

Standard Operating Procedure

Activity: Rocket

APPICABLE FP POLICY, LEGISLATION, INDUSTRY STANDARDS

- 1. Finlay Park Staff Training Policy (competency assessment, Hazard register, and SOP)
- 2. Finlay Park skipper license (approved by MNZ)
- 3. Maritime NZ Survey
- 4. Waikato Regional Council Navigation Safety By-Law 3.3 (2013)

ACTIVITY OVERVIEW (INSERT)

Hang on and hold tight! The rocket is a five or ten person inflatable that gets towed behind one of our Ski boats. Great fun, just try not to fall off. Instructor included.

LOCATION

SUPERVISION REQUIREMENTS

COMPETENCY INSTRUCTOR

- a) Supervision category: instructor only (X) category
- b) Min supervision age: 18 years
- c) Min Qualification/ Competency: NZ day skipper certificate and FP skipper license as approved by MNZ training framework
- d) Min experience: Experience instructing smaller risk activities such as Go karts, and sling shot paintball for at least 15 hours.
 - a. At least 20 hours driving other boats (commercial or private)
 - b. Assisting qualified instructor in a school setting and boat spotting for 10 hours.
 - c. Min reading: MTOP

COMPETENCY ADULT (ONLY STATE IF VISITING ADULTS SUPERVISES ACTIVITY)

Must be confident swimmer

EQUIPMENT

- a. Cell phone
- All boat equipment is checked weekly (when in use see equip list on board) and maintenance is logged on line (Gus, e mails, safety system checks)
- c. Buoyancy vests and life jackets are checked weekly (when in use) and repaired, or retired accordingly
- d. The rocket.
- e. Helmets for Yellow ten-seater or 5 seaters.

ON BOARD EQUIPMENT

- 1. PFD for all passengers and crew
- 2. EPIRB
- 3. Radio/ cell phone
- 4. 2 kg fire extinguisher
- 5. Paddle/ boat hook
- 6. First aid kit

- 7. Anchor
- 8. Mooring rope
- 9. Toolkit
- 10. Throw Bag
- 11. 1 spotter

PARTICIPANT REQUIREMENTS

COMPETENCY

- a) Minimum age: 8 years or older. If participants are younger changes could/ should be required around supervision ratios, duration of activity and activity gear needed
- b) Minimum level of competency: should have confidence to tread water and be in water over their heads
- c) Restrictions: People with neck, back, or head injuries. People with water anxiety issues

EQUIPMENT

- a) Clothes: Togs or wet suit
- b) Foot wear: none
- c) Other: Towel

SUPERVISION STRUCTURE

NUMBERS

28 persons per hour and a half

Numbers can be increased depending the weather forecast, competency of participants, competency of adults helping out, number of competent adults available and gear available. An increase also might require an extra instructor to be present.



RATIOS

Minimum 2 helpers but 3 recommended

SUPERVISION POSITION

- One adult to spot on the boat. Min spotter age 14 years. Preferred spotter position is next to the driver, not in the back of the boat.
- One adult to check and prepare next participants
- One adult to assist with participant control and / or help on the rocket

RATIO SUPERVISION CHANGES

SPECIFIC SUPERVISION INSTRUCTIONS FOR ADULT HELPERS (WHEN ADULT HELPERS ARE UNDER SUPERSISION OF FP INSTRUCTOR)

Adults on the raft should check participant lifejackets and helmets before rides. Adults should help loading the rocket for each ride and support participants. Adult on the boat should help with spotting.

All adults must wear life jackets. This is essential if a participant need assistance.

ACTIVITY IN OPERATION

GENERAL EMERGENCY PROCEDURES AND RESCUE SCENARIOS

Emergency code	Severity	Example
0	Minor accidents, not life threatening, no need to return to shore, no immediate need for outside help Minor mechanical issues	Scratches, bruises, small mechanical errors (lights, bilge, other issues) but boat is still operational
1	Minor to medium accidents that need attention, activity needs to be on hold, possible need help from shore, Minor mechanical issues that cannot be fixed without certain tools or knowledge from boat operator	Minor concussion, cuts, mild hypothermia, mechanical error (engine problems such as running hot or irregular) boat is possibly not operational
2	Medium accidents that need immediate attention, activity needs to be on hold or stopped, definite need for help from shore, medical expertise necessary. Major mechanical issues that need specialist attention	Cuts, major concussion, possible fractures, moderate hypothermia, Boat not operational (engine failure, fuel leak, hull fracture, minor collision)
3	Major accidents that need immediate professional medical or other specialist attention.	Drowning, major collision, fire, major boat leak, multiple injured persons

Flooding (area):

- Move group to higher ground ASAP
- Account for all staff and participants
- Inform senior staff of situation
- Return to camp or if not possible to nearest exit point

High winds/ cyclone:

- Move group to more sheltered position and/ or
- Contact senior staff for rescue if unable to move
- Account for all staff and participants

Earth quake:

- Move group away from lake and toward top of Finlay Road ASAP, or move group to assembly area ASAP. (if within camp grounds set off fire alarm system)
- Report to senior staff ASAP and account for all staff and participants.

Fire:

- Move group away from imminent danger ASAP and find best possible safe position, raise the alarm and move toward assembly
 area ASAP.
- Report to senior staff ASAP and account for all staff and participants.
- Contact emergency services

RESCUE SCENARIOS:

a) Participant unable to return to seated position on rocket:

Either pull rope or rocket toward vessel or manoeuvre vessel to rocket with extreme care (prop, rope, and people!). Turn of engine well before reaching participants. Pull rocket alongside vessel with participant between vessel and rocket. Grab participant under arms and pull until participant can lift their legs on top of side tubes.

b) Participant in water and panicked:





Have all swimmers stay clear of panicked person. Approach participant with vessel and talk to calm. Use throw bag or boat hook to pull participant toward rear of vessel with engine off and pull up on rear platform.

c) Participant injured (hypothermia, concussion, bruises, etc):

Assess situation and board participant, check emergency check sheet, follow procedures, and return injured person to base ASAP.

d) Vessel taking on water/ fire/ mechanical failure: (see vessel emergency chart on board vessel and appendix... In SMP and OP)

e) Engine overheating:

Switch of engine, and remove cover. Remove inlet hose to heat exchanger for transmission box, and clear inlet pipes. Restart and check engine temperature. Use emergency chart and follow up.

f) Fuel leak:

If gas detector alarm goes off, shut of engine ASAP. Move to back of vessel and turn of fuel tap on top of fuel tank. Establish if there is a fire. If no fire detected turn on engine blower to air out any fumes from engine bay. Contact camp base ASAP.

g) <u>Fire</u>:

If a fire is detected in engine bay, turn of engine and blower (if not already off), remove key from ignition and use Red key to turn on the engine bay extinguisher. Do not open the engine compartment. If fire under control contact base ASAP, and / or exit the vessel.

If fire is outside of engine compartment use the fire extinguisher under the seat to extinguish fire. Contact base ASAP.

SUPPLEMENTARY INFORMATION

Missing vessel response for land based crew.

All skipper are required to let base crew know if they are using a vessel outside of programme hours.

All skippers must use the Trip log system to log vital information's such as pre check items, fuel on board, time depart, numbers on board, etc.

Process	Process missing vessel	Who	Notes
1	Program/ roster checked for departure and	Senior staff	All vessel usage is according to
	arrival times		the program which is available
			to all staff at all times.
2	Trip log checked	Kowie Smit	Trip log is e mailed upon
			submission by skipper to Kowie
3	Other staff informed for information	Senior staff	Last point of contact or last seen
4	Investigate and search	Any other skipper	To report back as soon as area
			has been swept (usual activity
			areas with 1 km from camp)
<mark>5</mark>	Vessel still missing/ Search area extended	Senior staff and searching staff	Emergency services on hold,
			area extended 2km downstream
			and 1 km upstream from FP.
<mark>6</mark>	Emergency services requested to take over	Director/ Senior staff	





IAZ				

Activity	The Rocket			Supervision category	FP Instructor required X	
Area	Lake Karapiro	, Zone 10, and 11		Date reviewed	Date July 2024	
Hazard (what poses the threat)	Poss. Risk (injury outcomes)	Category (environment, people, equipment)	Risk Rate	Controls in place (What we do to either eliminate, minimise or isolate the hazard or risk)		Responsible (who is responsible for dealing with this hazard during activity
Water	Drowning	environment	High	Participants wear lit are put on the rocke Maritime NZ standa according to the MI ASAP. On the raft whilst we lake.	FP staff	
Other participants colliding	(Head) injuries	people	High	straight line behind of one of the part manoeuvred in sucl reasons; 1 Adults ra participants and	All care is taken not to flip the Rocket on purpose or where possible to prevent the rocket from flipping when going in a straight line behind the tow boat. Collision occurs when two occupants collide and body parts come in contact with the head of one of the participants. Boat speed is kept to safe level and a boat spotter is always present on the boat. The vessel is manoeuvred in such a way as to minimise any collision. Care is taken not to place adults with children on the rocket for two reasons; 1 Adults raised centre of gravity is higher and therefore might tip rocket easier. 2 Adults might fall on top of smaller participants and injure them. If an adult has to accompany a child, the rocket ride will be of a slow nature. FP Skippers receive specific training to prevent any injury. Kayak helmets are worn by participants.	
Tow rope	Rope burn	equipment	Medium	When returning the rocket to a group in the water and a semi-circle is performed the boat driver will always approach group at less than 5 knots. Boat will be in neutral when occupants are climbing back onto rocket. Participants are instructed to not wrap the rope handles around their hand or wrist, and to let go as soon as they feel the rocket starts to tip.		FP staff
Rope handle	Rope burn	equipment	low	Rope handles are provided on the rocket. In some instances, the handles could cause minor rope burn. Participants are instructed to hold fast with both hands under all circumstances.		
Boat	Participant run over	people	High	rocket, boat is turne approaching boats. behind. And a dista	cocupied with a boat spotter so the driver can focus in front of boat. As soon as an occupant falls of ear around and a semi-circle is formed around the occupant to protect them from other possible. When more than one boat is used all care is taken never to follow the front boat in a straight line not of at least 50 meters is kept between the boats. We all navigational rules and by laws for Lake Karapiro, through extensive training and assessment by boved by MNZ	FP staff
Submerged obstacles	Crash into submerged obstacle	environment	Medium	Where possible falle least 30 meters. A m	FP staff	
weather	Hypothermia	environment	Medium	On cold and wet day's session might be cancelled or shortened (max time 1.5 hours) and participants are advised to wear wetsuits or other insulating materials. The raft is covered so participants can get changed and or store warm clothes or towels on their return. (Ride time: 6 minutes per ride)		
weather	Sun burn	environment	Medium		sed to wear sun block at all times on exposed skin	Supervising adults and participants





VERSION

Version	Date	Changes	Authorized by
1.0	18 Feb 2016	Implemented version graph	Gus
1.1	11 July 2017	Changes to emergency procedures	Gus
1.2	6 June 2018	Change to equipment log, removed 5 or 10 seater, removed no adult on kids rides, added rescue scenarios for fire, fuel leak and changes to wording	Gus
1.3	25/10/2018	Changes to supervision structure	Gus
1.4	29 th Nov 2019	Added missing vessel response	Gus
1.5	13 th March 2020	Changes made to min age, and max numbers	Gus
1.6	16 th November 2020	Added supervising adults on raft must wear lifejacket	Gus
1.7	25 May 2021	Preferred spotter location next to driver	Gus
1.8	19/12/2022	Missing vessel process updated	Gus
1.9	3 July 2024	Created new SOP	Kowie