Personal Watercraft

Read Before You Ride!



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The A, B, Cs of Boating

- A. You are the Captain. You are responsible for the boat and its passengers. You are responsible for knowing the rules for safe operation of the boat. You are responsible for the condition of the boat.
- **B. You must know the rules**. Just like there are certain rules of the road, all recreational boats are subject to uniform operating



- rules. As the operator you are expected to know and obey these rules. All personal watercraft (PWC) are power boats under the law. They have the same requirements for registration, regulation, and operation as other boats. PWC are classified as "Class A Inboard Boats" by the United States Coast Guard (USCG).
- **C. Take a boating safety course**. Collisions are the #1 risk for recreational boaters. Stay alert. Know the risks. Drive defensively. Take a boating safety course sponsored by authorized boating agencies. This book is helpful, but is not a substitute for a boating safety course. Contact the local offices of these organizations to find out more:
 - State Boating Education Programs,
 - Coast Guard Auxiliary,
 - America's Boating Club/U.S. Power Squadrons,
 - Boat Ed[®], and
 - Also many local school districts have free or low cost education programs and publications available. There are also on-line sources for information.
- **D. Read the Warnings and the Owner's Manual**. Not all PWC are the same. Your watercraft could have unique features. Read the Owner's Manual and please comply with all of the warnings. This is the best way for you to have a fun and enjoyable experience.

E. Don't Drink and Drive.

Don't Do It



DON'T DO IT!

DRINKING AND BOATING DO NOT MIX.

Drinking impairs judgment, coordination, and reaction time.

Many states have legislated strict laws and severe penalties regarding the use of alcohol and drugs by boat operators. While the particular rules and regulations differ from state to state, their intent and message is universal - Drinking and boating do not mix. Don't drink and drive!

AND, impairment starts with the first drink. So just because you are not "legally intoxicated" does not mean that you are safe to drive.

F. What Causes Accidents?

WHAT CAUSES ACCIDENTS? JUST WHAT YOU WOULD EXPECT!

- There Are Many Accidents: According to the Coast Guard, in 2017 there were 4,291 recreational boating accidents, 658 deaths, 2,629 injuries and over \$46 million dollars of property damage.
- Operator Error: Operator inattention, operator inexperience, improper lookout, rules violations and excessive speed rank as the top primary contributing factors in accidents.
- <u>Drinking & Drugs:</u> Alcohol and drug use are the leading known contributing factors in fatal boating accidents; where the primary cause was known, it was listed as the leading factor in 17% of deaths.
- **Not Wearing PFDs:** Over 76% of deaths were due to drowning. 84% of those who died were not wearing their PFD.
- **Be a Good Boater**—Get Education: Where reported, 81% of recreational boating deaths involved operator's without boater's education. Compare this to the 14% of deaths involved operators with an education certificate.

(U.S. Coast Guard boating accidents statistics for 2017)

IT'S A JET PROPELLED BOAT

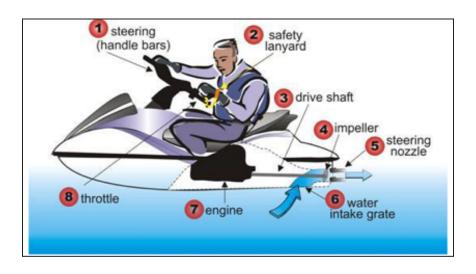
Here's how it works

JET DRIVE BASICS—PROPULSION

The jet drive in a personal watercraft (PWC) uses the same physics as the jet drive on modern aircraft. The impeller inside the hull sucks up water through the intake grate, accelerates that water, and pushes it out the nozzle to power the craft. It performs a similar function to the propeller on other recreational boats.

The water exiting the nozzle is powerful and so there are some precautions you should take with the jet pump on your PWC.

- Keep hands and feet, as well as hair or clothing away from the pump intake. Loose items can be sucked into the pump.
- Make sure the engine is off when checking the pump intake for possible obstructions.
- Don't operate your boat in shallow water (less than 30 inches).
 Anything stirred up from the bottom, such as sand or rocks, can be sucked into the jet pump and injure someone when they are expelled out of the pump.
- The jet nozzle force is powerful. Make sure that no one is behind you when you accelerate. Falling off into the path of the jet thrust nozzle can also be harmful. Wear protective clothing.



BASICS ABOUT YOUR WATERCRAFT

STEERING

Boats are different from cars in that cars steer from the front and power boats steer from the rear. The power of the jet nozzle (on PWC) or the propeller (on some other boats) not only moves the craft forward, but also steers the craft. The steering control directs the stream of water to the left or right. When the steering control is turned to the right, the steerable nozzle also turns to the right. The thrust from the rear of the craft pushes the back of the boat to the left. Hence, the craft will turn to the right.



The most important thing to remember about steering is that you must have power to turn. If you release the throttle or shut off the engine, the craft will lose the very force that enables its steering. Some PWC today have throttle reapplication devices to assist steering if you release the throttle, however, you should assume that you will need throttle to steer.

ALL SHAPES AND SIZES

PWC come in a variety of configurations. There are single person craft, ("stand-up" models) and there are two-person or three-person craft that are intended to be ridden sitting down. Some of these are suitable for towing skiers and wake boarders.

One thing all PWC have in common is that they are highly maneuverable, very fast, and they are one of the smallest vessels out on the water. Other larger boats may not be expecting you to turn quickly. Pay attention to those around you. You may turn directly into their path of someone passing from behind. In a collision, the risks to the smaller boat may be greater (just like motorcycles vs. cars). Stay alert! Scan your surroundings!

GENERAL BOATING TERMS

You should know and remember these terms.

A. **Port:** the left side of a boat when you are facing forward

B. **Starboard**: the right side of a boat when facing forward

C. **Bow:** the front of the boat

D. Stern: the back of the boat

E. **Hull:** the body of the boat

F. **Deck:** top portion of the body/hull

- G. **Lanyard:** Engine shut-off cord attached to the operator and to the vessel
- H. **Draft:** the depth of the boat below the waterline
- I. Stand-on vessel: to continue on the same course
- J. **Give-way vessel:** to yield, allow other vessel to go first stay clear of the stand-on vessel



THERE ARE NO PAINTED LINES

Unlike roadways, there are no painted lines on the water. Operating on the water can be more like driving in a busy, open parking lot. You can be approached from any direction. You must observe all 360° around you. Scan your surroundings!



Even though there are no "lanes" there are rules when boats encounter each other. You must know these rules! Ignorance of the law is not an excuse. Not knowing and following these rules may result in a collision.

These basic rules (the "Rules of the Road") must be remembered and followed!

Here are some of the Navigation Rules that you should know. These are not the complete rules. PWC operators should obtain a copy of the actual rules*, study them, and keep them available for further reference.

*The International Rules and the Inland Navigational Rules can be searched on the U.S. Coast Guard website https://www.navcen.uscg.gov.

ENCOUNTERS WITH OTHER VESSELS

There are three common types of encounters: meeting head on, overtaking, and crossing.

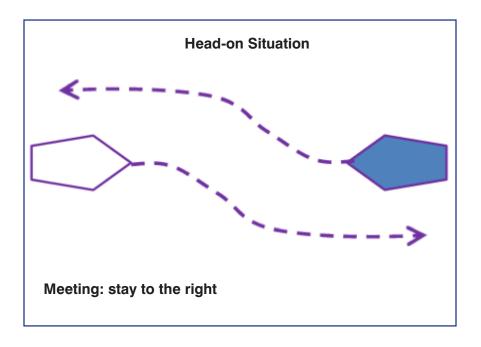
Remember, you are a power boat in these situations, so you follow the rules that apply to power boats. These rules have been adopted by the U.S. Coast Guard, and you are required to know and follow them.

Always ride with caution and use common sense to avoid hazardous situations.

MEETING HEAD ON: STAY TO THE RIGHT!

When meeting head-on or traveling in the same path of another powerboat, neither boat has the right-of-way and both should try to steer to the right.

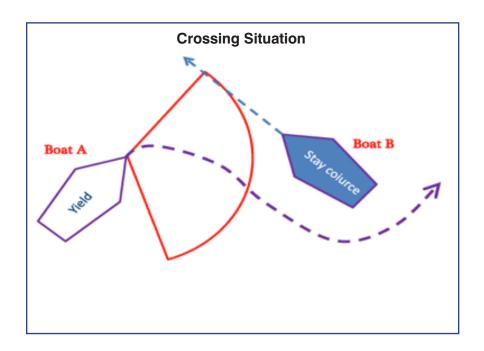
If there is no room to pass on the right, slow down, make sure the other boater knows what you intend to do, and make your move early.



CROSSING: YIELD TO THE BOAT ON THE RIGHT!

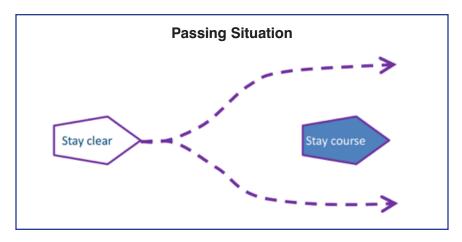
Sometimes it is necessary to cross the path of another boat. PWCs are smaller in comparison to many other boats so it could be difficult for you to see around other boats when crossing their path and may be difficult for other boats to see you. Make sure your visibility is not obstructed by the other boat by staying far enough away so that you can see if other traffic is coming your way.

When crossing the path of another motorboat, the give-way vessel (A) should alter course or slow down to pass behind. The stand-on vessel (B) should maintain its course and speed. So if Boat A and Boat B are crossing and Boat B is to the right then Boat A redirects its course to the right and crosses behind (astern) Boat B. Boat A should do everything possible to avoid Boat B, including stopping, slowing or reversing.

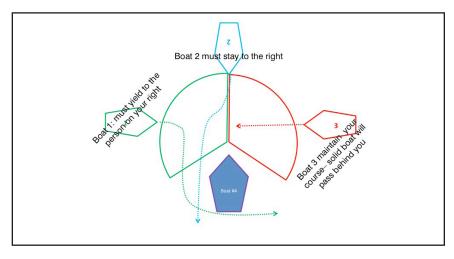


OVERTAKING: STAY CLEAR OF THE OTHER BOAT

When trying to pass another boat traveling in the same direction, if the boat behind is trying to pass, it is required to stay out of the way of the boat being passed or overtaken. The one passing (the "give-way vessel") can pass on either side as long as it stays well clear of the other boat (the "stand-on vessel"). The boat being passed maintains its course and speed.



This graph reflects the Meeting, Crossing and Overtaking rules explained above. If you are crossing from the left (Boat #1) you must yield and pass behind Boat #4. If you are crossing from the right (Boat #3) you must maintain course and let Boat #4 pass behind you. If you are approaching head on, then you must stay to the right of Boat #4



OPERATOR AWARENESS

Waterways are full of hazardous obstacles. Stay alert! Use common sense! Safe boating requires physical capability, maturity and good judgment. For this reason, many states have adopted restrictions regarding the age at which a person may legally operate a motorboat or PWC.

MINIMUM AGE FOR OPERATORS

The manufacturer of your craft has a minimum age recommendation for operators and recommendations for passengers. Refer to your owner's manual and on-product warnings. The Personal Watercraft Industry Association (PWIA) recommends that States require that PWC operators must be at least 16 years of age to operate a personal watercraft. Many states also specify minimum age restrictions for boat operators. Find out if your state has such a restriction.

BE DEFENSIVE!

Other boaters may not be as smart or as sober as you.

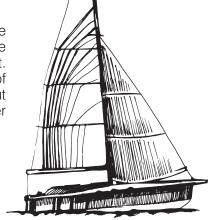
Safe boating requires an ability to avoid being involved in an accident. Most accidents are preventable. Defensive operation is the key to safe boating.

Most accidents involve operator error. According to recent studies, 95% of all accidents involve careless and reckless operation, excessive speed, inexperience, Rules of the Road violations, inattention and/or intoxication.

Always give yourself enough room so that you can react. If another boater makes a mistake and creates a hazard, you need to be alert, use good judgment and have time to respond in order to avoid an accident.

OTHER VESSELS

The general rule is, the more maneuverable boat stays out of the way of the less maneuverable boat. As a PWC operator, you are one of the most maneuverable boats out on the water. Stay away from other vessels.



OPERATOR SAFETY GEAR

These are a "must" — check before you go out.

Personal Flotation Device (PFD) – Everyone must wear one! You can be ticketed in most states if you don't wear one.

Over 50% of all boating fatalities are drownings. Many occur because a boater was not wearing a PFD.

There are different types of PFDs. Offshore life jackets and near-shore vests are designed to keep your face upwards in the event that you are unconscious. Most PWC operators wear flotation aids, which is comfortable and designed to keep your body afloat. Throwable devices/not wearable and special-use devices are really not suitable for PWC use.



The USCG requires a PFD that is in good, wearable condition. Most states require that the PFD be actually worn by all people on board of a PWC. Check the label to be sure your PFD is acceptable with this regulation.

WETSUIT/PROTECTIVE CLOTHING - Wetsuit bottoms (neoprene shorts) or clothing that provides equivalent protection should be worn at all times to protect against injuries that may occur during a fall into the water. These injuries can be severe. While these injuries are rare, there is no point in taking a chance—wear the gear! Wetsuits are not just to keep you warm in cold water. See your Owner's Manual for more information.

LANYARD - The engine shut-off cord (on most PWC) must be attached to the operator and to the vessel. Otherwise, the boat may ride off without you!

HELMETS - Helmets are not required, but during some kinds of riding (particularly when racing), they may be advisable. Consult your Owner's Manual for advice on whether you should wear a helmet.

BEFORE EVERY RIDE

CHECK LIST:

- **VENTILATE THE ENGINE COMPARTMENT** leave it open for several minutes prior to starting the engine.
- CHECK THE ENGINE COMPARTMENT look for loose fuel lines or electrical connections.
- ENGINE SHUT-OFF LANYARD/ START-STOP SWITCHES should be in proper working order (test start).
- PROPER SAFETY GEAR make sure that you and your passengers are properly equipped with a PFD and proper protective gear.
- MINORS If there are minors on board, they must be of sufficient size and strength that they can hold on and put their feet firmly on the deck floor.
- PASSENGERS Make sure passengers are paying attention and ready to go.

COMMON SENSE AND THE GOOD BOATER

In addition to the official "Rules of the Road," courtesy toward other boaters as well as shoreline inhabitants is advised, appropriate and the right thing to do. Spraying someone on the shore, jumping boat wakes or riding too close to fishermen is not cool!

GENERALLY:

- Don't irritate fishermen, stay away from them;
- Don't annoy landowners, don't operate by the same shoreline too long; and
- Don't jump boat wakes.

COURTESY – Water means freedom to many people. But if you abuse that freedom you may prevent others from enjoying the peacefulness of open waters and quiet beaches.



SPEED

Pay attention to posted speed limits. Excessive speed can be dangerous. NO WAKE areas will be marked with signs or buoys. These markers signal the operator to proceed at a minimal speed, usually five miles per hour or less. These areas are usually found near swimming areas, beaches, marinas, mooring areas, docking sites, waterfront residences, jetties and boat ramps. These zones apply to all vessels including PWC.



Follow the rules!

DOCKS, MOORINGS, AND MARINAS

Maintain a minimal speed (no wake speed) when operating your PWC near areas where boats are at anchor or docked. Traffic congestion in these areas calls for extra care on the part of the PWC operator.

NOISE

PWC can be very loud, particularly if the craft comes out of the water. Remember that noise carries further on water. Early morning and late afternoon are times when people enjoy peace and quiet. Avoid residential and camping areas and places where people usually go for solitude.

Realize that if your pump comes out of the water it will make more noise and that may be annoying to others on shore.

Noise can be as much a pollutant to the environment as fuel, smoke and litter, and is increasingly the target of anti-noise laws and enforcement.

OTHERS (SWIMMERS, DIVERS, WATER-SKIERS)

Keep a sharp lookout for swimmers at all times while operating your PWC. Remember that glare and the sun can make swimmers and other objects hard to see. Avoid swimming areas. Keep your PWC at a minimal speed (no wake speed) when you are near swimmers. When launching from or returning to a beach, ride at idle speed even if swimmers are not visible.

As a boater, you should be familiar with the "divers down" flag. This flag indicates that divers are present in an area. Avoid the area surrounding the flag. States require as much as 300ft between the flag and the vessel.

Stay away from water-skiers. Never jump the wake of a boat towing a skier. This is dangerous and it is unlawful. Keep in mind that the tow line may be difficult to see and can be very dangerous to you.

Fishermen should also be given plenty of room. Fishermen usually have lines or nets out which can be dangerous to you and them if you become entangled. Avoid the area surrounding the flag. States require as much as 300 feet between the flag and vessel.



SIGNS, SYMBOLS, AND MARKERS

Here are some signs and symbols you may come across while riding and will be expected to recognize.

Symbol	Meaning	Examples
\Diamond	Danger A diamond shape alerts boaters to hazards	DANGER
	Restricted Operations Marks with a circle indicate areas with regulated operations	NO WAKE 5
\bigoplus	Exclusion A diamond shape with a cross means boats are prohibited from the area	BOATS KEEP OUT
	Information Marks with a square provide helpful information such as directions, distances, and locations	GAS DOCK BOAT RAMP

WEATHER

When you're riding, pay attention to indications of changing weather. If bad weather conditions arise, go back to shore. If you are caught in bad weather, head for the nearest, safest shore. Use common sense and do not attempt to swim to shore unless absolutely necessary. In most bad weather situations, it is better to stay with your boat.

ALCOHOL AND FATIGUE

Drinking (or drugs) and boating don't mix! This is not just idle advice. Alcohol is a significant factor in many boating accidents and fatalities. Remember, alcohol impairment begins with the first drink. Even if you are not "legally" intoxicated, you are nonetheless impaired.

Also, long hours of boating, with its exposure to noise, vibration, sun, glare and wind can produce fatigue and dehydration conditions that can affect your balance, vision, judgment and reaction times. If you combine these effects with even low levels of alcohol consumption, you can increase your risk of a serious accident.

Alcohol makes you think you are fine; but you are not!

With alcohol, your perception of risk is impaired, your reaction times are delayed, and your peripheral vision narrows. Your ability to properly track moving objects is likewise impaired. These conditions result in many collisions.



OBLIGATIONS OF THE OPERATOR

FIRE EXTINGUISHERS

All boat owners/operators must carry a readily accessible USCG approved class B-1 hand portable fire extinguisher in working condition. Check frequently to be sure that fire extinguishers are in proper working condition and properly charged. Make sure locking pins and sealing wires are in place. Replace old fire extinguishers.



IN CASE OF FIRE

In the event of fire aboard your craft, you should swim away from the craft. If the fire spreads to the gas tank an explosion could occur.

VENTILATION

Most PWC require that you ventilate the engine compartment before each ride. Read the Owner's Manual and on-product warnings. If you do not ventilate, an explosion can occur. Check your engine compartment for any loose electrical connections or fuel lines. A loose battery connection or spark plug can ignite gasoline fumes.

OTHER CONSIDERATIONS

Ride your PWC for your enjoyment, but don't overdo it. When you push yourself too hard, accidents are more likely to happen. When you're tired, you are more likely to be in an accident.

Be familiar with the stopping distance and turning radius of your PWC. Remember, a jet drive requires thrust to turn. Stay far enough from traffic or obstacles so you have room to stop or maneuver. Become familiar with the area in which you ride.

WAKE JUMPING

Jumping the wakes of passing boats is risky and is illegal in some states. Visibility can be obstructed so that they cannot see you and you cannot see them. This can result in a collision. The other boat operator does not want to be "buzzed" by a PWC. Many collisions occur during boat wake jumping.

SURF RIDING AND WAVE JUMPING

Riding in the surf zone is frequently prohibited. Many surf zones stretch for 100 yards or more out into the surf. Given the size of surf waves, there is limited visibility and you may not see surfers and swimmers, which can result in very serious injuries. If you fall off, your drifting PWC may hit you or others in the surf. It can also be difficult to reboard in these conditions.



PULLING A WATER-SKIER/ WAKE BOARDER

You need three people - skier, observer and driver. The observer is needed to keep an eye on the water-skier. The driver needs to pay attention to where he is going. In many states it is a legal requirement that you have a "spotter." Everyone needs to wear a PFD.



- Stay well clear of congested areas and obstructions. Keep away from crowded beaches, docks, swim areas, rocks, and bridge pilings. Allow extra room while pulling a skier.
- Don't spray swimmers, boats, or other skiers.
- Never waterski while under the influence of alcohol or drugs.

YOU ARE THE CAPTAIN OF THE SHIP

YOU HAVE RESPONSIBILITIES TO OTHERS

You have a responsibility to your passengers. These include making sure that everyone has the appropriate riding gear (PFD and protective clothing) and that they are properly seated and holding on. If there are minors on board, they must be of sufficient size to hold on and firmly place their feet on the floor.

If you allow others to operate the craft then it is your responsibility to make sure that they know how to operate it properly. This includes instructing them on the "Rules of the Road" and the other rules discussed here. Make sure they are old enough, sober enough and have the judgment necessary to operate a craft of this type. You would not



give the keys to your car to someone inappropriate and you should not do that here.

IT'S A SMALL PLANET

PWC are small boats and generally have very little effect on the environment, as compared to larger vessels. The jet drive has no exposed propeller, and therefore the danger to manatees, dolphins and other aquatic species is significantly reduced.

Because of their smaller size and weight, PWC create smaller wakes than conventional boats thereby causing less damage to docks and other personal property. This feature also minimizes erosion of the shoreline and waterway bottoms. HOWEVER, high speed/high RPM operation in very shallow water or near shore can cause erosion.

It is important to keep your vessel well maintained so that oil leaks and other maintenance issues do not pollute the environment. Frequent maintenance is recommended to maintain safe use in the environment. Consult your owner's manual.

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