust the wake to make it symmetrical by moving passengers / ballast within the boat.

It is quite difficult to hold a speed for this type of skier / rider. Often, the speed you are trying to achieve is somewhere in the area just between the displacement speed of the boat and the planing speed.

A good skier / rider can tell if the driver changes course even slightly, or if the speed varies even fractionally. Set the speed and course and maintain both throughout.

Be aware of the wake. If the boat is not evenly loaded, it will lean slightly to one side. This will produce an uneven wake, usually with froth on one side. It is easy to correct this by moving the observer or passengers slightly, generally towards the side with froth.

If a skier falls, stop the boat in a straight line and then turn gently at tickover, being careful not to throw wash through the course.

# SKI BOAT DRIVER LEVEL 3 ASSESSMENT FORM



NAME OF CANDIDATE -

	ACTIVITY	DATE COMPLETED	ASSESSMENT	NAME OF	SIGNATURE OF
		SATISFACTORILY	CENTRE	EXAMINER	EXAMINER
<b>1</b>	<b>Driving with training boom</b>				
<b>1.a</b>	With a child on 2 skis				
<b>1.b</b>	With an adult on 2 skis				
<b>1.c</b>	In windy conditions				
<b>1.d</b>	With a wakeboarder				
<b>2</b>	<b>Starts</b>				
<b>2.a</b>	Deepwater start on 2 skis				
<b>2.b</b>	Deepwater start on 1 ski				
<b>2.c</b>	Sitting start on 2 skis				
<b>2.d</b>	Sitting start on 1 ski				
<b>2.e</b>	Standing start on 1 ski				
<b>3</b>	<b>Slalom</b>				
<b>3.a</b>	Setting the speed control system				
<b>3.b</b>	Adjusting the speed control system during a set				
<b>3.c</b>	Driving a set with an adult skier at 43 kph				
<b>3.d</b>	Driving a set with an adult skier at 55 / 58 kph				
<b>3.e</b>	When the skier falls in the course bringing the boat off the plane in a straight line				
<b>3.f</b>	Re-starting within the course				
<b>3.g</b>	Stopping with a skier at the end of a pass				
<b>3.h</b>	Spinning with a skier at the end of a pass (skiers speed 55 kph or 58 kph)				
<b>3.j</b>	Balance the boat to ensure an even wake				

<b>4</b>	<b>Wakeboard</b>				
<b>4.a</b>	Drive a straight course irrespective of the pressure variations on the line at a constant speed				
<b>4.b</b>	Balance the boat to ensure an even wake				
<b>4.c</b>	Drive the double-up for both goofy & regular				
<b>4.d</b>	Drive for the slider (if club has one)				
<b>5</b>	<b>Tricks</b>				
<b>5.a</b>	Drive a straight course at a constant speed				
<b>5.b</b>	Balance the boat to ensure an even wake				
<b>6</b>	<b>Kneeboard</b>				
<b>6.a</b>	Jetty start				
<b>6.b</b>	Deepwater start				
<b>6.c</b>	Balance the boat to ensure an even wake				
<b>7</b>	<b>Inflatables</b>				
<b>7.a</b>	Understand the particular risks involved and drive a set				
<b>8</b>	<b>Written Test</b>				

**NAME OF EXAMINER FINALIZING THIS ASSESSMENT**

**ASSESSMENT CENTRE**

SIGNATURE

DATE

Once completed please send to your Regional Driving Examiner

REGIONAL DRIVING EXAMINER

DATE