

Marine Information Bulletin

Operation of Jetlev and Flyboard type devices in Queensland waters

Issued November 2012; last reviewed June 2021

Background

New varieties of aquatic devices, such as the Jetlev or Flyboard, are now being made available to the Queensland market. These devices use water under pressure directed through nozzles to lift a person(s) above the surface of the water or allow a person(s) to dive under the water. The device can be powered independently using a floating engine driven pump or by a modified personal watercraft (PWC).

The operating characteristics of these types of devices could present a substantial risk to the user and general public. Because of this, Maritime Safety Queensland has released specific operational conditions for their use.

These conditions are contained in a gazette notice specifically dealing with these types of devices ([Attachment A](#)).

Requirements under the National System for domestic commercial vessels

On 1 July 2013, the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* (the National Law) came into effect. Some of these devices will be regulated under the National Law if used in connection with any commercial, governmental or research activity.

Note: Where a device powered by a PWC is considered a Domestic Commercial Vessel (DCV) under the National Law, any requirements under the National Law shall prevail to the extent of any inconsistencies with the gazette notice. ([Attachment A](#)).

State or national regulation

An independently powered device remains regulated under Queensland law, which means the gazette notice conditions continue to apply.

A device powered by a PWC that is used recreationally remains regulated under Queensland law. Queensland registration and licensing requirements and gazette notice conditions continue to apply.

A device powered by a PWC that is a DCV is regulated under the National Law.

For more information about the National Law, please refer to the Australian Maritime Safety Authority website at www.amsa.gov.au.

Gazette notice general operating conditions

- The device must only carry the number of persons the device is designed to carry.
- The device must be operated with another registered or certified safety ship/vessel or PWC (with rescue sled), with an appropriately licensed master, in place to effect an immediate rescue of the device user if necessary.
- A safety ship/vessel or PWC must be appropriately registered or certified to operate in Queensland waters.
- The device must be operated in accordance with the manufacturer's safety recommendations, including training, emergency and operational requirements.
- The device must be operated in sufficient water depths (minimum four metres) in the place of operation before the device rises higher than 2 metres (or any other minimum height recommended by the manufacturer i.e. less than the two-metre requirement) or starts diving.

- The device must not be operated within 60 metres of any person, ship or other source of risk such as rocks, the shore, jetties, pontoons, docks etc. when rising higher than two metres or starts diving.
- The device must not be operated when winds exceed 60 kilometres/hour or waves exceed one metre in height.
- The licensed master of the ship/vessel or PWC, including the device PWC, must ensure the kill switch lanyard of the ship/vessel or PWC is attached to the operator's body.
- The licensed master of the ship/vessel or PWC, including the device PWC, must ensure the kill switch lanyard of the ship/vessel or PWC is attached to the operator's body.
- The licensed master of the ship/vessel or PWC, including the device PWC, must ensure the general safety obligations, collision regulations and any other legislative requirements that apply to either a recreational or commercial PWC or ship under marine safety legislation are complied with.
- For commercial operations, the device must be operated in compliance with the safety requirements imposed by any other relevant legislation, such as but not limited to, relevant safety management requirements under the Work Health and Safety legislation.
- Under Work Health and Safety legislation these devices are considered an item of plant. As such, a person conducting a business has a duty to ensure that safe plant items are used, and the health and safety of persons is not put at risk while carrying out work as part of the business operations. For more information about Work Health and Safety laws please refer to the Workplace Health and Safety Queensland website at www.worksafe.qld.gov.au.
- A regional harbour master may impose other conditions they deem appropriate to ensure marine safety.
- A regional harbour master may also, in relation to a special event or demonstration, approve temporary operation outside one or more of the general operating conditions provided other safety conditions are met (see Schedule C of the gazette notice).

Questions and answers

Q How are these types of devices regulated?

A The gazette notice applies to recreational and commercial operations, and to devices either powered independently or by a modified PWC.

Gazette Notice Conditions

Q Where can I operate the device?

A The device can only be operated in designated 'Smooth Waters', 'Partially Smooth Waters' or as authorised under a PWC's condition of Queensland registration or national Certificate of Operation.

Q How many users can be carried by the device?

A The device must only carry the number of persons the device is designed to carry.

Q Can I operate the device alone?

A No, due to the potential for injury or damage in a dynamic marine environment, another registered or certified safety ship/vessel or PWC (with rescue sled), must be in place to effect an immediate rescue of the device user if necessary. An observer is required to maintain constant watch over the user, especially when a user is underwater and cannot keep a proper lookout.

Q Does an observer of the safety ship/vessel or PWC need to be licensed?

A Yes. When an observer is operating a safety ship/vessel or PWC (with rescue sled), they must be the appropriately licensed master of the ship/vessel or PWC.

Q Can I use the device PWC as a safety PWC?

A No. You are required to use another ship/vessel or PWC (with rescue sled) as the safety ship. Using the device PWC is not considered sufficient to effect a proper rescue of the user because its configuration restricts quick retrieval and placement on board of an injured or unconscious user.

Q What if the device is being remotely controlled from the shore?

- A When a person is remotely controlling the device from land they must be competent at operating the device, monitoring the safety of the user and have a safety ship/vessel or PWC (with rescue sled), with an appropriately licensed master as observer, on standby to take immediate action in the event of an incident or emergency.
- Q How far away must the rescue ship/vessel or PWC be when the device is in use?
- A A safety ship/vessel or PWC with an observer on board must be in place to take immediate and appropriate action in the event of an incident or emergency.
- Q Are there any distance restrictions when the device is in use?
- A Yes. The device must not be operated within 60 metres of any person, ship/vessel or other sources of risk such as rocks, the shore, jetties, pontoons, docks etc. when rising higher than two metres or starts diving.
- Q Are there any depth or height restrictions when a device is in use?
- A Yes. The device must be operated in sufficient water depths (minimum four metres) in the place of operation before the device rises higher than two metres (or any other minimum height recommended by the manufacturer, i.e. less than the two-metre requirement) or starts diving.
- Q Are there any other marine environment restrictions when a device is in use?
- A Yes. The device must not be operated when winds exceed 60 kilometres/hour or waves exceed one metre in height.
- Q Can I launch from the shore?
- A Yes, but an appropriately licensed master must ensure a water depth of four metres before a user reaches heights greater than two metres or starts diving manoeuvres from the water surface, and distances of 60 metres from other water users, including any person, ship/vessel or other sources of risk.
- Q Who should the safety lanyard be attached to?
- A The safety ship/vessel or PWC operator must have the kill switch safety lanyard attached to them when they are acting as observer during device operations.
- Q Should a safety lanyard also be worn by a device PWC operator?
- A Yes, the PWC operator must have the kill switch safety lanyard attached to them during device operations.
- Q Does the device PWC operator need to be licensed to operate the PWC?
- A Yes. The PWC operator must be appropriately licensed to operate the PWC.
- Q Do I need to comply with manufacturer's recommendations?
- A Yes. The device must be operated in accordance with the manufacturer's safety recommendations, including training, emergency and operational requirements.
- Q Do Work Health and Safety laws apply to my operation?
- A Work Health and Safety laws apply to commercial operations only, not recreational operations. The device must be operated in compliance with the safety management requirements imposed under relevant Work Health and Safety legislation.
- Q Who is responsible for ensuring the gazette notice conditions are complied with?
- A The licensed master of the ship/vessel or PWC, including the device PWC, must ensure that operating conditions are complied with, including any other relevant marine safety requirements.
- Q Can I seek temporary approval to operate outside certain operating conditions?
- A Yes. A regional harbour master may approve temporary operation outside one or more of the general operating conditions provided certain safety conditions are met (see Schedule C of gazette notice).
- Q In what type of situation can I apply for this approval?
- A An approval may be considered for special events or demonstrations. For example, demonstrating the operating capabilities of a device for purposes including training or as part of business operations.
- Q When approval is granted, who can operate a device?
- A The device must only be operated by a qualified person appropriately skilled and trained to competently perform specialised manoeuvres during the approved event or demonstration.
- Q Do I need an emergency plan for a specific event or demonstration?
- A Yes. A detailed emergency plan must be developed and implemented to ensure effective, immediate and appropriate actions are taken in the event of an incident or emergency at the event or demonstration.

Q Do I need an emergency vehicle during a special event or demonstration?

A Yes. An emergency service vehicle such as an ambulance must be on standby. This should form part of the emergency plan.

Q What other documentation do I need for an approval?

A A safety management plan and risk assessment appropriate to the operation and in compliance with relevant standards must be provided to the regional harbour master to support approval.

Q What are the indemnity implications for an approval of a special event or demonstration?

A If an approval is granted, the owner, master and/or operator of a device indemnifies Maritime Safety Queensland from any claims of injury or damage suffered during an event or demonstration as a result of operating outside the gazette conditions or manufacturer's safety recommendations.

Q Are there other conditions I need to comply with?

A The regional harbour master may impose other conditions to the general operation of the device or to special event or demonstration that they deem appropriate to ensure marine safety.

Certification and registration requirements

Q Does this device require registration?

A An independently powered device does not require Queensland registration or national certification. However, a device powered by a PWC will still require Queensland registration if used recreationally.

Commercial (DCV) PWC Licensing, Registration and Operation

Commercial (DCV) PWS's are handled under national regulation. For all DCV PWC licensing, registration and operation requirements, please refer to the Australian Maritime Safety Authority website at www.amsa.gov.au.

Further Information

For further information contact your local Maritime Safety Queensland office:

Airlie Beach 4841 4500

Bundaberg 4132 6600

Cairns 4052 7400

Gladstone 4971 5200

Hervey Bay 4194 9600

Mackay 4944 3700

Mooloolaba 5373 2310

Brisbane 3632 7500

Gold Coast 5585 1810

Townsville 4421 8100

Other Marine Information Bulletins about the safe operation of ships are available on Maritime Safety Queensland's website www.msq.qld.gov.au.

Attachment A
Gazette notice

NOTIFICATION OF DANGER TO MARINE SAFETY*Transport Operations (Marine Safety) Regulation 2016*Maritime Safety Queensland
Brisbane, 27 May 2019

I, Jim Huggett, Executive Director (Maritime Operations), Maritime Safety Queensland, pursuant to the provisions of section 197 of the *Transport Operations (Marine Safety) Regulation 2016*, state that the operation of a commercial or recreational device in Queensland waters endangers marine safety, unless:

- (i) the device is operated in the waters set out in Schedule A; and
- (ii) the device is operated in accordance with the relevant conditions set out in Schedule B; or
- (iii) if used during special events/demonstrations, is operated in accordance with the conditions set out in Schedule C.

Note: Where the device is a domestic commercial vessel under the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* (Cth), any requirements under that law shall prevail to the extent of any inconsistencies with the conditions under this gazette notice.

In this notice, the following definitions apply:

1. The device means a water jet apparatus of any configuration, powered independently or by a personal watercraft (PWC), capable of lifting a person(s) above the surface of the water.¹
2. Smooth waters means the waters – (a) of rivers, creeks, streams and lakes; or (b) within breakwaters or revetments; or (c) within 0.5n mile from land that are within waters described in schedule 7 of the *Transport Operations (Marine Safety) Regulation 2016*; or (d) described in schedule 8 of the *Transport Operations (Marine Safety) Regulation 2016*.
3. Partially smooth waters – means the waters described in schedule 7, other than waters within 0.5n mile from land.

¹Examples of such devices include, but are not limited to, a Flyboard, Jetlev Flyer or Jetovator.

SCHEDULE A: Specified Waters	
Smooth Waters; or Partially Smooth Waters when the significant wave height does not exceed 0.5m from trough to crest; or as authorised under a personal watercraft's condition of Queensland registration or national certification.	
SCHEDULE B: Operating Conditions	
General	
<ol style="list-style-type: none"> 1. The device must only carry the number of persons the device is designed to carry; 2. The device must be operated with another registered or certified safety ship/vessel or PWC with rescue sled, with an appropriately licensed master, in place to affect an immediate rescue of the device user if necessary; 3. The device must be operated in accordance with the manufacturer's safety recommendations, including training, emergency and operational requirements; 4. The device must be operated in sufficient water depths (4 metres minimum) in the place of operation before the device rises higher than 2 metres (or any other minimum height recommended by the manufacturer) or starts diving; 5. The device must not be operated within 30 metres of any person, ship or other source of risk such as rocks, the shore, jetties, pontoons, docks, etc. when rising higher than 2 metres or starts diving; 6. The device must not be operated when winds exceed 60 kilometres/hour or waves exceed 1 metre in height; 7. Any other conditions a regional harbour master deems appropriate to ensure marine safety. 	
Licensed Master of Ship/Vessel/PWC	
<ol style="list-style-type: none"> 8. The licensed master of the ship/vessel or PWC, including the device PWC, must ensure that: <ol style="list-style-type: none"> a. the general operating conditions above are complied with; b. the kill switch lanyard of the ship/vessel or PWC is attached to the operator's body; c. the general safety obligations, collision regulations and any other legislative requirements that apply to either a recreational or commercial PWC or ship under the <i>Transport Operations (Marine Safety) Act 1994</i> and <i>Transport Operations (Marine Safety) Regulation 2016</i> are complied with. 	

Commercial Operation only

9. The device must be operated in compliance with the safety requirements imposed by any other relevant legislation, such as but not limited to, relevant safety management requirements under the Work Health and Safety legislation.

SCHEDULE C: Special Event/Demonstration Operating Conditions**APPROVAL**

- a. The regional harbour master may approve operation outside one or more of the Schedule B conditions (except for section 8(c)) for each of the following categories:
- i) an owner, master and/or operator of a device;
 - ii) an event or demonstration;
 - iii) a specified period of time.

An approval is subject to the following conditions:

CONDITIONS

- b. The device must only be operated by a qualified person appropriately skilled and trained to competently perform specialised manoeuvres during the approved event/demonstration for the specified period.
- c. A detailed emergency plan must be developed and implemented to ensure effective, immediate and appropriate actions are taken in the event of an incident at the event/demonstration.
- d. A safety management plan and risk assessment appropriate to the operation and in compliance with relevant standards must be provided to the regional harbour master to support approval.
- e. Any other conditions a regional harbour master deems appropriate to ensure marine safety.
- f. The owner, master and/or operator of a device agree to indemnify and save harmless Maritime Safety Queensland from any claim, action, liability, loss, damage or suit arising from any damage, injury or harm suffered during the approved event/demonstration, as a result of non-compliance with the gazette operating conditions or any of the manufacturer's safety recommendations specified in any operating manual regulating these devices.

This notice repeals the Notification of Danger to Marine Safety which was published in the Queensland Government Gazette No. 73 on 11 April 2014 in so far as it relates to these devices.

Jim Huggett
Executive Director (Maritime Operations)
Maritime Safety Queensland