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INTRODUCTION

E ngā mana e ngā reo, tēnei te mihi ki a koutou katoa. Ko rātou mā ngā tūpuna i hoea te moana nui a Kiwa. E mihi ana ki a rātou. Ko tātou ngā kanohi o rātou mā, e kore tātou e ngaro, he kākano i ruia mai i Rangiatea.

Waka ama, or outrigger canoes, are part of the culture of Pacific people. After Aotearoa New Zealand was settled by the first Polynesian voyagers, waka design and use went through a number of evolutionary stages. The different trees available here and their huge size meant that waka in this country eventually became single-hulled and did not need an outrigger float, or ama, to keep their hulls upright.

Gradually, over hundreds of years, waka ama went into decline in Aotearoa. But during the 20th century, Māori travelling to Pacific islands such as Hawaii and Tahiti observed the continuing tradition of waka ama racing, and in the mid-1980s waka ama began to be revived here. Hosting the world championships in Aotearoa in 1990 rekindled the flame, and the sport has grown to the extent that many people from different cultures are now sharing in this special part of the history and traditions of their ancestors.

Initially called Tātou Hoe o Aotearoa, the waka ama association comprised just two founding member clubs, Ngā Hoe Horo in the north and Mareikura on the East Coast. From these small beginnings, the national association, since renamed Ngā Kaihoe o Aotearoa (NKOA), has expanded to include six regional members, with a growing list of clubs in

each region. The week-long National Waka Ama Championships, with upwards of 3,000 competitors each year, illustrates how the sport has grown.

As the numbers participating have grown, so too has the need for NKOA to address the safety and wellbeing of its members. The relationship it has forged with Maritime New Zealand (MNZ), together with new alliances with groups such as Ngā Waka Federation, has enabled it to develop rules to help the paddlers of Aotearoa use waka ama safely.

Heoi anō, rau rangatira mā, koutou ngā tohunga tārai waka, koutou ngā kaihoe o Aotearoa, ka nui te mihi ki a koutou, tēnā koutou katoa.



THE RULES OF WAKA AMA RACING

As the sport of waka ama expands, safety systems and procedures need to be developed and nurtured by coaches, clubs and experienced paddlers. All new paddlers entering the sport must be given the knowledge and skills to avoid unnecessary risk or, in the event of an incident occurring, to deal with it appropriately.

It is essential to minimise the risks to both paddlers and other water users by adopting a code of safe practice for waka ama. By implementing safety procedures, a level of safe and responsible practice will have been put in place. Taking the 'safe' option does not mean we are wrapping the sport in cotton wool and never pushing our equipment or ourselves – it simply means the sport is carried out within safe limits. (*Kanu Culture*, Vol. 7, Steve West)

It is important to stress that these are safety rules and each club is expected to develop its own safety plan that reflects its local conditions.

Navigation safety bylaws

Paddlers must be aware that most regions of New Zealand have their own navigation safety bylaws. Your club should have a copy of the local bylaws – contact the harbourmaster for your region. Harbourmaster contact details are provided at www.wakaama.co.nz or www.maritimenz.govt.nz.

Skipper or kaihāutu responsibilities

The skipper or kaihāutu should be identified or nominated before any voyage is undertaken. In the absence of a nominated skipper, the person who is steering is usually regarded as the skipper or kaihāutu. That person must have access to and be familiar with these guidelines. The skipper or kaihāutu is responsible for assessing risk to vessel and crew and carries the burden of responsibility for his or her decisions.

Definitions

Waka ama - outrigger canoe

A hull with one or more outrigger pontoons (ama). The pontoons are rigged out to the side to provide stability and lashed to the hull with cross-beam members (kiato). The hull has sealed bow (ihu) bulkheads and stern (kei) bulkheads.

Waka taurua - double-hulled canoe

A vessel with two hulls lashed together with kiato for stability.

Waka tere - sailing canoe

A waka ama fitted or rigged with a mast, sail and appropriate sailing kiato. Waka tere also has a special ama used for sailing.

Types of waka

Waka ama

W1 One-person single-hulled waka
 W2 Two-person single-hulled waka
 W3 Three-person single-hulled waka
 W4 Four-person single-hulled waka
 W6 Six-person single-hulled waka

Waka taurua

WT12 Twelve-person double-hulled waka

Waka tere

W4 Four-person single-hulled sailing waka
 W6 Six-person single-hulled sailing waka
 WT12 Twelve-person double-hulled sailing waka

Design and construction

Despite the increase in waka ama construction and variations in models internationally, there are currently no design and construction standards in New Zealand. While recognising that a waka's lightness and speed are important to a club, NKOA recommends that the priority for waka construction should be strength and safety. The steps that NKOA is taking to encourage safe construction include:

- working with MNZ and other authorities, such as New Zealand Marine, to promote improved design and construction practices
- nominating 'authorised persons' to conduct safety audits for all waka ama.

Equipment

General

Item	Number	Comments
Lifejackets or personal flotation devices (PFD)	1, 2, 4, 6 or 12	Required – sufficient PFDs must be available for all those aboard a waka. For waka under 6m, PFDs must be worn at all times unless the skipper considers that no risk exists.
Communications equipment	2	Recommended – at least two reliable means of (waterproof) communication that will work following a capsize, such as VHF radio, cellphone (in a plastic bag), EPIRB and flares.
Bailers	2	Required – a large bailer will cut down the bailing time.
Spare paddles	1 or 2	Recommended – these should be securely lashed to the waka and one should be strong enough to steer with.
Flares (day and night)	2	Recommended.
White light fixed 1m above deck and visible from all directions	1	Required for night paddling.
Man overboard throw bag	1	Recommended.
Repair kit	1	Recommended – should include spare rubber lashing, duct tape, bungs and towing rope.
Spray skirt (optional)	As required	Use depends on weather and sea conditions.

Support or escort boat

Item	Number	Comments
Lifejackets or PFDs	Sufficient number for crew and support crew	Required.
40m rope	1	For towing.
First aid kit	1	To meet first aid requirements.
Communications equipment	At least 2 forms	VHF radio, cellphone (in a watertight plastic bag), EPIRB and flares.
Rescue tubes	2	Support crew must be trained to use these in an emergency.
Man overboard throw bag	1	Recommended.
Spare paddles	As required	

Waka visibility

Maritime rules require boaties to keep a proper lookout and maintain appropriate speeds around other water users. However, there are many factors that can prevent them from seeing waka and other craft that sit low in the water.

Conditions such as choppy water, fog, glare, sun strike, rain, wind in the eyes, saltspray on the windshield, poor vision or a combination of any of these can affect a boatie's ability to spot a small craft in the water. Waka paddlers and others using similar craft can do a lot to dramatically improve their visibility – and therefore their own safety – when sharing the water with others.

Use your head

Your head is your highest point – make it as bright as possible. Day-glow orange or yellow hats are highly visible.

Blazing paddles

Motion is another important visibility tool. Because your hoe (paddles) are in constant motion while paddling, you can increase your visibility by using reflective tape on blades or shafts, in combination with strips of day-glow tape. This combination will allow your hoe to catch and reflect sunlight, as well as creating flashes of day-glow.

Dress to impress

Wearing a day-glow orange or yellow paddle jacket or overshirt offers the highest visibility potential. If your torso is not covered with day-glow, consider wearing a brightly coloured paddle jacket that is a different colour from your waka, PFD and hoe blades.

Fly the flag

Day-glow orange and yellow chopper flags provide a permanent bright flash at a good height above the water. Chopper flags 'break the horizon' of other vessels and draw attention to the waka.

Have a colourful craft

Choose a waka in a bright, contrasting colour. The highest visibility potential is achieved when your boat contrasts with the sea and surrounding backdrops and with your clothing, paddles and flag. To increase your kayak's visibility, consider adding flashes of day-glow or reflective tape. Bright, multi-coloured waka give greater contrast.

Be bright at night

Maritime rules require that, as a *minimum*, waka paddlers must carry a torch to prevent collision. However, holding a torch may prevent you from paddling effectively and therefore being seen!

Wearing a head torch leaves your arms free to paddle. In addition, mounting an all-round white light (or a red, green and white sector light) on your rear deck above head height means you will be visible from all directions.

Stick together and light up

Waka paddlers travelling in a group, particularly at night, are recommended to carry two light sources, such as a head torch and an all-round white light or sector light.

If the rear paddler has their all-round light turned on when paddlers are travelling in a tight pod, the group will be visible from behind and other members will not be blinded. The lead paddler should have their head torch on and shining forward, which won't affect others' night vision. All paddlers should then only need to use their lights when there is approaching traffic. Don't use a flashing strobe light unless there is an emergency.

Attaching reflective tape or strips to your waka, paddle and clothing will maximise your visibility at night. Shining your torch across the strips can also help you to be seen.

Remember the radio

If you are paddling in an area where you can see other, larger boats that may not be able to see you, remember that many of them will have VHF radios and be listening on channel 16. A very brief message to all craft in the area, stating that you are on the water, can alert others to your presence.

Maintenance

Regular, scheduled maintenance should be carried out on all waka and equipment by suitably qualified and experienced people. This maintenance should be documented.

PFDs and lifejackets should be cleaned, checked and (inflatable models) serviced regularly. Check the manufacturer's instructions for the correct procedures for cleaning and servicing.

There should be regular audits by an expert and/or approved boat builder or 'authorised person' to confirm that maintenance of the waka is being carried out effectively. Audits should cover:

- the structure of the waka
- all equipment
- all documentation.



PERSONNEL

Roles and responsibilities

The following are minimum requirements for skippers and paddlers, and training needs to be adapted to meet these requirements. Please remember that the skipper (kaihāutu) is legally responsible if there is an incident. Unless otherwise designated, the steerer is considered to be the skipper.

The skipper or kaihāutu must:

- be designated before the voyage
- have read and understand these Waka Ama Safety Rules
- understand weather forecasts and where to find them (marine VHF radio, newspaper, radio and internet)
- understand what can happen with local weather conditions
- check that each paddler has a PFD on board that fits them and decide when conditions require the crew to put them on (it is recommended they always be put on before paddling at night)
- inform someone about the crew's paddling plan where they are going and what time they are due back. Either contact someone before setting out, or note the plan on a designated whiteboard, noticeboard or trip book
- know all the crew's capabilities for paddling and swimming, and their medical needs

- make sure the group has all the equipment listed earlier, in the equipment section
- ensure all paddlers are appropriately clothed, with hats and thermal clothing if the conditions require it
- have sufficient water supplies for hot weather
- determine whether the conditions require a spray skirt to be fitted.

The paddler or kaihoe must:

- be competent in safety procedures for swamping, capsizing and paddler-overboard situations
- be familiar with the use of flotation devices, close at hand and on a support vessel
- be able to swim at least 50m, and if they can't, wear a PFD at all times and inform the other paddlers that they are non-swimmers
- not be under the influence of drugs or alcohol while on the water
- ideally, as a result of intensive training, be resilient and competent to cope with any situation.

Safety coordinator

All clubs must appoint a safety coordinator, who is responsible for:

- developing a safety plan and procedures for the club, in accordance with these Waka Ama Safety Rules
- reporting any safety requirements or issues for the club
- initiating any emergency procedures, in accordance with the club's safety plan and procedures
- maintaining safety information and emergency contact details for the Police, Coastguard and Harbourmaster
- ensuring compliance with navigation safety rules, bylaws and the collision prevention rules (refer to Appendices 2 and 3 and the MNZ publication Safe Boating: An Essential Guide).



Training

Clubs will be required to maintain a training programme for all levels of participant and crew. The programme should be focused on developing the competency of each paddler to participate confidently in the waka ama activity. This should include:

- competency in swimming and flotation
- a minimum level of fitness relevant to waka ama
- familiarity with safety drills
- fitness requirements
- familiarisation with roll and capsize procedures
- generic coaching levels
- understanding of risk management
- safety awareness
- lifesaving (surf survival programme).

OPERATIONAL PROCEDURES

General

Procedures must include:

- a thorough check of both existing and forecast operating conditions, prior to the journey
- a full waka and equipment check prior to the voyage
- a full briefing about the voyage, given to all parties
- an unequivocal no alcohol and drug policy.

Racing

The official NKOA race rules are available on the Ngā Kaihoe o Aotearoa Waka Ama website at www.wakaama.co.nz/site.

Race procedures may include:

- a briefing given to club representatives prior to the race
- a physical check of the waka ama, to ensure it is seaworthy
- a physical check of safety equipment, to ensure it is fully serviceable and/or suitable
- a physical check of bailers, spare paddles and PFDs to ensure they are serviceable and/or suitable
- ensuring that a safety or escort boat(s) is provided
- a safety briefing about the course for all participants

- medical and/or first aid procedures
- flipping drills
- communications equipment
- crew lists
- distances to safe havens (for marathons)
- course markers
- event management
- obtaining necessary approvals, from local authorities and so on
- minimising the impact on other boaties and water users
- checking criteria for eligibility
- skipper responsibilities
- emergency procedures
- order of events
- karakia.

Practice

Waka ama practice sessions must have:

- a briefing about the course plan
- notification of the training location, placed on the club noticeboard
- specific training for race events
- a log of training hours
- allocated training times
- voyage plans for safety coordinators to refer to
- an induction programme for new members (with a probation period of three months, usually building up to the nationals)
- crews training in pairs

- line of sight and checkpoints
- correct lighting for night training
- emergency procedures
- sufficient lifejackets, PFDs or flotation tubes for all on board
- means of communicating distress, such as VHF radio, cellphone (in a plastic bag), a distress beacon and/or flares.



EMERGENCY PROCEDURES

Waka leaders or kaihāutu must ensure there are enough crew members at all times who are capable of taking charge in the event of the waka swamping, rolling or capsizing.

Swamping

- Do not move from your position.
- Hold your hoe in tapāpa position (horizontal across the gunwales).
- Do not lean or shift weight.
- Wait and listen for the kaihāutu's commands.

Capsize or rolling

- Do not let go of your hoe.
- Take hold of the waka and use it for extra buoyancy.
- Check to see where your partner is and whether he or she needs help.
- Use hoe to help others reach the waka.
- Carry out a roll call.
- Initiate roll or capsize procedures.

Man overboard

All waka crew must be trained in how to use the rescue tube and throw bag.



Accidental cold-water immersion

The first reaction when suddenly entering cold water is shock, accompanied by breathing difficulty and an increased heart rate, which can cause death in a few minutes. Those who survive rapidly lose heat from their limbs, causing a severe loss of muscle strength and of the ability to carry out simple tasks such as putting on or manually inflating a lifejacket or setting off a flare.

Wearing a lifejacket with a secure crotch strap (to prevent it riding up) will help you to survive the cold shock and maintain your strength. Because it also removes the need to tread water or move your arms to keep afloat, it will help to preserve your body's warmth.

A lifejacket can significantly reduce the chance of death, provided you have a way of summoning help.

Heat loss is greater in water than in air of the same temperature. If you are in the water with floating objects such as upturned waka, raise as much of your body out of the water as possible.

For more information about how to survive in cold water, go to www.maritimenz.govt.nz and search 'cold water'.

APPENDIX 1: THE NAVIGATION SAFETY RULE

The Navigation Safety Rule came into force on 21 March 2003. For the full text of this rule (called Part 91) and the advisory circular that accompanies it, please refer to the rules section of the MNZ website: www.maritimenz.govt.nz.

The key points are summarised below:

Maritime Rule Part 91: Navigation Safety is a rule made under the Maritime Transport Act 1994. The Act places responsibility on the skipper or person in charge of a vessel for:

- the safety of the vessel
- the safety of all persons on board
- complying with all maritime rules and other regulations and bylaws.

The Navigation Safety Rule sets out a legally binding code of conduct for all vessel operators' behaviour. All vessels are also subject to the Collision Prevention Rules, which must be read in conjunction with this rule.

Lifejackets or personal flotation devices (PFD)

It is compulsory for personal flotation devices (PFDs, often called lifejackets) to be carried on all recreational craft. They must be worn when under tow and at all times of heightened risk. These risks may include rough seas, non-swimmers, alcohol consumption, emergencies and distress.

- The rule allows a wide range of PFDs to suit all types of boating activity.
- The skipper must ensure that a correctly sized, serviceable PFD is available for every person on board.
- For some sporting and ceremonial events, the PFDs may be carried in another boat that stays in the immediate vicinity.
- PFDs must meet the New Zealand Standard or another similar national standard that is acceptable to MNZ. Sports teams from other countries may use their own approved PFDs while in New Zealand.

Age for operating power-driven vessels

The person operating a powered vessel capable of travelling at more than 10 knots must be at least 15 years old. If a person aged 15 or over is supervising and remains within reach of the controls, a younger person may operate the vessel.

Speed

Without reasonable excuse, no vessels may exceed 5 knots through the water in the following situations:

- within 50m of another vessel or person in the water
- within 200m of the shore, any structure or any vessel displaying a dive flag
- while anyone has any part of their body over the bow or sides of a power boat.

Wake

 Recreational craft must avoid making a wake that can cause unnecessary danger or risk of damage to other vessels, structures or people.

Water skiing, towing and similar activities

- Any boat towing a water skier, boat, wake board or similar device at a speed of more than 5 knots must have a person aged at least 10 to keep a lookout, as well as the skipper. Those being towed must wear a PFD.
- Water skiing and similar activities are not permitted from sunset to sunrise.

Access lanes and reserved areas

- If an area is being used for its designated purpose, then other people and craft must leave the area.
- If the area is not being used for that designated purpose, then all normal navigation rules apply.

Anchoring

- All vessels must anchor well clear of wharves and jetties and their approaches.
- Skippers must ensure they anchor so that they do not cause a hazard by swinging into other anchored craft or by dragging.

The 500 ton rule

 In areas near the approaches to harbours and ports, charts will show where all vessels must keep well clear of ships over 500 tons, even if the ship is overtaking.

Tankers and defence premises

 Whenever possible, vessels are required to stay at least 200m away from tankers, ships displaying a code flag B (dangerous goods) and defence premises.

Diving

Any vessel where diving activities are taking place must display a code flag A with a minimum size of 600mm x 600mm. It must be displayed so that it is clearly visible to all approaching vessels from 200m away.

Safe boating advisors

 MNZ may appoint safe boating advisors (SBAs) to promote safety awareness in small craft.

Regional navigation safety bylaws

- Regional council bylaws apply in many places around the coast as well as inland. To ensure there is a single consistent set of Navigation Safety Rules throughout all parts of New Zealand, bylaws must not conflict with this maritime rule.
- Where bylaws are in place, the Navigation Safety Rule does not apply.
- Councils may appoint honorary enforcement officers to help supervise their areas.



APPENDIX 2: SAFETY ON THE WATER

"Rules of the road" on the water

Most boating accidents involve the skipper not having enough boating knowledge and experience.

It is the skipper's responsibility to ensure safety, which includes knowing and understanding the rules that apply, before heading out on the water.

If you have an accident, ignorance of the law is not accepted as an excuse. Heavy fines or prison sentences apply to breaches of maritime rules.

Lookout

You must keep a good lookout at all times. It is your responsibility to stay alert for other boats, swimmers, dive boats, kayaks, hazards and obstacles. Keep focused on the water ahead, especially at speed. Listen as well as look.

Speed

All boats must travel at a safe speed, taking into account the amount of boat traffic in the area, weather conditions and glare affecting visibility.

Specifically, you must not exceed a speed of 5 knots (a fast walking speed) if you are:

- within 200m of the shore
- within 200m of a boat displaying a diver's flag
- within 50m of any other boat
- within 50m of a person swimming
- on a power boat if any person has any part of their body outside the rails or edge of the deck.

Unless very closely supervised by an older person, who is in constant reach of the controls, you must be over 15 to operate any power boat that is capable of speed exceeding 10 knots. This includes dinghies and personal water craft.

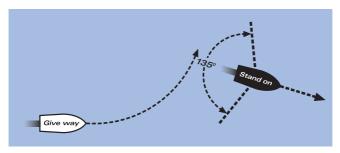
When two boats meet

When two boats are approaching each other, one has the right of way and it is called the stand-on boat.

The other boat is called the give-way boat. The give-way boat must make an early and obvious manoeuvre so there can be no confusion.

The give-way boat must pass astern of (behind) the stand-on boat, while the stand-on boat maintains the same course and speed.

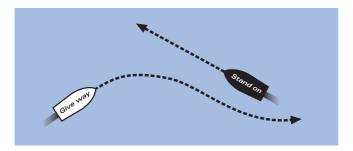
Every boat that is overtaking must give way. You are overtaking if you are approaching another boat anywhere in a 135 degree sector at its stern.



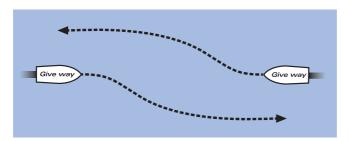
In channels and harbours:

- every boat must keep to the starboard (right) side of any channel
- inside a harbour (normally shown on the pilotage limit on the chart) you
 must keep out of the way of any ship over 500 tons (which is about
 50m long). Stay at least 500m clear when ahead of the ship
- you must not create a wake that causes unnecessary danger to other boats or people
- you must not anchor in a channel or anywhere that could be dangerous to other craft
- all small craft must keep out of the way of larger vessels that are restricted by the channel
- stay 200m away from tankers.

When power meets power:

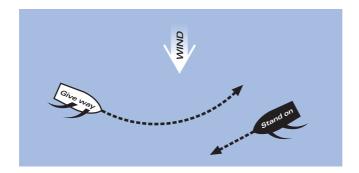


you must give way to another boat on your starboard (right)

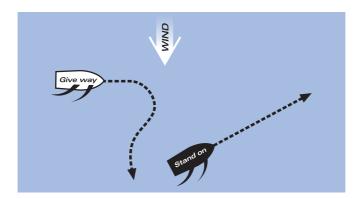


if you meet head on, both boats must turn to starboard (right).

When sail meets sail:

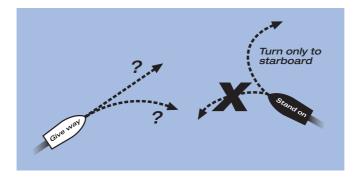


 when the wind is coming from different sides, the boat with the wind on the port (left) side has to give way



- when both boats have the wind on the same side, the windward (upwind) boat has to give way
- special rules may apply between yachts competing in the same race.

When things go wrong:



if the give-way boat does not appear to be giving way, the stand-on boat must take action. The stand-on boat should turn to starboard (right). If it turned to port it could turn in to the path of the give-way boat.

When power meets sail or a boat being rowed or paddled:

- the power boat gives way (unless the other boat is overtaking)
- a sailing boat has to give way to a power boat with limited ability to manoeuvre that displays certain lights or day shapes
- sailing boats should avoid sailing in a narrow channel. They have to give way to power boats restricted by the channel.

Remember, you can be fined or prosecuted for breaking maritime rules or bylaws.

(Reproduced from the MNZ publication Safe Boating: An Essential Guide.)

GLOSSARY

ama pontoon

hoe paddle

ihu bow

kaihāutu skipper or waka leader

kaihoe paddler

karakia prayer

kei stern

kiato cross-beam member

tapāpa horizontal

waka canoe

waka ama outrigger canoe

waka taurua double-hulled canoe

waka tere sailing canoe

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NOTES

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