



## Chapter 5 Personal Watercraft – Jet Skis and High Speed Power Boats



Personal Watercraft (PWC) such as jet skis or water/wet bikes are a rapidly growing segment of the recreational craft market.

A PWC is a watercraft that is less than 4.88 metres (16 feet) long, propelled by a two stroke petrol engine directly powering a water jet pump and designed to be operated by a person who sits, stands or kneels on it. They are capable of speeds exceeding 100 km/hr and are highly manoeuvrable in competent hands.

## 5.1 Training

It is recommended that persons operating a PWC undertake appropriate training. There are a number of training schemes and approved courses available and information can be obtained directly from course providers (see Appendix 9 for details of course providers).

## 5.2 Recommended equipment for personal watercraft (PWC)

- Rope (5 m x 8 mm Nylon) for use in towing and mooring.



- A flare pack should be carried containing a minimum of 1 x pinpoint red, 2 x orange smoke in a watertight container.
- Carry a suitable folding anchor.



- A collapsible paddle, which can be stowed on board for use in the event of engine failure.
- Basic first aid kit.
- PWC should be equipped with a lanyard/kill cord to cut out the engine; the lanyard/kill cord must be attached to the operator's body, clothing, or PFD/lifejacket. A spare lanyard/kill cord should always be carried on board.



- Knife.
- Torch.
- Basic Tool Kit.
- Fire Extinguisher.

### 5.3 Personal equipment to be worn/carried by operator of the PWC

- Suitable PFD/lifejacket (see Appendix 5).
- A whistle, fitted to each PFD/lifejacket to attract attention in the event of an emergency or entering the water.
- Suitable clothing, including a wetsuit and hand/foot protection.
- A suitable helmet, preferably fitted with facial protection, if operating offshore or involved in wave jumping.
- Goggles are recommended, especially for salt water riding.

### 5.4 Personal watercraft operations

#### 5.4.1 Prior to entering the water (Pre-Launch Checks)

- To protect other water users and due to high noise levels generated, PWC may be subject to specific local bye-laws issued by harbour or local authorities to restrict speed or the areas of operation. It is the responsibility of PWC operators to be familiar with the relevant bye-laws in force in the waters they use.
- Check the weather/sea condition forecast before starting out.
- Always complete a safety checklist (see section 5.7) prior to departure. A waterproof laminated copy of the checklist should be permanently attached

to the PWC and located inside the door of the storage compartment.

- Ensure all engine access and storage doors are correctly secured and sealed.
- Be aware of correct procedures for launching and recovery of a PWC using a trailer.
- Operators should be familiar with and have practiced the procedure for righting a capsized boat. Rolling a craft over the wrong way may result in water entering into the engine, causing serious damage to it and rendering the PWC inoperative.

#### 5.4.2 Emergency Procedures

- In the event of falling off the craft into cold water, re-board immediately. Immersion in cold water can result in a life-threatening drop in body temperature (hypothermia). Hypothermia can also be caused by wind chill, rain and perspiration. To avoid this danger, prepare by dressing correctly including wetsuit/drysuit, hand/foot protection. Wearing your PFD/lifejacket affords additional protection against the cold.
- If in difficulty, remain with your PWC. Do not try to swim to shore in cold water unless you are very close to safety and you have no expectation of speedy

assistance. Swimming and treading water use up valuable energy and produce rapid heat loss. If it is not possible to get out of the water, wearing your PFD/lifejacket will help increase your survival time by keeping your head out of the water.

### 5.4.3 On the water

- Do not drink alcohol or take drugs when riding a PWC: it is illegal to do so and your ability to make quick decisions is impaired. This is critical when operating a fast and manoeuvrable PWC.
- Study the manufacturer's manual. Practice the handling of your PWC under experienced supervision in open water and well away from other boaters.
- Be alert for the wave, wind, cloud changes that may signal weather changes.
- Avoid skiing alone, especially at sea.
- A high incidence of accidents with PWCs involve collisions with other craft. Operators should exercise the utmost caution when approaching or overtaking other boats and should never manoeuvre at speed in close proximity to other PWC, boats or swimmers (see Appendix 1).
- Where applicable, use buoyed channels and designated zones.
- If engaged in waterskiing or

towing a float, it is essential to carry an observer. This should only be done on craft with a carrying capacity of 3 or more persons.

- Always ensure sufficient fuel is on board for any intended trip. Plan to return with the fuel tank one third full thereby allowing for any possible emergencies.
- Additional petrol should not be carried on board and no fuel transfer should be attempted once the vessel is afloat.

## 5.5 Offshore Cruising

Subject to suitable weather and sea conditions, these craft are capable of undertaking coastal or offshore passages.

- Such passages should be undertaken in company with other PWCs or suitable support boats.
- A nominated person ashore should be aware of departure times, destinations and expected arrival/return times.

It is recommended that the following are carried on board:

- Compass.
- Waterproof VHF Radio.
- Passage Plan.
- Chart of sea area.

The majority of PWCs are not fitted with navigation lights, which the law requires for operating at night.

Therefore the use of such PWCs is restricted to a period between sunrise and sunset.

### 5.6 National Association

The Irish Sailing Association (ISA) is the national governing body for PWCs in Ireland (see Appendix 10 for contact details).

### 5.7 Personal Watercraft Safety Checklist

Personal Gear	Tickbox
PFD/Lifejacket	
Whistle	
Wetsuit	
Gloves	
Helmet	
Goggles	
PWC Equipment	Tickbox
Tow Rope	
Flare Pack	
Anchor	
Collapsible Paddle	
First Aid Kit	
Engine Kill Cord	
Spare Engine Kill Cord	
Knife	
Torch	
Basic Tool Kit	
Fire Extinguisher	

Pre-Launch Checks	Tickbox
Local Bye-laws/speed restrictions	
Weather Forecast	
Tides	
Local Chart	
Fuel and oil tank full	
Seats/Hatches sealed	
External hull check	
Engine test run	
Engine Stops tested	
Offshore Cruising	Tickbox
Cruise in company	
Passage Plan	
Nominated Person Ashore	
VHF Radio	
Compass	

## 5.8 High Speed Power/Sports Boats – Operation and handling

A high-speed power/sports boat is generally regarded as one capable of achieving speeds in excess of 17 knots. There are a variety of craft designed as high speed power/sports boats, including rigid GRP Vee profile hulls, RIBs, Cathedral type dory hulls, etc. The high speeds that can be attained by these craft place specific demands on the skills and capabilities of their operators. These craft allow a much shorter reaction time to an incident than conventional motor craft.

It is recommended that persons participating in power/sports boat activities undertake appropriate training. A number of training schemes and approved courses are available and information can be obtained directly from course providers (see Appendix 9).

**Persons under 16 years of age are not allowed to be in command of a fast power/sports craft, i.e. a craft that can attain a speed through or over water of 17 knots or more**

### 5.8.1 Pre-departure Checks

- All persons on board any boat under 7 metres in length must wear a PFD/lifejacket – **it's the law**;

- Check engine oil levels, etc;
- Ensure all on board wear suitable clothing. Be aware of the effects of wind chill at speed;
- Carry sunscreen protection – factor 15+;
- If using an inflatable boat or RIB, ensure all tubes are correctly inflated;
- Engine kill cord – Always wear one, and test it prior to departing the berth;
- Competency and Skills – Ensure you have received adequate training in the operation and handling characteristics of the boat type you are using.

### 5.8.2 On the water

- Maintain a good all round lookout, particularly when in main shipping channels;
- Observe designated speed limits, particularly on passage through anchorages, marina approaches and areas used by swimmers;
- Be aware of the wash generated by your boat, in particular when close to or passing other boats;
- Know your limits – be aware of your ability and capability;
- Know the boat's limits;
- Check fuel reserves regularly;
- Do not overload the craft – these craft are designed for a maximum number of persons. If the boat is CE marked, this number will be indicated on the CE plate on the transom;
- Secure all boat equipment correctly;

- Ensure all occupants are secure and use the supplied seating and handgrips;
- If intending to swim from your boat, consider its freeboard. Check beforehand and make sure there is a suitable means to reboard from the water.

### 5.9 Waterskiing, Wakeboarding and towed rides

Persons involved in towed activities such as waterskiing, wakeboarding and the towing of inflatable doughnuts, etc., should be aware of the following:

- A suitable PFD/lifejacket must be worn.
- There should always be an observer in addition to the boat

driver aboard the towing craft.

- Towing rides should only be undertaken in areas either specifically designated or in areas clear of other shipping and water users.
- Ensure your Insurance Company is aware of these activities.

When waterskiing, both observer and skier should be aware of the correct procedures and signals required. It is recommended that individuals undertake suitable training and coaching.

The Irish Waterski and Wakeboard Federation is the national body for waterskiing in Ireland (see Appendix 10 for contact details).



## **5.10 Competitive use – Power Boats**

The Irish Sailing Association is the National Authority for powerboat racing in Ireland. Racing is organised by clubs affiliated to the Association. All racing is run in accordance with the rules and procedures of the Union Internationale Motonautique (UIM), which is the world governing body. The UIM set out requirements for vessel safety, skipper qualification, scrutiny requirements and safety management during a race.