Tourism 12- Miss Ashley- Module 4-Operating a Boat-safety underway

p.58-Loading Boat and Equipment

1. What steps should you take when loading people and equipment?

1) Consult the pleasure craft’s capacity plate and ensure that:

- Equipment and people do not exceed the “recommended gross load capacity” of the craft

- The number of people onboard does not exceed “the equivalent number of adult persons”

the craft is capable of safely carrying

2) Every person should be wearing a properly fitted approved PFD or Lifejacket

3) The operator should board first and then assist each passenger aboard

4) Position equipment and people so that weight is equally distributed throughout the craft

5) Each person should be properly seated and positioned before the next person comes aboard

6) Ensure all equipment is securely fastened and stored properly to prevent uncontrolled shifting

once the craft is underway. You should stow gear in lockers that are easily accessible in case of

emergency and as low as possible to help stabilize the craft

2. What should you familiarize your passengers with before heading out?

- Passengers should be informed of the location PFDs/Lifejackets and their importance for safety

- Each passenger should wear a properly fitted, approved PFD or Lifejacket. Instruct passengers on

the correct way to put on a PFD/Lifejacket while in the water or on the craft

- Instruct your passengers to keep their weight as low as possible at all times and hold onto solid

objects when moving about the craft. Passengers should always remain as close to the centreline as

possible when moving around the craft

- Show your passengers the location of your craft’s Emergency Kit

- Emergency situations may require your passenger’s co-operation and assistance.

p. 59- loading boat and equipment cont.

2. cont.

Advise passengers that they may have to react in the event of an emergency

- Instruct passengers to keep hands, arms and legs inside the craft at all times, particularly when approaching or leaving the dock

- Remind passengers that many factors can affect their reflexes, judgment and sense of balance while underway. These include the motion of the craft on the water, sunlight, waves, reflections, wind, sound and/or alcohol. Passengers may not be familiar with the effects of these influences and should be advised to take them into consideration

- Advise passengers of their responsibilities during refueling. Passengers must disembark the craft and extinguish any cigarettes before refueling begins

3. What instructions should you give pwc passengers?

- Advise passengers as to the location of the PWC’s safety equipment

- Passengers should read and understand the warning labels on the craft

- Instruct passengers that the PWC will become more unstable as each passenger boards the craft

- Passengers should keep their weight stable and evenly distributed

- Advise passengers to keep legs and arms within the craft at all times

- Remind passengers to keep away from the PWC’s intake grate while the engine is running. Items such

as long hair, loose clothing, or PFD straps can become entangled in the moving parts of the jet intake system resulting in severe injury or death

- Advise passengers that the jet propulsion system is powerful and water and/or debris exiting the jet thrust nozzle can cause severe injury. Operators and passengers should avoid being close to the jet thrust nozzle at the rear of the machine

- Remind passengers to never place their feet or legs in the water to aid turning

- Advise passengers that they should hold onto the seat strap while underway

p. 60-Getting underway

4. What precautions should you take when casting off?

1) All passengers should be seated properly with their hands and feet inside the boat

2) For crafts equipped with enclosed engine compartments, operate the ventilation system (blower) for at least 4 minutes before starting the engine

3) Start the engine:- PWC operators should ensure the watercraft’s engine shut-off cord (safety lanyard) is securely

attached to their wrist or Lifejacket at all times.The engine shut-off chord must be kept free from the handlebars and be free to release if the operator falls off the PWC

4) Untie all mooring lines and push the craft away from the dock

5) Check your surroundings and take into account any obstacles or other craft

6) As you leave the dock, the stern of your vessel will likely swing back towards the dock. Ensure that you push your craft well clear of the dock at both the bow and stern

7) Proceed slowly from the dock until it is safe to increase your speed

8) Fast acceleration may cause passengers to loose their balance. Ensure all passengers and crew are informed before any rapid acceleration occurs

5. What should you do when returning to the dock?

1) Ensure all passengers are seated securely with their feet and hands inside the craft

2) Approach the dock at a manageable speed

3) Turn your craft slowly as you approach the dock in order to come to a parallel resting position. If necessary, use reverse to control the position of your craft

6. What do you need to remember when returning to the dock?

Your boat does not have brakes and requires a minimum distance to stop. Stopping distance will vary

depending on initial speed, load, wind and water conditions.

PWC operators should remember that as the throttle lever is released to idle position, less directional control

is available. You must apply throttle to steer. PWC’s not equipped with neutral and reverse must be shut

down when close to the dock, or forward thrust will continue to propel the PWC into the dock.

p. 61-Safety underway

7. What do you need to remember when disembarking?

1) Secure the craft

2) Shut down the motor:- PWC operators should remove the engine shut-off chord from the PWC to avoid accidental starting

4) Securely fasten the craft to the dock

3) Unload passengers one at a time: - PWC operators should be aware that as each passenger exits the watercraft it may become unstable. Passengers should attempt to keep their weight distributed as they disembark from the PWC

4) Never jump from the boat to the dock

8. What does safety underway mean?

- Understanding and taking into the account the effects of being on the water

- Choosing a safe and appropriate speed

- Knowing the proper techniques for reducing risk while operating at high speeds

- Knowing how to operate safely amongst other boat traffic during the day or night

9. What are effects of being on the water that can impair your judgement?

- The motion of your pleasure craft- Sunlight- Wind- Waves- Sound- Alcohol and/or controlled substances

p. 61-Safety underway cont

10. What can you do to reduce the effects of being on the water?

nsuring that you wear appropriate protection from the elements including sunglasses, sunscreen and a visor or hat.

Be well rested when planning to operate your craft for extended periods and ensure that you consumeample liquids (such as water or juice) to keep hydrated. You should never consume alcohol or controlled substances when operating a pleasure craft.

11. What should you guage your speed on?

- The location of hazards- Your distance from shore- Your distance from other boats including concentrations of fishing vessels - Activities of others on the water including other vessel traffic- Water currents and wind conditions

- Other weather, water and visibility conditions

12. What should you remember about opeating speed?

Always operate at a speed that allows you to take effective action to avoid collisions.

13. What do you need to remember about high speed operation?

Pleasure crafts operating at high speeds require a greater stopping distance. Operators driving their boats at high speeds should ensure they are able to react effectively in emergency situations including sudden changes in water, weather and visibility conditions. Be aware that high-speed operation reduces the amount of time you have to react in an emergency. You should always use caution and be more attentive when operating at high speeds.

p. 63-Safety underway cont.

14. What is trim and why is it important?

a description of the relative angle of the boat in the water. Too much weight towards the bow of the boat will cause the boat to plow down into the water. Too much weight towards the stern of the boat will cause the boat to bounce on the water. Either condition can result in poor and uncontrollable handling.

15. What should a vessel be like when properly trimmed and how can this be controlled?

When properly “trimmed”, the gunwales of the craft should be parallel to the water. Trim can be controlled be altering the position of equipment and people in the craft. For craft equipped with power trim, the operator can adjust the trim of the boat by changing the angle of the motor/outdrive.

16. What do you need to know about steering a pleasure craft?

You should look in all directions (including behind to the stern) before turning your craft. Take note of the position of other craft and their relative speed. Once a safe direction has been established, turn your boat in a predictable manner. You should avoid rapid unexpected manoeuvres as other boaters will not be able to predictyour movements.

17. What do you need to know about stopping your craft?

Top stop your craft, pull back on the throttle using a smooth even motion. Your craft will slow to idle speed. To stop your craft completely, move the throttle lever to the neutral position.

18. What do you need to know about steering a PWC?

Personal watercraft steer as high-pressure water passes through the craft’s jet-propulsion system. Water is forced through the steering nozzle at the stern of the PWC. The steering nozzle is controlled by the handlebars which the operator can turn left or right. Remember-As the throttle lever is released to idle position, less water is forced through the system, and therefore less directional control is available. If the engine is shut off, all directional control is lost. You need throttle to steer.

p. 64-safety underway cont

19. How do you stop a PWC?

You can stop a PWC by releasing the throttle lever, pressing the stop button, or disconnecting the safety lanyard.

20. What do you need to remember when stopping a PWC?

PWCs coast farther and require more distance to stop than traditional pleasure craft. PWC operators should remember that a minimum of 75 m is required to stop from full throttle - Exact stopping distance depends on the type and size of PWC being operated and the prevailing water and wind conditions. Never use the PWC’s reverse (if so equipped) to stop. You or your passenger(s) could be unexpectedly ejected towards the handlebars or thrown from the craft.

21. What do you need to know about handling rough water conditions?

adjust their speed as suitable to water conditions. When operating your boat in rough water, you should slow down and use caution. Adjust your speed so that the bow of your craft does not become buried in a wave. You should never attempt to jump waves. If you find yourself in increasingly high seas, you should make way to a sheltered mooring such as a protected bay, cove or breakwater. If wave and water conditions make it unsuitable to operate safely, immediately set anchor and signal your need for assistance.

22. What do you need to remember if crossing a wake?

you should reduce your speed and alter your course to cross the wake at a 45-degree angle. Be aware of traffic that may be in your path as you cross to the other side of the wake. Once you have crossed the wake, resume your speed

and course. PWC operators should cross the wake at a 90-degree angle. Doing so will help maintain lateral stability. You

should never attempt to jump a wake.

p. 64-safety underway cont.

23. What do you need to remember when operating in bad weather?

When operating in bad weather slow down and operate according to prevailing environmental conditions. Operate with caution during high wave conditions when other craft may not be easily visible. Choose a slow speed and use your craft’s navigation lights during periods of restricted visibility such as fogand heavy rain.

24. When can you make use of an anchor?

In the event of a breakdown- During severe weather conditions- An anchor is also useful in non-emergency

situations (such as when swimming from the stern or securing for an overnight stay)

25. What are the 6 steps to setting an anchor?

1) Ensure the inboard end of the anchor line is securely attached to the pleasure craft.

2) Ensure the outboard end of the anchor line is securely fastened to the anchor.

3) Slowly lower the anchor over the bow or side of the craft until it reaches bottom. Note the distance to the bottom and/or note the length of rope used for the anchor to reach bottom. Never throw the anchor over the side the boat.

4) Let the boat drift rearward or operate the engines astern:- Let out an additional eight to ten times more

anchor line then the depth of the water and securely fasten the desired length to the boat. - At only 2x and 4x depth, the anchor can dig in but there is too much upward pull on the anchor line (rode). At 8x to 10x depth, the rode lies flat

on the bottom and pulls the anchor in deeper

5) Once the anchor is set, chose two fixed landmarks on the horizon and occasionally check your relative position to ensure that you craft is not drifting. If anchoring overnight display your craft’s all-round white light.

6) To retrieve the anchor, slowly pull on the anchor line, moving the boat forward until the anchor frees itself from the bottom. Bring the anchor onto the craft and fasten securely.

25. What are some other things to remember about anchoring?

Never secure the anchor to the stern of the craft. Smaller boats can be easily swamped by waves crashing over the transom. If your are preparing to set anchor in an anchorage among other boats, remember that the first craft into

anchorage has the “right of swing”. Always allow for another craft’s right of swing.

p. 66-sharing the waterways

26. What are some general rules about sharing the waterways?

- Never operate close to swimmers and the personal property of others

-Ensure that your wake and wash will not cause personal injury, erosion of the shoreline, or damageto personal property

- Use common sense and courtesy when operating close to non-powered craft

27. What do you need to remember when operating near swimmers?

Operating a power boat near swimmers is extremely dangerous and against the law. Always keep away from designated swimming areas when operating your craft. When operating near shore, keep a look out for swimmers, including those persons engaged in underwater activities such as snorkeling or diving. Remember that the sun’s glare can make it difficult to spot swimmers in the water.

28. What do you need to remember about staying clear of divers? What flags are required and what do they mean?

Vessels engaged in diving activities are required to display flags indicating their activities. The blue and white International Code Flag “A” indicates “I have a diver down: keep well clear at slow speed.” The Collision Regulations Rules 18 and 27 require that all operators take early and substantial action to steer well clear of any vessel that displays a Code Flag “A”. A “red and white” diving buoy marks an area where diving is in progress. Always be sure to keep a look-out and steer clear of diving buoys.

p. 67sharing the waterways cont

29. What are the rules when operating close to non-power boats?

Non-powered craft such as canoes, sailboats, rowboats and sailboards have the right of way – It’s the law. Reduce your speed when operating near unpowered craft and ensure your wake does not create a hazard or irritation to them.

30. What are your wake and wash, and your responsibilities for them?

Operators are responsible for the wake and wash of their craft: - Wake is caused by the boat moving through the

water and displacing it- Wash is the disrupted water following from the stern of the boat and is caused by the motion of the propeller Your craft’s wake and wash can cause damage to the shoreline and can be a danger to smaller craft.

31. What areas do you need to be aware of when it comes to the effects of your wake and wash?

- Swimmers and bathing areas- Docks- Wildlife- Shoreline erosion- Smaller craft such as fishing boats and canoes- Unpowered craft- Water-skiers- Divers- Areas of anchorage- Other anchored or grounded vessels

p. 68-Exiting and boarding from deep water

32. What are your environmental responsibilities?

It is illegal to pollute Canadian waterways. Always use caution when refueling and be sure not to spill excess

fuel into the water. Do not dump oil, litter or waste overboard. Waste from marine toilets must be held in a holding tank and pumped out at an approved marine facility. Bilge water containing oil or other chemicals must not be dumped overboard. You should check your bilge on a regular basis to ensure it’s free of oil, grease and chemicals. If chemical pollutants are found in the bilge use an appropriate absorbent product to soak up chemical waste.

33. What are your responsibilities for noise pollution?

not permitted within 8 km of any Canadian shore unless their craft is fitted with a noise-muffling device. A “wet exhaust”, where noise is muffled by cooling water discharged through the exhaust pipe, is not considered a noise muffling device.

34. What do you need to remember when exiting into deep water?

You or your passenger(s) should never exit the craft into the water while underway. To enter the water from your craft, first shut off the engine. Take note of all possible hazards such as rocks or shallow underwater features. If you are unsure of the area in which you are operating, take caution and enter the water slowly with feet first. Do not dive or jump headfirst unless you are certain there are no hazards or shallow water.

p. 69-Exiting and boarding cont.

35. What 6 common sense guidelines should you use when boarding a boat from deep water?

1) Ensure the engine is shut off

2) If the craft is equipped with a ladder swim to it and pull yourself out of the water onto the boat

3) If the craft is not equipped with a ladder swim or move to the stern of your boat

4) Position yourself beside the motor and locate the flat cavitation plate just above the propeller

5) Place one hand on the shroud of the motor and one hand on the gunwale of the boat. Place one foot on

the cavitation plate. Use the plate as a step and your arms to help pull yourself up

6) When boarding in this manner be surefooted and ask for assistance if necessary. The edges of the

cavitation plate are sharp and can cause injury

36. What do you need to remember when boarding a PWC from deep water?

If the PWC has been flipped and is upside down in the water, right it according the manufacturer’s instructions.

(A PWC will not self-right if capsized). PWCs should be righted in one direction only – check with your owner’s

manual and/or warning sticker on the stern of the PWC to determine the proper direction. To board a PWC first swim to the stern of the craft. Use the grab handle on the transom or seat to help pull yourself onto the craft. Slowly pull yourself up, placing your knees on the rear boarding platform. Once aboard, move forward onto the seat and attach the

safety lanyard. Always remember the following when boarding a PWC:- Never attempt to board the PWC from the side. Youmay cause the craft to flip over on top of you - Never attempt to board the PWC when the engine

is running. The powerful suction from the jet thrust system may ingest loose items such as long hair, clothing, or the straps of your PFD/Lifejacket resulting in serious injury or death - Do not attempt to grab, kneel or stand on the

reverse gate (if so equipped) when re-boarding the craft. Damage to the PWC and personal injury may result

- If waiting for a passenger to board the PWC, never start the engine prematurely. The force of the water exiting the jet thrust nozzle may cause serious injury or death to the passenger - Remember that boarding a PWC in deep water can be strenuous. Always practice in chest-deep water and ensure passengers understand proper re-boarding techniques

p. 70 –Towing actions

37. What do you need to remember when towing?

Towing a water-skier, wakeboarder, kneeboarder, or other towable device requires the use of a spotter. A

spotter is a person who observes the person being towed at all times. The spotter notifies the driver if there

is a need for a change in speed and/or direction as indicated by the skier’s hand signals. The spotter can

also notify the driver in case of emergency. The driver should never watch the skier. The driver should always concentrate on driving the boat in a safe manner, keeping well clear of other boats, skiers, swimmers and hazards.

38. What are the rules and regulations regarding towing a water skier?

- A driver and spotter must be in the boat at all times

- The craft used for towing must be equipped to carry a minimum of three people. This includes PWCs. (The third seat is used to accommodate the skier if he or she becomes injured)

- The person being towed must wear an approved flotation device. A ski belt is not considered to be an approved flotation device

- The towing vessel cannot be operated by remote control

- Only tow skiers one hour after sunrise until one hour before sunset. It is a criminal offence, as governed by the Criminal Code of Canada, to tow a person after dark

39. What are the hand signals you need to know for towing water skiers?

Both the spotter and the person being towed must understand and be able to communicate using the following hand signals:

- “Go Home” - Skier pats his/her head with one hand

- “Speed Up” - Skier holds one thumb up

- “Slow Down” - Skier holds one thumb down

- “Turn Around” - Skier rotates an upwards pointed finger in a circular motion

- “I’m OK” - After the skier falls, skier extends both arms overhead and clasps his/her hands. This alerts the spotter that the skier is “OK” and also makes the skier visible to other boaters

- “Cut the Engine” - With hand outstretched and palm facing down, skier makes a slicing motion across his/her neck