HUMAN POWERED VESSEL SAFETY CHECKLIST

The purpose of this checklist is to ensure all UVic faculty, staff and students have the required safety equipment to operate a Human Powered Vessel in compliance with Transport Canada regulations. Human Powered Vessels (HPVs) are defined as kayaks, canoes, row boats, inflatables, river-rafts, or vessels that are equipped with propulsion motors less than 10 HP (7.5 kW).

If HPVs are used as part of your teaching or research project, please complete this checklist and ensure your vessel is equipped with all applicable navigation and safety equipment. It is the responsibility of both the Principal Investigator or supervisor and the individual(s) operating the boat to ensure all requirements are satisfied prior to the start of the project. Please keep copies of this checklist for your own safety training records. Guidance Notes for each item are available on the following pages. For more information about HPVs and marine safety please contact OHSE at ohs@uvic.ca

Principal Investigator or Supervisor:	**Make** (builder or brand name) **& Type of HPV** (kayak, canoe, row boat, inflatable, etc.)**:**
Boat Operator(s):	**Unique identifier** (name, hull identification no., or serial no.) **or description of vessel:**
UVic Department:	**Date Checklist was Completed:**

	Safety Procedures Checklist	**Yes/No**
1.	If applicable, are all participants given a complete pre-departure safety briefing? (*SVR 304, 307)	
2.	Are records available detailing the people on board and the voyage to be undertaken so that in the event of an emergency, rescuers will know if everyone has been recovered? (*SVR 305, 308)	
3.	Are you aware that persons on board must wear either a PFD or Lifejacket? (*SVR 310)	
4.	Are you aware that both the Supervisor ***and*** the Researcher are accountable to ensure all required safety equipment is present on board and worn by the participants? (*SVR 303, 310)	
5.	When operating in waters with temperatures less than 15° C, do you have established procedures or equipment to protect all persons on board from hypothermia and cold water shock resulting from swamping, capsizing or falling overboard? (*SVR 303, 306)	

	Navigation Equipment Checklist	**Yes/No**
6.	Is there on board a sound-signalling device or sound-signalling appliance? (*SVR 311)	
7.	If operating between sunset and sunrise are appropriate navigation lights available? (*SVR 311) (*Colregs R.22)	
8.	If required, is there on board a magnetic compass? (*SVR 311)	

	Safety Equipment Checklist	**Yes/No**
9.	Is there on board a buoyant heaving line (throw bag) of not less than 15m in length? (*SVR 310)	
10.	If the vessel is ***less than 6 metres in length,*** is there on board a watertight flashlight **or** three pyrotechnic (flares) distress signals, type A, B or C other than smoke signals, type D? (*SVR 310)	
11.	If the vessel is ***more than 6 metres in length,*** is there on board a watertight flashlight **and** six pyrotechnic (flares) distress signals, type A, B or C other than smoke signals, type D? (*SVR 310)	
12.	Is an approved First Aid kit available? (*SVR 309)	
13.	Is there on board a bailer or manual bilge pump? (*SVR 311)	
14.	Is there a re-boarding device available for all vessels where the re-boarding height from the water is greater than 0.5m (20 inches)? (*SVR 310)	

*References Transport Canada *Small Vessel & Collision Regulations.*

GUIDANCE NOTES

Question **Notes**

1. The intent of the pre departure briefing is to alert passengers of hazards and to advise them of procedures in the event of an emergency. Your briefing should include procedures in the event of you being incapacitated.
   The briefing may be in either or both of the official languages and must include:
   - **A demonstration showing the correct method of wearing each type of lifejacket or personal floatation device**
   - The location of all safety craft (as applicable)
   - The location of first aid kit
   - The location of flashlights and flares
   - The location of whistles/air horns
   - The use of throw bags/buoyant heaving lines
   - An explanation of the consequences of improper passenger distribution on the stability of the vessel
   - An explanation of the means of emergency communications with proper authorities

2. You should make it standard procedure to fill out a sail plan and leave it with a responsible person on shore. This person shall be responsible for carrying out your overdue procedures. If you are operating in a remote area, the plan should be left so that it can be easily found. For example, on the departure dock.
   In the event of an emergency, rescue services need to know where you and your vessel has sailed to, when it is expected to return and how many persons are onboard.

3. 

4. Self-explanatory.

5. Where the water temperature is less than 15 degrees Celsius, you must develop procedures to protect all participants against the effects of hypothermia and cold-water shock. For your own practical and legal protection, you shall establish and document suitable procedures, based on local conditions or established industry best practices to fulfill this requirement. For more information or to see what really happens during cold-water immersion visit www.coldwaterbootcamp.com.

6. 
   Sound Signalling Device
   All boats must carry a sound-signalling device. This can be a pea-less whistle, a hand held compressed gas horn or an electric horn.

7. The vessel shall have ready at hand an electric flashlight **or** lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.

8. 
   The compass should be able to be adjusted and corrected. It should as being capable of being illuminated for night viewing. You are not required to carry a magnetic compass if your vessel is not more than 8m in length **and** you navigate only within sight of seamarks. However due diligence and common sense should dictate that even if you were operating in areas within sight of seamarks, given the possibility of restricted visibility, this item would be essential.

Question **Notes**

9.

For example, a 15m x 7mm 300kg test braided polypropylene floating rope. Bright orange nylon and polyester complete with self-draining bag that comes with adjustable strap and retro-reflective safety tape.

10 & 11.

You must be sure that the batteries in your watertight flashlight are still fully charged before every trip. Apart from its use as emergency lighting, your watertight flashlight may be your only way to signal for help.

When buying marine distress flares, you should look for a Transport Canada approval stamp or label. Remember that flares are only good for four years from the date of **manufacture** (not purchase), which is stamped on every flare. You should also ask the manufacturer how to dispose of your expired flares. Flares should be kept within reach and stored vertically in a cool, dry location (such as a watertight container) to keep them in good working condition.

There are four types of approved flares: A, B, C and D.

Type A: Rocket Parachute Flare, Type B: Multi-Star Flare, Type C: Hand-Held Flare, Type D: Smoke Signal (Buoyant or Hand-Held)

12. A first aid kit shall be packed in a waterproof case capable of being tightly closed after use and shall be either an approved marine emergency first aid kit that contains the following:

- An up-to-date first aid manual or up-to-date first aid instructions, in English and French
- 48 doses of analgesic medication of a non-narcotic type
- Six safety pins or one roll of adhesive first aid tape
- One pair of bandage scissors or safety scissors
- One resuscitation face shield
- Two pairs of examination gloves
- 10 applications of antiseptic preparations
- 12 applications of burn preparations
- 20 adhesive plasters in assorted sizes
- 10 sterile compression bandages in assorted sizes
- 4 m of elastic bandage
- Two sterile gauze compresses
- Two triangular bandages
- A waterproof list of the contents, in English and French

Or

A first aid kit that meets the requirements of the *Marine Occupational Safety and Health Regulations* or of provincial regulations governing workers' compensation, with the addition of a resuscitation face shield and two pairs of examination gloves if the kit is not required to contain them.

13.

Bailers must hold at least 750ml (just over 1½ pints), have an opening of at least 65 cm^2 (10 in^2) and be made of plastic or metal. If you have a manual bilge pump, the pump and hose must be long enough to reach the bilge and discharge water over the side of the boat.

14.

When the freeboard exceeds 0.5 m (1'8") you will need a reboarding device. However, if your vessel has transom ladders or swim platform ladders it already meets this requirement.