QUICK GUIDE

Health and Safety Guidelines for Commercial Parasailing Operations

May 2022

Nō te rere moana Aotearoa
MARITIME NEW ZEALAND

Te Kāwanatanga o Aotearoa
New Zealand Government

Legislation

These guidelines reflect the health and safety duties and responsibilities that commercial parasailing operators have under:

- Health and Safety at Work Act 2015 (HSWA)
- Maritime Rules Part 19: Maritime Transport Operator – Certification and Responsibilities
- CAA Rule 101, Subpart F: Gyrogliders and Parasails
- Health and Safety at Work (General Risk and Workplace Management) Regulations 2016 (GRWM Regs).

Out of scope of these guidelines

- Other legislation that operators must comply with.
- Parasailing where passengers are towed by a vehicle over land.
- Recreational parasailing over water.
- Technical or operational requirements for vessels not specific to parasailing.

Key terms

Term	Definition
Competent person	A person with the appropriate skills, training, knowledge, and experience to perform the task or role.
Director	Director of Maritime New Zealand.
Must	Indicates a legal requirement that has to be complied with.
Should	Indicates a recommended practice or approach.

Guidance issued by the Director of Maritime New Zealand

Maritime New Zealand (MNZ) expects the content of an operator's safety system to align with guidance provided by the Director of MNZ, and with industry codes of practice that have been developed to an appropriate standard. This does not mean that an operator must always rigidly follow that guidance. But it does mean an operator's safety system should be compatible with or contain the same principles as guidance provided by the Director and/or suitable industry codes of practice.

Key points

- Every person working in parasailing must clearly understand their health and safety duties.

- As the PCBU – a person conducting a business or undertaking – maritime operators have the primary duty to make sure, so far as is reasonably practicable, that the health and safety of workers, passengers and other people is not at risk from their work.

- Maritime operators must have in place systems and processes to ensure the health and safety of workers, passengers and other people and provide appropriate resources (for example, safe machinery, equipment and facilities).

- The skipper controls the ship when it is at sea, and makes the day-to-day decisions required to run the ship. They must take appropriate steps when machinery or equipment, for example, are a risk to health and safety or need maintenance.

- As the person ‘on the spot’, it is the responsibility of the skipper to make sure everyone on board understands and uses the health and safety systems and processes put in place by the maritime operator.

- In practice, maritime operators and skippers must work together to meet their health and safety duties.

Contents

1.0 Introduction

1.1 Who should read these guidelines?

These guidelines provide health and safety advice for maritime operators of commercial parasailing businesses over water, to help them protect workers, parasailors/passengers and others.

Under the Health and Safety at Work Act 2015 (HSWA), a maritime operator is a PCBU – a person conducting a business or undertaking. A PCBU has a primary duty of care to make sure their work does not put the health and safety of workers and other people at risk.

In these guidelines, 'you' means the PCBU.

These guidelines may also be useful for skippers who conduct parasailing over water.

1.2 Good health and safety practice

Maritime New Zealand expects all maritime operators to follow good health and safety practice when managing health and safety risks at work.

Good health and safety practice is often a combination of:

- things you 'must' do according to the law, such as engage your workers when managing risk, and
- things that are not the law but are helpful to do to maintain good practice (the things you 'should' do or which are 'recommended').

1.3 Health and safety responsibilities of workers

Workers have a responsibility to take reasonable care of their own health and safety, and to take reasonable care that their actions do not adversely affect the health and safety of other people. Workers must cooperate with any reasonable work health and safety policy or procedure of the PCBU, and comply with any reasonable instructions given by the PCBU.

1.4 MTOPs and HSWA

These guidelines have practical examples to help you meet the requirements of HSWA that are not already addressed in your Maritime Transport Operator Plan (MTOP). For example, upstream duties and worker engagement, participation and representation.

Examples do not cover every possible situation. If operators need more specific help, they should refer to the relevant manuals or technical notes for their business or seek expert advice.

1.5 Parasailing equipment

MNZ expects commercial parasailing operators to only use equipment that is suitable for parasailing. The equipment should be fitted, inspected, maintained, replaced and used in accordance with the manufacturer's instructions. Parasailing equipment must be listed in your MTOP.

1.6 Overlapping duties

Under HSWA, you must, so far as is reasonably practicable, consult, cooperate and coordinate activities with other PCBUs who have health and safety duties in relation to the same matter. This is called 'overlapping duties'.

EXAMPLE

If other commercial parasailing companies operate in the same area as you, consult with them in advance to make sure you operate at a safe distance from each other. A general guide is to operate at least 2km from another parasailing operation, with the length of any navigable waterway used for parasailing also being at least 2km. Wind and other conditions may mean greater minimum distances are appropriate. Consider what is safe according to your operation and circumstances.

Other examples of overlapping duties are:

Situation	PCBUs that have overlapping duties
A parasailing business operates in the same area as other maritime operators, for example, ferries, charter boats, and recreational vessels.	- parasail business - other maritime operators operating in the same area.
A company that makes parasails has hired an advertising company to film an advertisement on board a hired boat.	- parasail company - owner of the boat (maritime operator) - advertising company.
A tradesperson is hired to do maintenance on a vessel when it is in port.	- maritime operator - port operator - tradesperson (if they are self-employed) - contracting company (if the tradesperson is employed by one).
A catering company is contracted to provide refreshments on a vessel that runs scenic cruises.	- maritime operator - catering company.

Table 1: Examples of overlapping duties

1.5 Upstream duties

A PCBU in the supply chain (upstream) also has a duty to make sure, so far as is reasonably practicable, that the work they do or the things they provide to other workplaces do not create health and safety risks.

An upstream PCBU is a business that:

- designs, manufactures, imports, or supplies plant, substances, or structures, or
- installs, constructs or commissions plant or structures.

Upstream businesses are in a strong position to eliminate or minimise risk. They can influence and sometimes eliminate health and safety risks through designing, manufacturing, importing or supplying products that are safe for the end user.

EXAMPLE

A supplier has upstream duties to, so far as is reasonably practicable:

- make sure the product they supply (for example, a parasail canopy) does not create health and safety risks for the people that use it and those nearby
- make sure the product has been tested so it is safe for use in a workplace
- give you the following information:
  - the purpose or intended use of the product
  - the results of any calculations and tests done on the product
  - any general and current relevant information about how to safely use, handle, store, construct, inspect, clean, maintain, repair, or otherwise work with the canopy.

These requirements apply across the canopy's entire lifecycle from construction or assembly to everyday use, decommissioning and disposal.

These requirements do not apply to secondhand product or product sold as is.

2.0 Managing the risks of parasailing

Risks to health and safety arise from people being exposed to a hazard (a source or cause of harm). You must make sure, so far as is reasonably practicable, that the health and safety of workers and other people is not put at risk by the work that you do.

Risk management is about identifying hazards and assessing risks, then eliminating the risks so far as is reasonably practicable, or applying control measures to minimise the risks so far as is reasonably practicable.

It is important to regularly review control measures and, if necessary, revise them to make sure they remain effective.

You must consult with your workers and their representatives, so far as is reasonably practicable, at all steps of the risk management process. For more information about worker engagement, participation and representation, see 3.8.

2.1 Identify hazards

With your workers, identify the hazards of your parasailing operation. These may include, but are not limited to:

- weather (strong winds, rough seas, heavy rain, fog, low visibility)
- temperature (very hot or very cold air and/or sea temperatures)
- UV/sun exposure (sunburn, heatstroke, heat exhaustion)
- faulty or worn equipment
- fire on board
- other ocean users/vessels
- human factors (impairment due to drugs, alcohol, some prescribed medications, stress, fatigue; or worker distractions such as mobile phones, work and/or home pressures).

Every work environment or work activity will be different. To help identify the hazards of your work (both actual and potential), review your incident and injury records (including near misses), and look at your work environment and consider ‘what could go wrong’.

Table 2 below has some examples to help kickstart your thoughts.

What could go wrong when operating a parasailing business?

Hazard	Risks	Possible control measures
Weather, including high winds (stronger than 20 knots), rough seas, fog, lightning, heavy rain, UV/sun exposure, extreme heat, extreme cold	- hypothermia - sunburn - heatstroke - heat exhaustion - slips - falling overboard - death or serious injury	- check weather forecast before departing for the first trip of the day - monitor weather reports throughout each trip - have a process in place to decide when a trip will be postponed or called off due to adverse weather - provide suitable PPE to protect workers from the weather, such as sunscreen, hats, beanies, jackets, warm gloves - advise passengers to wear suitable clothing for the conditions. Include this information on your website or on their ticket so they are prepared for the trip.
Skipper loses control of the parasail	- parasail crashes - death or serious injury	- make sure skipper is adequately trained, skilled and experienced to conduct parasailing activity safely.

Winch failure	- parasailors unable to be reeled back in - emergency landing in the sea - death or serious injury	- do not operate parasailing in winds higher than 20 knots - install a gauge to monitor winch pressure to make sure winch does not operate outside its capabilities - fit the winch with an emergency stop that automatically cuts power to the winch motor in an emergency - as part of the daily inspection of equipment, test the winch through the full range of its operation and test each device used to cut power to the winch motor in an emergency - only the skipper and crew should operate the winch - give all passengers a safety briefing before the trip begins, including explaining what to do in an emergency landing - regularly maintain and service vessel - make sure skipper and crew are familiar with the emergency plan and have appropriate training for emergencies (including refresher training).

Towline failure	- parasail canopy unable to be controlled
	- parasail drifts over land
	- parasail collides with structure (for example, bridge, building)
	- emergency landing in the sea
	- death or serious injury
		- inspect towlines before the first trip the day
		- never use a worn or frayed towline
		- **never tie knots in the towline**. This reduces the strength of the towline[1]
		- replace towlines annually or when there is visual wear and tear, or in accordance with the manufacturer's specifications (including for safe working load and number of flights)
		- if the towline does not have a manufacturer's specification, the rope should have a safe working load of 3000kg and be replaced whenever the earlier of the following happens:
		  - four months after the towline is first used
		  - the towline is used for 400 parasail flights[2]
		- towlines should be a low-stretch, static line made of high-quality material suitable for parasailing
		- towlines should not be longer than the maximum length stated by the harness manufacturer[3]
		- trim towlines as necessary but at least once a month, and according to the manufacturer's instructions
		- keep towline clean and free of oil, grease or petroleum products
		- use towline only in accordance with the manufacturer's instructions

[1] 'Testing revealed that … a bowline knot drastically reduced the tow line's strength, by more than half. … the addition of hitch knots further weakened the tow line's strength.' https://www.ntsb.gov/safety/safety-studies/Documents/SIR1402.pdf

[2] Marine Safety - Parasailing Standard 2007. Dept of Transport, Queensland. https://www.legislation.qld.gov.au/view/pdf/asmade/sl-2007-0110

[3] ibid.

		- give all passengers a safety briefing before the trip begins, including explaining what to do in an emergency landing - make sure skipper and crew are familiar with the emergency plan and have appropriate training for emergencies (including refresher training).
Harness failure	- parasailor falls from height - death or serious injury	- inspect harnesses before the first trip of the day - harnesses should have no visible signs of wear and tear - harnesses should be dated from new - store and dry harnesses in the shade - maintain harnesses to manufacturer's instructions - replace harnesses with non-UV-resistant webbing and thread every five years (or earlier if specified by the manufacturer) - replace harnesses with UV-resistant webbing and thread every 10 years (or earlier if specified by the manufacturer) - harnesses should have gated carabineers, rated to an appropriate strength - make sure the harness is attached to the parasailor's life jacket by using the loops on the life jacket to feed the harness through or by straps over the person's shoulders - give all passengers a safety briefing before the trip begins, including explaining what to do in an emergency landing - make sure skipper and crew are familiar with the emergency plan and have appropriate training for emergencies (including refresher training).
Engine failure	- boat stranded at sea	- regularly maintain and service engine - make sure there is spare fuel on board, stored securely and safely - carry an auxiliary engine.
Fire on board	- death or serious injury	- carry appropriate fire extinguishing equipment on board - make sure engine is regularly maintained and serviced to reduce chances of a fire on board - give all passengers a safety briefing before the trip begins, including explaining what to do if there is a fire - make sure skipper and crew are familiar with the emergency plan and have appropriate training for emergencies (including refresher training) - do not allow smoking or vaping on board.
Unguarded machinery	- serious injury (for example, jammed or cut fingers or hands)	- fit machinery with protective guards - have effective machinery lockout/tagout procedures.

Table 2: What could go wrong when operating a parasailing business?

2.2 Assess the risks

With your workers, assess the risks of each hazard you have identified.

Some things to consider	For example
Who might be exposed to the hazard?	- workers, contractors, passengers, parasailors, people on other nearby vessels or land.
Do you have vulnerable workers?	- inexperienced workers, workers with English as a second language, workers with low literacy levels who may not be able to understand complex written safety information.
How often is the hazard likely to cause a risk?	- is the hazard present all of the time, some of the time or rarely?
What factors are likely to cause the hazard to occur or to be present?	- are some times of the year busier than others? - is rough weather more likely to occur during some months but not others? - are there specific tasks that have the potential to introduce human error? For example, a passenger/parasailor misunderstanding or misinterpreting an instruction from the skipper.
How could workers or parasailors be harmed?	- falling overboard - falling out of harness while aloft - jamming fingers in the winch or other equipment - slipping or tripping while on board the vessel - hitting the water at speed and/or being dragged in the water while harnessed to vessel - drowning.
How severe could the harm be? How likely are these consequences?	- death or serious injury.

Table 3: Examples of things to consider when assessing risk

You should prioritise risks that have potentially significant consequences such as death, serious injury or chronic ill-health, or that have a high chance of happening.

2.3 Eliminate risks or minimise them with appropriate control measures

You must eliminate risks to health and safety so far as is reasonably practicable. You must minimise the risks so far as is reasonably practicable, **only** if elimination is not possible.

With your workers, select the most effective control measures. You can use the Hierarchy of Controls (see Figure 1) which ranks the ways of controlling risks (Substitute, Isolate, Engineering, Administrative, PPE) from the highest level of protection (the most effective) to the lowest (the least effective).

Keep in mind that control measures may introduce new risks that will also need to be managed.

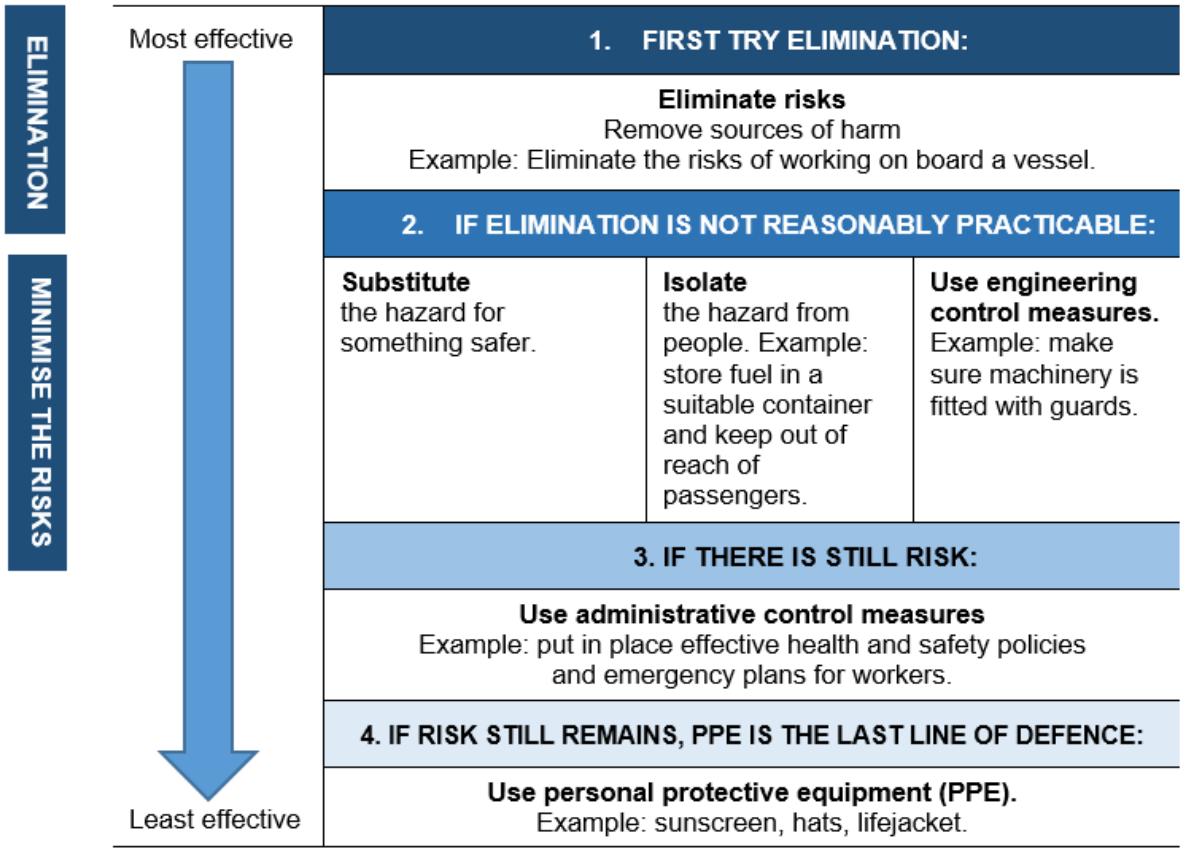

Figure 1: Hierarchy of controls

What to consider when deciding what is 'reasonably practicable'

HSWA often requires that you take a certain action 'so far as is reasonably practicable'. Something to think about when deciding what is reasonably practicable, is just because something is possible to do, does not mean it is reasonably practicable in the circumstances. Consider:

1. What is known about the risk?
2. What control measures are available? What measures are used in the wider industry?
3. What is known, or should reasonably be known, about the ways to eliminate or minimise the risk?
4. How appropriate (suitable) are the control measures to manage the risk?
5. How likely is the risk to occur?
6. What are the costs of the control measures?
7. How severe is the illness or injury that might occur if something goes wrong?
8. Are the costs grossly disproportionate to the risk? Cost can only be used as a reason to not do something when that cost is grossly out of proportion to the risk.

2.4 Review control measures

With your workers, review control measures regularly to make sure they are still effective and, if necessary, revise them. If your work site or work activities change, make sure your control measures are still the most appropriate to use.

3.0 Parasailing operations

The requirements of CAA Rule Part 101: Subpart F and other applicable regulations that have not yet been mentioned are featured below. This section also has recommendations that are not required by law but are good practice for parasailing operators to follow.

3.1 Aerodromes and airspace

(a) A person must not operate a parasail on an aerodrome or within 4km of an aerodrome boundary unless:

(1) at an uncontrolled aerodrome, the parasail is operated

(i) in accordance with an agreement with the aerodrome operator; and

(ii) at a height not exceeding 400 feet AGL;

or

(2) at a controlled aerodrome, the parasail is operated in accordance with an authorisation from the aerodrome air traffic control service.

(b) A person must not operate a parasail:

(1) on or over any aircraft movement area of an aerodrome; or

(2) on or over any active runway or runway strip area of an aerodrome.[4]

A person operating a parasail above a height of 400 feet above ground level must:

- make sure the parasail remains more than 4km from any aerodrome boundary
- operate in Class G airspace
- at least 24 hours before the operation, provide the New Zealand NOTAM office with:
    - name, address and telephone number of operator
    - date, time and duration of operation
    - brief description of parasail (including size and predominant colour)
    - height to which parasail will be operated.[5]

3.2 Age limit

You must not:

(1) perform a parasailing operation with an extended towline length of more than 300 feet, as measured from the winch drum to the parasail canopy yoke, when carrying any solo passenger who is between 8 and 11 years old

(2) perform a parasailing operation with a passenger carried by a parasail who is less than 8 years old unless the passenger is accompanied by another passenger who is at least 18 years old and is able to assist the younger passenger if an emergency occurs.[6]

3.3 Canopies

The skipper should have good visibility of the parasail canopy while it is in flight.

Repairs to parasail canopies should only be carried out by a competent person, in accordance with the manufacturer's instructions.

Never modify a parasail canopy.

[4] CAA Rule 101.253.
[5] CAA Rule 101.255.
[6] CAA Rule 101.273.

Make sure the size of the parasail is appropriate for the size of your vessel. A parasail that is too large could cause the vessel to become unstable and capsize, leading to death or serious injury.

3.4 Controlled dipping

Dipping should not occur any deeper than the passenger's knees when they are moving across the water (although the level of dipping could be deeper when the boat is stationary). At no time while dipping should the towline be able to touch the boat deck.

3.5 Dropping of articles

A person operating a parasail must not allow any object to be dropped in flight if such action creates a hazard to other persons or property.[7]

3.6 Effective communication

It is critical that operations have methods to ensure there is effective communication between skippers, crew and passengers at all times when conducting parasailing operations. Ineffective communication between skippers, crew and passengers can result in serious accidents. It is recommended that there be 'closed loop' communication between crew and passengers; for example, if the crew member or passenger is asked to do something by the skipper, then that person reports back to the skipper directly.

3.7 Emergency planning and training

You must make sure that on each trip, all crew and passengers know what to do in an emergency.[8] All crew must be familiar with and trained in emergency response and procedures, including undergoing regular drills (at least every six months).

You must make sure your work has an emergency plan, taking into consideration the:

- size and location of your workplace
- number and composition of workers
- nature of your work and its hazards.

The plan must include information about how to notify emergency services and evacuate the workplace. The plan could also include information about managing risks, including but not limited to:

- towline separation with parasailors aloft
- winch failure with parasailors aloft
- recovery of parasailors during high winds
- capsize
- medical emergency of parasailor in flight
- incapacity, injury, or illness of a passenger (including hypothermia)
- retrieving a person from the water
- response to loss of propulsion with parasailors aloft
- damage to the vessel
- record of on-board emergency equipment

3.8 Engage workers in health and safety matters that affect them

Under HSWA, you have two main duties related to worker engagement and participation:

1. to engage with workers on health and safety matters that affect or are likely to affect workers, so far as is reasonably practicable, and
2. to have practices that give workers reasonable opportunities to participate effectively in the ongoing improvement of work health and safety.

[7] CAA Rule 101: Subpart A explains the requirements for equipment such as parasails to not operate in controlled airspace, low-flying zones or military areas. Subpart A is not repeated here. To read this subpart in full, please go to CAA Part 101

[8] CAA Rule 101.265.

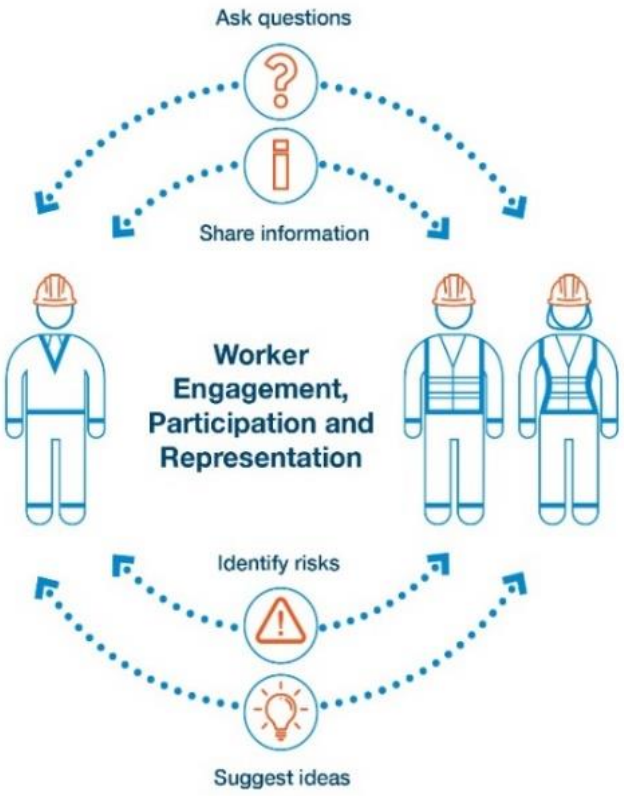

Figure 2: Worker engagement, participation and representation

You must engage with workers during specified times, including when identifying hazards and assessing risks.

You must have clear, effective, and ongoing ways for workers to suggest improvements or raise concerns.

Ways of engaging with workers include:

- sharing information about health and safety matters so that workers are well-informed, know what is going on and can contribute to decision-making
- giving workers reasonable opportunities to have a say about health and safety matters
- listening to and considering what workers have to say at each step of the risk management process
- considering workers' views when health and safety decisions are being made
- updating workers about what decisions have been made.

Worker representation

Workers can be represented by a Health and Safety Representative (HSR), a union representing workers, or a person that workers authorise to represent them (for example, a community or church leader, or another trusted member of the community). HSRs and Health and Safety Committees (HSCs) are two well-established methods of participation and representation. If workers are represented by an HSR, worker engagement must also involve that representative.

3.9 Equipment inspections

You must make sure the parasail is fit for the intended purpose and is maintained in an airworthy condition in accordance with the manufacturer's instructions.[9]

It is recommended that you make sure:

1. Equipment is inspected daily before use	2. Equipment is inspected annually	3. Records are kept
- Before first trip of the day, inspect all parasailing equipment (for example, canopy, harness, towline, winch, helmets) to make sure it is safe to use. - Do not use unsafe or faulty equipment. For example, when equipment may have been weakened by ultraviolet light or salt water, or equipment is the wrong size for the parasailor. - Check equipment stowage conditions, protective rails, and padding. - Carry out inspections according to manufacturer's instructions. - Inspections should include testing the winch through its full range of operation and testing each device for cutting out the winch motor.	You should arrange for parasailing equipment (other than the winch, if it is surveyed as part of your annual boat inspection) to be thoroughly inspected each year by a competent person (for example, the equipment's manufacturer or agent, or other suitably qualified person).	Keep records of daily and annual inspections, and of maintenance needed on the parasailing equipment, including: - date of inspection - name of the person who inspected the equipment - (for annual inspections) if the inspection was carried out by a person on behalf of the manufacturer or manufacturer's agent, the name of manufacturer or agent - details of equipment faults - follow-up actions for unsafe equipment (for example, when and where equipment will be repaired or replaced) - equipment serial numbers. You could assign unique IDs to each piece of equipment to make it easier to keep track of inspections and maintenance on equipment.

Table 4: Inspecting parasailing equipment

3.10 First aid

You must make sure that an adequate number of workers are trained to administer first aid or that workers have access to an adequate number of other persons trained to administer first aid.

3.11 Harnesses

Each person carried by the parasail must be secured to the parasail by a harness.[10] A seated harness is recommended.

3.12 Lookouts

The skipper should make sure that a designated person other than themselves supervises activity at the launching point. This person should keep a lookout for sources of danger on the deck, at sea and in the air, at all times during each parasail flight, and inform the skipper of any actual or potential sources of danger observed.

[9] CAA Rule 101.261.
[10] CAA Rule 101.263.

3.13 Low-flying zones

A person must not operate a parasail within a low-flying zone designated under Part 71. To find out more, see CAA Part 71 Designation and classification of airspace

3.14 Meteorological limitations

You must not operate the parasail closer than 400 feet below cloud. Ground visibility must be at least 5km.[11]

3.15 Multiple-passenger flights

Multiple-passenger flights should only occur when equipment specifically designed for such an activity, such as tandem or triple bars, is used in accordance with the manufacturer's instructions. Where possible, bars should be padded to protect passengers.

The recommended maximum number of passengers to take part in the same flight is three.

3.16 Night operations

You must not operate a parasail at night.[12]

3.17 Notifying Maritime New Zealand

A notifiable event is when:

- someone dies as a result of work
- someone has a serious injury or illness as a result of work
- a serious accident happens at work.

You must notify MNZ of all notifiable events that happen onboard a vessel.

To notify MNZ:

- Phone the Rescue Coordination Centre New Zealand (RCCNZ). Available 24/7. 0508 222 433

OR

- contact the MNZ Maritime Operations Centre (MOC) on VHF Channel 16. Available 24/7. The MOC will send the information to RCCNZ.
- Then fill out the online form at the link below as soon as you can and click submit. This will automatically send your information to MNZ.

Notify MNZ online

3.18 Operating limits and procedures

You must operate the parasail in accordance with the operating procedures and limits recommended by the manufacturer (including payloads).[13]

Parasailing should not be carried out from beaches or platforms.

[11] CAA Rule 101.257.

[12] CAA Rule 101.259.

[13] CAA Rule 101.269.

3.19 Parasailing on a lee (downward) shore

Parasailing should not be conducted on a lee shore.

If there are circumstances where you are on a lee shore, the parachute should not pass within a distance from the shore equal to:

- the length of the winch rope, for a wind speed of up to nine knots
- twice the length of the winch rope, for a wind speed of more than nine knots but not more than 13 knots
- three times the length of the winch rope, for a wind speed of more than 13 knots.

3.20 Passengers' responsibilities

Vessels providing commercial parasailing operations are workplaces. Under HSWA, passengers are an example of 'other persons at a workplace'.

Other persons at a workplace must:

- take reasonable care for their own health and safety
- take reasonable care that others are not harmed by something they do, or do not do
- comply, as far as they are reasonably able, with the PCBU's reasonable health and safety instructions that are given so that the PCBU can comply with HSWA or regulations.

When engaging in parasailing, passengers should:

- pay attention to the safety briefing and ask questions of the skipper or crew if they do not understand something
- properly use all safety equipment provided, as instructed by the skipper or crew
- advise the skipper or crew of any impairments or disabilities
- not participate if they are under the influence of drugs or alcohol.

3.21 Payloads

If the equipment has no payload specifications, contact the manufacturer for this information.

3.22 Pre-flight safety briefings

You must make sure passengers are given a clear and comprehensive safety briefing before they are harnessed into a parasail.[14] Ideally, the safety briefing would be given before the vessel leaves port to make sure passengers can give it their full attention. The safety briefing must include information about the nature of the flight, standard operating procedures, and emergency procedures:[15]

Passengers must be briefed on:	For example:
Nature of the flight	- description of parasailing including the inherent risks - location of safety equipment on the ship.
Standard operating procedures	- health and safety guidelines that passengers must follow while on board the ship, when aloft (for individual and multiple-passenger

[14] CAA Rule 101.265.

[15] CAA Rule 101.265.

	flights), and when there is controlled dipping - proper use of hand signals if the passenger wants to be retrieved before their parasail is finished - the correct position for passengers to land back on the boat (including in rough seas and/or at high speed) to avoid injury - a question and answer session to check that each passenger understands the safety briefing and to give them an opportunity to ask questions.
Emergency procedures	- location and correct use of emergency equipment - procedures to follow in the event of a water landing, towline separation, or equipment failure. These should include showing passengers how to use the quick release to disconnect themselves from the parasail in an emergency - how to communicate with the vessel in an emergency. **Water landings** - description of the parasail canopy and its position if a water landing should occur (including in high winds and/or rough seas) - awareness of how to use the flotation device fitted to each passenger - reassurance to remain calm while in the water - a plan for how passengers will be recovered from the water. **Equipment failure** - detailed rescue instructions and survival techniques if there is an equipment failure.

Table 5: Passenger safety briefings

You could also consider:

- advising passengers that parasail rides may put those suffering from medical conditions at greater risk of harm (for example, stress from being airborne, sudden exposure to cold water, panic; or the physical nature of the activity aggravating heart disease, which could result in cardiac arrest and possibly death)
- screening passengers to make sure they are mentally and physically fit to participate in parasailing, and will not be a risk to the health and safety of themselves or other people. This information could be gathered through a pre-trip checklist or questionnaire
- providing safety briefing information not just verbally but also on your website, and in printed passenger information sheets.

After the safety briefing, it is good practice for the skipper to assess whether they think each passenger is fit to take part in parasailing. For example, in an emergency, would the person be able to swim or keep themselves afloat? Do they seem to be reluctant or afraid to participate?

3.23 Provide adequate facilities for workers at work

You must make sure, so far as is reasonably practicable, that adequate facilities are provided for workers at work including toilets, drinking water, handwashing facilities, facilities where workers can eat and take breaks and, if it is not reasonable for workers to leave work if they become unwell, facilities where they can rest. Parasailing workers may get wet, so you must make sure they have facilities where they can change into dry clothing.

3.24 Provide adequate training and/or supervision for workers

Good health and safety practice means workers are:

- provided with the training, information and instruction they need to protect themselves and others from risks to health and safety at work, or
- adequately supervised by a person with this knowledge or experience.

Under HSWA, workers must be adequately trained in the safe use of equipment they are required to use or handle, and all personal protective equipment (PPE) they may be required to use or wear. Workers must be able to readily understand the training they receive.

Train workers to recognise unanticipated risks and know what control measures to use. Workers need to be able to recognise when a situation has become unsafe and have the authority to stop or refuse to carry out work if they decide they are unable to sufficiently manage the risks they have identified.

See also 3.25 Recommended experience

Give new workers an effective induction

An induction for new workers is useful for helping them understand their work duties and responsibilities, including health and safety. Topics covered in an induction should include:

- a list of known hazards at your work and the control measures in place to manage the risks
- locations of facilities including first aid
- emergency procedures
- how to report an incident or hazard.

It is a good idea to keep inductions as brief as possible (while still being comprehensive) and in straightforward language. Try not to use jargon or acronyms without explaining what they mean. Think about the best way to give information to workers who have English as a second language or low literacy.

3.25 Recommended experience

The skipper of a commercial vessel used for parasailing should have experience gained over a period of at least three months, including:

a) in situations where the deckhand controls the winch, the skipper should have:
   - been a parasailing deckhand for 500 parasail flights with the first 100 supervised
   - controlled a vessel used for parasailing under direct supervision, using different parasail sizes and in a range of weather conditions for at least 100 parasail flights:
     - the first of which were made using weights to simulate at parasailor until the supervisor is satisfied that the trainee skipper can perform their duties safely
     - with at least 50 of the first 100 flights towing a parasailor.

b) in situations where the skipper controls the winch, the skipper should have:
   - been a parasailing deckhand for 250 parasail flights with the first 100 supervised
   - controlled a vessel used for parasailing under direct supervision, using different parasail sizes and in a range of weather conditions for at least 350 parasail flights:

- the first of which were made using weights to simulate at parasailor until the supervisor is satisfied that the trainee skipper can perform their duties safely
- with at least 50 of the first 100 flights towing a parasailor.

The skipper of a commercial vessel used for parasailing should not undertake a parasailing operation without an instructor being available until the skipper is fully trained to deliver the activity, has at least a local launch operator or skipper restricted limits (SRL) certificate, and has been assessed by the supervisor as being competent to be a skipper of a parasailing vessel.

A written or electronic record should be kept of the relevant qualifications, training and experience of each person involved in conducting the parasailing operation.

3.26 Safety equipment

A person operating a parasail must make sure that each person carried by the parasail:[16]

- when flying over water, or within gliding distance of water, wears a buoyancy aid. It should have a neck collar and a rating of at least 71 Newton (N), and be certified to meet Type 402 in NZS 5823 or equivalent standard. For example, a personal flotation device for inshore waters. For more information, see Types of lifejackets on the MNZ website
- wears a rigid, protective helmet, and
- is secured to the parasail by a harness.

3.27 Towlines

For a parasail operation conducted with an extended towline of more than 600 feet (measured from the winch drum to the parasail canopy yoke), each person carried by the parasail must be equipped with a means of communicating with the vessel in an emergency.[17]

A person must not release the towline of a parasail in flight except in an emergency.[18]

3.28 Vessel seating

All seating should be located forward of the launching point (the back of the boat).

3.29 Wind conditions

Parasailing must not be conducted if the sustained wind speed exceeds 20 knots.[19]

You must make sure the wind speed at the location of the parasailing is monitored.[20]

You should not operate if the vessel cannot maintain a forward speed of at least 5 knots while the bow is pointing directly into the wind, with parasailors aloft. If windward boat speed is impossible, there is no control of the canopy and the vessel would be considered overpowered by the wind conditions. If there is a mechanical failure, the downwind distance required for a controlled water landing is much greater and the process to recover the canopy more difficult.

[16] CAA Rule 101.263.
[17] CAA Rule 101.263.
[18] CAA Rule 101.267.
[19] CAA Rule 101.271.
[20] CAA Rule 101.271.