



**Southern Cross
University**

SCU Boating Procedures

Faculty of Science and Engineering

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1. Introduction

The SCU Boating Procedures ('the procedures') outline the procedures and requirements for the operation of, and management of health and safety risks associated with, vessels used by persons as part of research, work or study at Southern Cross University (SCU; 'the University'). These procedures are the overarching document of the SCU Boating Operations.

2. Scope

The procedures apply to staff, students, visitors, volunteers and external collaborators involved in all aspects of boating operations related to research, work or study at SCU. The procedures primarily address the use of vessels owned by SCU in Australian waters. For use of third-party vessels (i.e. external provider) see **Section 17**. Failure to comply with these procedures will result in the actions outlined in **Section 31**.

3. Legislation

3.1 Overview

The national system of governance of commercial vessels comprises the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* ('the National Law Act') and a number of regulations, marine orders and exemptions. The national regulator is the Australian Maritime Safety Authority (AMSA). A brief description of the various parts of the national system and how it applies to the University's vessels is provided below.

3.2 Marine Safety (Domestic Commercial Vessel) National Law Act 2012

The National Law Act defines a domestic commercial vessel as follows:

...a vessel that is for use in connection with a commercial, governmental or research activity.

The University's vessels (powered and human powered) are classified as 'domestic commercial vessels' under The National Law Act. Recreational vessels are not allowed for work/research purposes by AMSA in Australian waters as they do not meet specified standards for construction, stability and safety equipment.

3.3 Marine Order 504 (Certificates of operation and operation requirements – national law) 2023

Marine Order 504 describes the requirements to be met for a *Certificate of Operation* to be issued. It describes the following:

- Operational requirements of the various classes of vessels;
- The details to be included in Safety Management Systems (SMS's), including provision for vessel inductions, safety drills and training;
- Risk assessment process, and specifically the use of lifejackets; and
- The requirement for clear and direct reporting pathways for issues.

The majority of the University's vessels do not require a *Certificate of Operation* because they meet the criteria described in Item 2.1 of Schedule 1 of Marine Safety (Certificates of operation) Exemption 2020 (refer **Section 3.7**).

Additional to the above, the University has a 4.25 m rigid inflatable vessel (MERC) that operates within 2C certification that requires a *Certificate of Operation*.

All University vessels have an SMS that is current for each individual vessel.

3.4 Marine Order 505 (Certificates of competency – national law) 2022

Marine Order 505 describes the types of certificates that may be issued for masters and crew of domestic commercial vessels. It also describes the criteria to be met prior to a certificate of competency being issued by AMSA.

The qualifications required to operate a vessel will be defined under *Marine Order 505 (Certificates of Competency – national law) 2022* (i.e. Coxswains Grade 3) at the cessation of EX15.

3.5 EX01 – Marine Safety (Vessel identifiers) Exemption 2020

EX01 exempts specific vessels from the requirement to obtain and display a unique identifier. This includes SCU human-powered vessels as they are covered by a specific *Certificate of Operation*. There is no requirement to apply for EX01 providing the vessel complies with the conditions stated in Item 4 of EX01.

3.6 EX02 – Marine Safety (Certificates of survey) Exemption 2020

Schedule 1 of EX02 defines the types of vessels exempt from the requirement to have a *Certificate of Survey*, as otherwise required in Sections 43 and 44 of the national law.

All of the University's vessels do not require a *Certificate of Survey* because they meet the following criteria described in Item 2.1 of Schedule 1:

- Meet the design, construction and equipment standards mentioned in NSCV Part G;
- Class 2 vessels;
- <12 m in length; and
- Only operate in sheltered (D or E) waters.

These vessels have been issued with a '*Non-Survey Approval*'.

The only exception to the above, is the University's RIB that also operates in Class C Restricted areas on the GBRMP, and requires a periodic survey to maintain EX40.

3.7 EX03 – Marine Safety (Certificates of operation) Exemption 2020

Schedule 1 of EX03 defines the types of vessels exempt from the requirement to have a *Certificate of Operation*, as otherwise required in Sections 53 and 54 of the national law.

The majority of the University's vessels do not require a *Certificate of Operation* because they meet the following criteria described in Item 2.1 of Schedule 1:

- Class 2 or 3 vessel;
- <7.5 m in length;
- Only operate in sheltered (D or E) waters; and
- Does not carry passengers.

These vessels must still have and comply with an SMS that addresses the operation requirements in Schedules 1 and 2 of Marine Order 504.

There is no requirement to apply for EX03 providing the vessel complies with the conditions stated in Schedule 1 of EX03.

The only exceptions to the above, is the University's RIB that operates in Class C Restricted areas on the GBR, and the human-powered vessels to maintain EX01.

3.8 EX15 – Marine Safety (Scientific research and educational activities) Exemption 2029

The University's vessels (powered) are covered under EX15, which defines the following:

- Qualifications of Masters of the vessel able to operate under this exemption;
- The operational areas in which scientific research or educational activities can be undertaken.

Under EX15, a person is exempt from the requirement to hold a certificate of competency if the following conditions are met:

- They are an employee of a scientific research and educational organisation or;
- **approved** in writing by the National Regulator (AMSA) as part of an authorised group.
- The work is being carried out in the Great Barrier Reef Region; or
- In smooth or partially smooth waters;
- The person holds a licence that would be required to operate the vessel recreationally in the waters where the person carries out the specified operation and complies with the conditions of that licence.

SCU have approval in writing from AMSA for all SCU powered vessels for:

- a defined group of Southern Cross University postgraduate and honours-level students to operate Domestic Commercial Vessels in support of scientific research and educational activities and;

In general, SCU are discouraging the reliance on EX.15. Despite EX.15 being a permitted use of an SCU vessel, it does not offer a sensible degree of training commensurate to being the Master on a commercial vessel operation.

An application **must** be made to the Boating and Diving Officer/s at least **30 days prior** to requiring an SCU vessel. The Boating and Diving Officer/s will consider, on a case-by-case basis, a SCU researchers' request to utilise a SCU vessel without holding the minimum commercial qualifications required for such vessel.

EX. 15 only applies to SCU employees, researchers (as an authorised group as defined by the National Regulator) and vessels. It does not include:

- SCU employees utilising non-SCU vessels;
- SCU researchers utilising non-SCU vessels; or
- Non-SCU employees utilising SCU vessels;
- Non-SCU researchers utilising SCU vessels;

3.9 EX40 – Marine Safety (Class C restricted operations) Exemption 2021

The University's RIB that operates in Class C Restricted areas on the GBR is covered under EX40, which permits this vessel to operate in Class C Restricted areas without a *Certificate of Survey*. Item 5 of EX40 defines the type of vessels exempt from the requirement to have a *Certificate of Survey* for sections 43 and 44 of the National Law.

To obtain this exemption the vessel must undergo:

- a. an initial survey; and
- b. an in and out of water periodic survey, conducted within the 3 months before or the 3 months after each 5th anniversary of the vessel's approval.

The initial and periodic surveys must be conducted by an accredited marine surveyor or recognised organisation and meet the applicable standards defined in Divisions 2–4 of Schedule 1 of EX40.

3.10 National Standard for Commercial Vessels

The National Standard for Commercial Vessels (NSCV) specifies the safe design, construction and operation of vessels. The categories of vessel are defined under Part B of the NSCV.

'Vessel service categories' comprise 'vessel use' (i.e. kind of vessel) and 'operational area'.

The majority of the University's vessels are Non-Passenger vessels (i.e. 'Vessel Use' category '2') and are restricted to 'Operational Area' category 'D' 'Partially smooth water operations' and category 'E' 'Smooth water operation'. Both category D and E 'operational categories' are considered 'sheltered waters operational areas'.

Therefore, the 'vessel service category' of these vessels is 2D and 2E.

The only exception to the above, is the vessel MERC that operates in Class C Restricted areas, which has a service category of 2C (i.e. '2' is Non-passenger vessel, 'C' is restricted offshore operations – specified areas) (i.e. within 50 nautical miles of the baseline of Queensland within the GBR Region) and 2D.

3.11 International and Local Laws

When operating vessels overseas or in international water, relevant local laws, regulations, and standards must also be adhered to, as well as the requirements set out in these procedures.

3.12 Applicable Legislation

- *Marine Safety (Domestic Commercial Vessel) National Law Act 2012*
- *Marine Safety (Domestic Commercial Vessel) National Law Regulation 2013*
- *Navigation Act 2012*
- *Australian Maritime Safety Authority Act 1990 (AMSA Act)*
- National Standards for Commercial Vessels (NSCV)
- *Occupational Health and Safety (Maritime Industry) Act 1993*
- *Work Health and Safety Act 2011 (NSW)*

- *Work Health and Safety Act 2011 (QLD)*
- *Work Health and Safety Regulation 2017 (NSW)*
- *Work Health and Safety Regulation 2011 (QLD)*

3.13 SCU Policy and Procedures

- [Work Health and Safety Policy](#)
- [Workplace Health and Safety](#)
- [WHS Management System](#)
- [Critical Risks](#)

4. Definitions

Terminology specific to SCU Boating Operations is provided in **Table 1**.

Table 1. Terminology specific to SCU Boating Operations.

Item	Definition
Australian Maritime Safety Authority (AMSA)	Australia's statutory authority established under the <i>Australian Maritime Safety Authority Act 1990</i> (AMSA Act) responsible for maritime safety, protection of the marine environment, safe navigation and maritime search and rescue.
Boat	Interchangeable with vessel
Boating operation/s	The use of a boat for work, research, transport or educational purposes. Does not include the use of commercial transport ferries.
Boating and Diving Sub-Committee	Group of 4–6 representatives from the Faculty of Science and Engineering that support the Boating and Diving Officer. Composed of the Designated Persons and at least one Academic representative.
Boating and Diving Officer	Relevant person/s that is responsible for overseeing University vessel operations within the Faculty of Science and Engineering. Generally, also one of the Faculty's 'Designated Persons' for vessels.
Boating Safety Plan	A document prepared for each trip detailing the boat, destination/s, launch locations, timing, Master, crew, loading and emergency information. Must be approved by the Boating and Diving Officer/s.
Certificate of Competency	A certificate, issued by AMSA, which provides evidence of the seafarer's capability to operate a boat.

Item	Definition
Designated Contact Person/s	Person/s described in the approved FWRA and Boating Safety Plan that will be the shore-based point of contact for assistance or in the case of emergency. Also the person with whom 'scheduled calling' is undertaken.
Designated Person/s	Boating and Diving Officer/s and other nominated persons that supports implementation of vessel safety management systems (SMS). They are responsible for ensuring the safe operation of vessels, monitoring and supporting safety and pollution-prevention aspects of vessel operations. Provide advice to vessel users and raise safety issues with management. Be contactable by Master and crew as appropriate.
Domestic Commercial Vessel	A boat or other vessel that is used for commercial, governmental or research activities.
Fieldwork Leader	Person onsite and directly in charge of the fieldwork.
Fieldwork Risk Assessment (FWRA)	A document prepared for field sampling that identifies the activities to be undertaken, the associated risks, and mitigation measures to be implemented to reduce the risks to an acceptable level. An approved FWRA may cover single or multiple sampling events. Must be approved by the Faculty Dean.
Master (of SCU or third-party vessel)	Responsible for the seaworthiness of the vessel and safety of persons onboard including boat operators and smaller vessels (if applicable). Must hold the relevant certificate of competency and experience e.g. General Boating Licence; Coxswains Grade 3.
NSCV	National Standard for Commercial Vessels
Operational Area (i.e. Vessel service category)	<p><i>Smooth (E) and Partially Smooth Waters (D):</i></p> <p>Smooth waters include rivers, creeks, streams and lakes, waters within breakwaters or revetments and within half a nautical mile from land within partially smooth water limits.</p> <p>https://www.nsw.gov.au/driving-boating-and-transport/using-waterways-boating-and-transport-information/waterways-and-designated-areas/enclosed-waters</p> <p>https://www.nsw.gov.au/driving-boating-and-transport/using-waterways-boating-and-transport-information/navigation-and-communication/boating-maps#toc-sydney-maps</p> <p>https://www.msq.qld.gov.au/safety/smooth-and-partially-smooth-water-limits</p> <p><i>Restricted Offshore Operations – Specified Areas (C):</i></p> <p>Within 50 nautical miles of the baseline of Queensland within the Great Barrier Reef Region.</p>

Item	Definition
Other vessel/s and non-vessels	<p>Includes kayaks, canoes, dinghies, tinnies, floating pontoons, barges, submersibles, or aircushion vessels.</p> <p>List of things that are not vessels under the national system:</p> <ul style="list-style-type: none"> • an aquaculture pen or aquaplane • a boogie board, surfboard, surf ski, or waterski • an unpowered inflatable raft or inner tube • a kiteboard, sailboard, or paddleboard • a pontoon connected to the mainland or floating structure permanently connected to shore <p>If a craft is not a vessel, then the national system requirements do not apply to it.</p>
Safe Work Procedure (SWP)	Directions on how work associated with a hazardous task is to be undertaken in a safe and standardised manner.
Safety Management Systems (SMS)	Document and system in place to ensure the safety of vessels and the people on board. The SMS describes how safety, maintenance and operation is managed on the vessel. They are required by legislation/AMSA for all domestic commercial vessels and kept up to date by the designated person/s.
Special Personnel	<p>For a vessel, means a person who is all of the following:</p> <ul style="list-style-type: none"> • not the master, a pilot or a member of the crew; • not a passenger of the vessel; • on the vessel to perform or assist the performance of the special work being carried out on board the vessel; or • an observer, trainee, person being coached or a coach; or • employed by or a volunteer for an emergency services organisation.
Unberthed Passenger	<p>For a vessel, means any person other than:</p> <ul style="list-style-type: none"> • the master or a member of the crew; or • special personnel; or • a child not more than 1 year old; or • a person on board the vessel because of the master's obligation to carry shipwrecked or distressed persons or because of circumstances the master or owner could not prevent.
Unique Vessel Identifier (UVI)	A unique number to help identify each domestic commercial vessel that stays with the vessel even during change of ownership.
Vessel	For the purpose of these procedures, any powered vessel that is capable of being used as a means of transportation on the water.

5. Authorities and Responsibilities

Details of the authorities and responsibilities of persons involved in SCU Boating Operations are provided in **Table 2**.

Table 2. Authorities and responsibilities of persons involved in SCU Boating Operations.

Authority	Responsibility
<p>Owner: Southern Cross University</p> <p>Chancellor: Sandra McPhee</p> <p>Vice Chancellor: Tyrone Carlin</p> <p>Faculty of Science and Engineering (FSE)</p> <p>Executive Dean: Jon Hill</p>	<ul style="list-style-type: none"> a. Ensure that vessel procedures are implemented and maintained in the Faculty. b. Ensure that all vessel operations are conducted safely and in accordance with relevant Australian legislation, regulations, standards and SCU policies, procedures and guidelines. c. Allocate sufficient resources for safe vessel operations in the Faculty. d. Faculty Dean to approve proposed vessel operations as part of the field trip authorisation process.
<p>Designated Person/s (not the same as designated contact person)</p>	<ul style="list-style-type: none"> a. Support the implementation of the vessel's Safety Management System. b. Monitor the safety of vessel operations and the effectiveness of pollution prevention controls. c. Ensure the vessel and crew have appropriate resources and shore support to operate safely and efficiently. d. Schedule vessel maintenance. e. Ensure regulatory compliance. f. Ensure that the SMS is current, complied with and regularly reviewed once a year. g. Be contactable by the Master or crew of the vessel.
<p>Boating and Diving Officer</p>	<ul style="list-style-type: none"> a. Provide oversight for managing University vessel operations. b. Ensure that all vessel operations are conducted safely and in accordance with relevant Australian legislation, regulations, standards and SCU policies, procedures and guidelines. c. Provide supervision, training, inductions and specialist advice to support staff and students involved with vessels. d. Maintain boating related record keeping (refer Section 18). e. Manage scheduled and unscheduled maintenance. f. The authority to approve, restrict, prohibit or suspend operations, or request additional safety practices, procedures or equipment to ensure safety.

Authority	Responsibility
	<p>g. Reports to the Faculty Executive Dean for all matters affecting the vessel and the vessels safe operation.</p>
Boating and Diving sub-committee	<p>a. Supports the Boating and Diving Officer. b. Assist in reviewing the effectiveness and content of boating procedures and documentation. c. Meets periodically at 1–3 month intervals.</p>
Fieldwork Leader	<p>a. Is directly in charge of the fieldwork. b. Can cancel or postpone the fieldwork if they deem the operation/s or sea conditions unsafe. c. Obtain approval from the appropriate Boating and Diving Officer and Faculty Dean for the proposed boating operation/s. d. Circulate relevant Boating Safety Plans, Fieldwork Risk Assessments, Safe Work Procedures and other vessel specific documentation to participants, crew and designated contact person/s. e. Ensure that the appropriate vessel and crew are engaged for the fieldwork or research activity. f. Ensure that directions given by the other responsible persons are enacted by all participants and that participants behave in an orderly manner. g. Have a good working knowledge of the <i>SCU Boating Procedures</i> and vessel's <i>Safety Management System</i>. h. Must be familiar with the <i>Boating Safety Plan</i> and associated emergency procedures.</p>
Master	<p>a. In command of the vessel and all personnel. b. Ensure seaworthiness and safety of the: <ul style="list-style-type: none"> • crew in the vessel; • vessel, and when relevant, the vehicle and trailer; • marine safety equipment that relates to the vessel; and • operation of the vessel. c. Must be familiar with the <i>Boating Safety Plan</i> and associated emergency procedures. d. Deliver crew inductions, training/drills, safety briefings and familiarisation.</p>

Authority	Responsibility
	<ul style="list-style-type: none"> e. Undertake pre-departure checks of the vessel, trailer and safety equipment. f. Complete the vessel logbook. g. Ensure all crew members comply with SCU policies and procedures and relevant regulations. h. Identify risks and implement control measures where necessary. i. Cancel or postpone vessel operations if they deem the work or conditions unsafe. j. Have a good working knowledge of the <i>SCU Boating Procedures</i>. k. Comply with the vessel's safety procedures and <i>Safety Management System</i> and maintain documentation. l. Regulatory compliance. m. Reports to the Boating and Diving Officer in any matters affecting the vessel and the vessels safe operation.
Skipper	Interchangeable terminology with Master
Designated Contact Person/s	<ul style="list-style-type: none"> a. Knowledge of all vessel operations for which they are notified. b. Must be familiar with and have access to the <i>Boating Safety Plan</i> and associated emergency procedures. c. Initiates the emergency response when contact is not made at the completion of a voyage. d. Communications between those on board the vessel, SCU and emergency services. e. Be contactable at all times during vessel operations. f. Escalate matters to authorised personnel when necessary. g. Reports to the Boating and Diving Officer for all matters affecting the vessel and the vessel's safe operation.
Crew and Special Personnel staff, students and visitors	<ul style="list-style-type: none"> a. Ensure safety and regulatory compliance of vessel operations, personnel and equipment. b. Comply with any lawful and reasonable directions of the Boating and Diving Officer, Designated Person/s, Master and Fieldwork Leader. c. Comply with the vessel's safety procedures and <i>Safety Management System</i>. d. Reports to the Master and Boating and Diving Officer for all matters affecting the vessel and the vessels safe operation.

Authority	Responsibility
Student Supervisors	a. Ensure that where a student’s research project involves any boating, the operation is conducted in accordance with <i>SCU Boating Procedures</i> .

6. Certificate of Survey

- a. All *domestic commercial vessels* are required to have a *Certificate of Survey* unless exempt.
- b. The University has a 4.25 m rigid inflatable vessel (MERC) that operates within 2C limits that requires a *Certificate of Survey*. This vessel must be inspected periodically (i.e. 5-year intervals) by an accredited marine surveyor to ensure it meets specified standards for construction, stability and safety equipment.
- c. All other University vessels are considered ‘exempt’ in accordance with the definitions provided in Schedule 1 of AMSA EX02 (refer also to **Section 3.5**).
- d. If external vessels (e.g. charter or fishing vessels) are used by University personnel, evidence of an in-date *Certificate of Survey* should be obtained (unless exempt).

7. Certificate of Operation

- a. All *domestic commercial vessels* are required to have a *Certificate of Operation* unless exempt.
- b. The University has a 4.25 m rigid inflatable vessel (MERC) that operates in Class C Restricted areas, and a fleet of human-powered vessels (i.e. canoes and kayaks) that require a *Certificate of Operation*.
- c. All other University powered vessels are considered ‘exempt’ in accordance with the definitions provided in Schedule 1 of AMSA EX03 (refer also to **Section 3.6**).
- d. All University human-powered vessels operate under one *Certificate of Operation*.
- e. If external vessels (e.g. charter or fishing vessels) are used by University personnel, evidence of an in-date *Certificate of Operation* should be obtained (unless exempt).

8. Geographical Area of Permitted Use

The geographical areas in which vessels are permitted to be used is specific to each vessel and defined on the Certificate of Operation or the Non-Survey Approval that pertains to each specific vessel.

Refer to the vessel-specific Safety Management System for further information.

9. Safety Management System

- a. The details to be included in Safety Management System (SMS) is described in Schedule 1 of Marine Order 504.
- b. Each vessel must have a documented and current SMS stored onboard, which includes:
 - i. summary of features;

- ii. crewing: qualifications, licences, number of people permitted in the vessel;
 - iii. vessel details (e.g. ID, hull type, class, length, propulsion system, engine power);
 - iv. identification of reasonably foreseeable hazards that could give rise to risks to health and safety in relation to its operations;
 - v. measures to eliminate or minimise the risks so far as is reasonably practicable;
 - vi. review of risk control measures;
 - vii. user induction and training requirements;
 - viii. procedures for on board operations;
 - ix. emergency plans and equipment;
 - x. planned maintenance schedule;
 - xi. routine inspection records;
 - xii. vessel pre-departure and operational checklists; and
 - xiii. logbook.
- c. For human-powered vessels, the SMS may be stored in the vehicle. It must be available onsite if requested by authorities.
- d. The SMS must be audited annually for verification, review and evaluation. Review of, and any changes to, the SMS are recorded in the SMS 'Document Revision Register'. The record of revisions includes:
- i. a version number;
 - ii. the name of the person/s making the change;
 - iii. a reference to the part of the document or record changed (if any); and
 - iv. the date of the change.
- e. All Masters and crew must have a good working knowledge of the SMS document.
- f. The Designated Person/s maintain oversight of how the SMS is working and ensure that they are kept up to date.

10. Risk Management

- a. A number of 'critical risks' (i.e. risks that have potential to lead to a fatality) have been identified under the SCU Work Health and Safety (WHS) Management Framework SCU. 'Critical risks' require specific preventive controls to be implemented to reduce the likelihood of occurrence.
- b. 'Critical risks' associated with boating include the following:
- i. Boating, including vessels, rafts and canoes
 - ii. Remote and isolated work
 - iii. Wildlife
 - iv. Diving

- v. Working around and in water
- c. Hazard identification, risk assessment and identification of control measures must be completed and documented, in consultation with those who will be involved with the boating or other vessel operation/s, prior to the operation/s commencing.
- d. A risk assessment, including **risk management procedures**, that address the boating duties generally undertaken at the University is included in each of the University vessel's SMS.
- e. The details to be included in the Risk Assessment in the vessel's SMS is described in Schedule 1 (Clause 2) of Marine Order 504.
- f. The vessel's **risk management procedures** shall be reviewed if:
 - i. the vessel undertakes an operation that differs from that normally undertaken by the vessel; or
 - ii. the Master of the vessel considers that the risks may have changed; or
 - iii. the vessel is involved in a marine incident.
- g. A *Fieldwork Risk Assessment* (FWRA) must be completed by the Fieldwork Leader and approved by the Faculty Dean before vessel use. The risk assessment should describe, so far as is reasonably practicable, all reasonably foreseeable hazards associated with the proposed operation/s. All identified risks will be eliminated or minimised through the planned control measures (refer also to **Section 13**).

11. Safe Work Procedures

- a. Following the *Fieldwork Risk Assessment* (FWRA) of the proposed boating or other vessel operation/s, Safe Work Procedures (SWP's) must be developed and implemented where required. These are to be created by the person conducting the work in consultation with those who will be involved with the operation/s.
- b. The SWP's must be forwarded to the relevant Supervisor for review and approval with the FWRA.
- c. Once approved, the Supervisor and Fieldwork Leader are responsible for ensuring that all persons conducting the work have read, completed any training and signed the SWP.
- d. The Supervisor or Fieldwork Leader must keep a digital file of all signed SWP's and must be able to provide these to the Boating and Diving Officer and/or Executive Dean upon request.
- e. SWP's should be reviewed and kept up to date as required.

12. Boating Safety Plan

- a. If FSE vessels are being used, the Fieldwork Leader must develop a *Boating Safety Plan* (BSP) and submit to the Boating and Diving Officer for review and approval. The *BSP* should be submitted at least 5 working days prior to the commencement of the trip.
- b. A BSP is not required for the use of third-party vessels. A *Third-Party Vessel Use Form* should be completed and submitted to the Boating and Diving Officer (refer also to **Section 17**).

- c. The primary purpose of the BSP is to ensure the Boating and Diving Officer and Designated Contact Person/s know the whereabouts of FSE vessels and personnel.
- d. The secondary purpose of the BSP is to provide the Fieldwork Leader an opportunity to plan the logistics of a boating fieldwork program, as it relates to:
 - i. Vessel access to sampling destinations;
 - ii. Nearby medical facilities;
 - iii. Crewing requirements; and
 - iv. Vessel weight capacity on the water and whilst being towed.
- e. The Fieldwork Leader is responsible for ensuring that the *Boating Safety Plan* is accurate and kept up to date.
- f. Changes to the approved BSP are to be addressed as follows:
 - i. Very minor changes, such as change to the tow vehicle, can be emailed through to the Boating and Diving Officer.
 - ii. Changes to significant details such as dates, locations and personnel can be documented in the *Boating Safety Plan Amendment Form*.
 - iii. If numerous changes to the approved BSP occur, it might be more appropriate to submit an updated BSP for review and approval.
 - iv. Details of any changes must also be provided to the fieldwork team and designated contact person/s.

13. Fieldwork Approvals

- a. Before the start of any University field trip involving boating or other vessel operations, the Fieldwork Leader must, as a minimum, have an approved *Fieldwork Risk Assessment (FWRA)* and a *Boating Safety Plan* or *Third-Party Vessel Use Form* (where relevant) as part of the fieldwork approval process.
- b. Once the boating or other vessel operations is approved, the Fieldwork Leader must ensure that the *Boating Safety Plan* or *Third-Party Vessel Use Form*, FWRA and relevant *Safe Work Procedures* are available to all participants so that they understand the likely risks and hazards involved, can perform the task safely and are equipped with adequate knowledge to react in the event of an emergency.
- c. Any changes to the proposed boating or other vessel operation must be approved by the Boating and Diving Officer before the activities take place.

14. Master Requirements

14.1 Qualifications for Masters of University Vessels

- a. The minimum certificate of competency required to operate a SCU vessel is the Coxswain Grade 3 Near Coastal (NC3).
 - i) Notably, the NC3 certificate only permits the operation of a vessel within 1 nm from shore or within Inland or Smooth Waters and carrying no more than 6 persons aboard the vessel.

- b. In accordance with AMSA Exemption 15 (EX15; refer below), the minimum requirement for a Master at SCU is a General Boat Driving Licence.
 - i) Approval required from Boating and Diving Officer prior to implementing (refer **Section 3.8**)
- c. No formal licence is required for operating human-powered vessels (e.g. kayaks, canoes).
- d. All University Masters must hold a current First Aid and CPR certificate. Minimum standard is HLTAID11 which includes CPR.
- e. The University can operate under AMSA *Exemption 15 – Marine Safety (Scientific research and educational activities)* (refer **Section 3.8**). Exemption 15 allows the University to perform duties on a domestic commercial vessel up to 7.5 m long used for scientific or educational activities without a certificate of competency, provided:
 - i) The Master holds a licence required to operate recreationally in the waters where the specified operation is being carried out (e.g. NSW General Boat Driving Licence);
 - ii) The vessel carries only employees of the vessel's owner and other persons inducted and trained in accordance with the vessel's Safety Management System;
 - iii) Operations are conducted within:
 - The Great Barrier Reef Region;
 - The Torres Straight zone;
 - Smooth or partially smooth waters; or
 - Other waters approved by AMSA for the specified operation.
 - iv) It has been approved by the *Boating and Diving Officer*

14.2 Master Induction and Training

- a. University Masters must complete several inductions (**Table 3**), in particular the *Master Vessel Induction* that covers the use of vessels and relevant equipment. This induction also includes the *Master Duties and Responsibility Statement* and *FSE Vessel Conditions of Use Statement*, which must be read and signed.
- b. The *Master Vessel Induction* will be conducted in two parts;
 - a. Online via a self-paced induction which comprises a presentation followed by an assessment;
 - b. Onboard, by the Boating and Diving Officer (or delegated person) for vessel familiarisation, SCU expectations and safety drill refreshers
- c. The *Master Vessel Induction* will need to be conducted annually. Refreshers may be required sooner if substantial changes have been made (e.g. following an incident).
- d. Prior to the *Master Vessel Induction* the *SCU Boating Procedures* and relevant vessel SMS's must have been read and understood.

Table 3. Master induction process.

Training Stage (In order of progression)	Details
Prior to Induction	<ul style="list-style-type: none"> • Achieve required minimum qualifications (refer to Section 14.1). Read <i>SCU Boating Procedures</i> • Read vessel <i>Safety Management System/s</i>
Inductions	Complete the following: <ol style="list-style-type: none"> 1. SCU Driving Safety Module 2. FSE vehicle induction 3. Towing a trailer induction 4. Boat Shed access induction 5. Master Vessel Induction (including emergency drills)

14.3 Master Vessel Trip Responsibilities

The tasks the Master is responsible for prior to, during and after a vessel trip are described in **Table 4**. Refer to **Section 5** for further details on authorities and responsibilities.

Table 4. Master vessel trip responsibilities at the different trip stages.

Stage	Procedure	Record Keeping
Trip Planning Stage	<ul style="list-style-type: none"> • Master to induct all vessel crew using the <i>Crew Vessel Induction Checklist</i> 	<ul style="list-style-type: none"> • Master to provide completed and signed Crew Vessel Induction Checklists to the Boating and Diving Officer
Pre-departure	Master and crew to read and understand the following boat and trip specific information: <ul style="list-style-type: none"> • Vessel's <i>Safety Management System (SMS)</i> • Trip specific Safe Work Procedures (SWP) • <i>Fieldwork Risk Assessment (FWRA)</i> • <i>Boating Safety Plan</i> 	<ul style="list-style-type: none"> • A copy of the SMS is always stored in the safety box on the vessel. • Signed/approved copies of SWP's, FWRA and <i>Boating Safety Plan</i> to be retained by Supervisor/Fieldwork Leader. • A separate copy to be kept onboard for the duration of the trip

Stage	Procedure	Record Keeping
Prior to Departing Boat Shed	<ul style="list-style-type: none"> Complete Vessel Specific <i>Pre-departure Safety Checklist</i> 	<ul style="list-style-type: none"> Completed checklists automatically completed online for the Boating and Diving Officer/s Master to raise any defects to the Boating and Diving Officer prior to departing Boat Shed
Prior to Departing Shore	<p>Master to:</p> <ul style="list-style-type: none"> Undertake a crew safety briefing (use <i>Crew Safety Briefing Guide</i>) Logon with onshore designated contact person/s (and Marine Rescue where relevant) Complete relevant sections of the vessel's <i>Logbook</i> 	<ul style="list-style-type: none"> Online QR Logbook is automatically recorded online for the Boating and Diving Officer. Completion of the safety briefing is recorded in the vessel's <i>Logbook</i> If mobile telephone service is limited, paper copies of the logbook are stored onboard and must be completed
Returning to Shore	<ul style="list-style-type: none"> Log-off with designated contact persons (and Marine Rescue if relevant) Complete the final relevant sections of the vessel's <i>Logbook</i> Notify the Boating and Diving Officer of any required maintenance, damage or incidents, and raise a Riskware where required. 	<ul style="list-style-type: none"> Completed logbook automatically recorded online for the Boating and Diving Officer (can be completed and submitted on paper where relevant)

Stage	Procedure	Record Keeping
Post-trip Procedure	<ul style="list-style-type: none"> • Master to finalise logbook • At the completion of each trip and once the vessel is back at the Boat Shed, the vessel and trailer is to be washed, engines flushed and an overall vessel inspection by the Master and Crew. Any defects are to be immediately reported. • Master to advise Boating and Diving Officers when vessel is secured and trip completed prior to departing Boat Shed. • The vessel, trailer and safety equipment is then to be inspected at the completion of each trip by the Boating and Diving Officer (or delegate) • Any unscheduled maintenance is to be carried out in a timely fashion 	<ul style="list-style-type: none"> • Any significant damage to the vessel or equipment is to be recorded in Riskware • Unscheduled maintenance recorded in the <i>FSE Vessel Scheduled and Unscheduled Maintenance Register</i> (SCU FSE W: drive) (refer also to S. 11).

15. Crew Requirements

15.1 Qualifications for Crewing University Vessels

- a. No formal qualifications are required for crew on University vessels.

15.2 Crew Induction and Training

- a. University crew members must complete a *Crew Vessel Induction* on the use of vessels and relevant equipment.
- b. The *Crew Vessel Induction* is to be conducted by the Master.
- c. If the Master is unavailable, the Boating and Diving Officer may be able to conduct the induction on their behalf.
- d. The *Crew Vessel Induction* will need to be conducted annually. Refreshers may be required sooner if substantial changes have been made (e.g. following an incident).
- e. Prior to the *Crew Vessel Induction*, the *SCU Boating Procedures* and relevant vessel SMS's must have been read and understood.

- f. At completion, the Crew Vessel Induction is to be signed by the inductee and provided to the Boating and Diving Officer.

15.3 Crew Vessel Trip Responsibilities

The tasks the crew are responsible for prior to and during a vessel trip are described in **Table 5**. Refer to **Section 5** for further details on authorities and responsibilities of crew.

Table 5. Crew vessel trip responsibilities at the different trip stages.

Stage	Procedure
Trip Planning Stage	<ul style="list-style-type: none"> • Read <i>SCU Boating Procedures</i> • Read vessel specific <i>Safety Management System/s</i> • Complete a vessel induction, this to be completed by the Master associated with the planned trip (using the <i>Crew Vessel Induction Checklist</i>)
Pre-departure	Read and understand the following vessel and trip specific information: <ul style="list-style-type: none"> • Trip specific Safe Work Procedures • <i>Fieldwork Risk Assessment</i> • <i>Boating Safety Plan</i>
During the Boat Trip	<ul style="list-style-type: none"> • Obey instructions provided by the Master of the vessel

16. Other Personnel Requirements

- a. Other personnel may include *Special Personnel* or *Unberthed Passengers*, depending on the non-survey approval for each vessel. Refer to the individual vessel SMS's for details.
- b. No formal qualifications are required for other personnel on University vessels.
- c. No formal induction or training is required for other personnel on University vessels.
- d. The Master must conduct a Safety Briefing for all personnel onboard.
- e. The Fieldwork Leader is responsible for delivering any relevant training for work being conducted.

17. Using Third-Party Vessels

- a. Only approved third-party vessels (e.g. charter, contractor, fishing vessels) may be used to conduct SCU work (i.e. research or teaching).
- b. A *Third-Party Vessel Use Form* needs to be completed (in lieu of a BSP) by the Fieldwork Leader.
- c. The following should be obtained from the external vessel provider:
 - i. Certificate of Operation;
 - ii. Certificate of Survey;

- iii. Any relevant exemptions;
 - iv. Vessel-specific *Safety Management System (SMS)*; and
 - v. Qualifications of the Master of the vessel (type, number and expiry; qualification should be sighted where possible).
- d. The SMS must show evidence that:
- i. the vessel covers the proposed activities to be undertaken;
 - ii. sufficient safety equipment will be available; and
 - iii. sufficient emergency plans/procedures are in place.
- e. A vessel inspection should be conducted by the Fieldwork Leader where possible to confirm the vessel's suitability.
- f. If the external provider cannot provide evidence of suitable certificates, qualifications, exemptions or processes that are in place, then an alternative provider or SCU vessel must be used.
- g. The fieldwork approval process (**Section 13**) must be followed.

18. Vessel Management Database

- a. The Boating and Diving Officer (or delegated person/s) maintain's the *Vessel Management Database*
- b. The *Vessel Management Database* includes details of:
 - i. Training, inductions, skills or competencies for each University Master and Crew;
 - ii. First aid and CPR certificate expiry dates;
 - iii. Vessel and trip-specific records, including scheduled and unscheduled maintenance, completed boating safety plans, logbook sheets and pre-departure checklists;
 - iv. Safety equipment records, including regular servicing and inspections; and
 - v. Blank templates.
- c. Induction and training records, logbook sheets and other vessel-related documents, will be kept for a minimum of 5 years and will be made available to relevant authorities upon request.
- d. The various registers to be maintained within the database are listed in **Table 6**.

Table 6. Registers to be maintained within the Faculty's *Vessel Management Database*.

Subject	Title of Register	Notes
Vessels and Trailers	FSE Vessel and Trailer Register	Includes details of all vessels and trailers within FSE. Details updated as required.
	FSE Vessel Scheduled and Unscheduled Maintenance Register	Includes details of scheduled and unscheduled maintenance to vessels and trailers within FSE. Record completion of the following: <ul style="list-style-type: none"> • Quarterly inspection • Annual service

Subject	Title of Register	Notes
		<ul style="list-style-type: none"> • Incidental maintenance undertaken
Safety Equipment	FSE Vessel Safety Equipment Register	<p>Includes details of the following safety equipment:</p> <ul style="list-style-type: none"> • PFD's: <ul style="list-style-type: none"> - serial numbers; - rating; - location (NMSC, Lismore, QLD) - date of next service (annual); and - service agent. • Flares: <ul style="list-style-type: none"> - number and type; - expiry date; - vessel; and - location. • First-aid kits: <ul style="list-style-type: none"> - vessel; - location; and - date of next service (annual). • Fire extinguishers: <ul style="list-style-type: none"> - type; - vessel; - location; - date of next service (6-monthly). • EPIRB <ul style="list-style-type: none"> - type; - expiry date; - vessel; and - location.
Master/Crew	Vessel Master Training Register Vessel Crew Training Register	<p>Includes details of Master and Crew. Details updated as required and include the following:</p> <ul style="list-style-type: none"> • Name; • Vessel operation qualification and expiry (if relevant); • List of completed inductions and emergency drills, including date of completion; and • First aid training certificates and expiry.
Third-Party Vessels	Third-Party Vessel Register	Includes details of third-party vessels used by University personnel.

19. Boating Safety Equipment

- a. All vessels must have life jackets, fire extinguishers, first aid kits plus other safety equipment specified by AMSA. The full list of equipment present is provided in the *Vessel Pre-departure Checklist* and in each vessels SMS.
- b. All equipment must be checked to ensure it is in good working condition, within the expiry date specified and operated within the manufacturer's recommendations.
- c. Any additional safety equipment as identified in the approved *Fieldwork Risk Assessment* must also be carried.
- d. Where access to primary medical care within 4 h is unlikely, at least one staff member must hold a current Remote First-aid Certificate. A Remote Area first-aid kit must also be carried.
- e. The Master must check that all safety equipment is on board prior to departure and that all personnel understand the correct use of such equipment (refer to **Section 14.3**).
- f. All safety equipment must be stored in the vessel in such a manner that it is readily accessible in an emergency and does not deteriorate.
- g. Any decision made by the Master regarding safe work and the wearing of safety equipment is final and must be followed by all persons on the vessel.
- h. Any worker or student who uses vessels and ancillary equipment must report any damage or malfunctions to their manager/supervisor and the Boating and Diving Officer as soon as practicable on return from the boating operation/s.
- i. The Boating and Diving Officer (or delegated person) must undertake quarterly vessel/trailer safety inspections to ensure that University vessels are well maintained, safety equipment is in date and ancillary equipment is functioning correctly. Record of the inspections is to be included in the *Vessel Management Database* (see **Section 18**) and noted in each vessel's *Logbook*.

20. Lifejackets/Personal Floatation Devices (PFDs)

- a. Personal flotation devices (PFDs) are a critical safety control and must be used in accordance with this procedure.
- b. The Master of the vessel has responsibility to instruct crew/passengers to wear a lifejacket/PFD when required.
- c. The Master of the vessel has responsibility to ensure crew/passengers lifejacket/PFD are correctly fitted
- d. All personnel must;
 - I. comply with lifejacket requirements at all times
 - II. Report defective or damaged equipment
- e. Each vessels SMS details when a lifejacket/PFD must be worn. This includes if:
 - i. work involves an elevated risk of falling in the water (e.g. working over the side of the vessel, manually retrieving/setting gear);
 - ii. working alone on a vessel;
 - iii. an emergency situation arises,

- iv. using human-powered vessels, or
- v. at anytime requested by the Master
- f. The use of a lifejacket/PFD is to be specifically considered in the *Fieldwork Risk Assessment* undertaken for every boating activity.
- g. Refer to state guidelines for requirements in relation to wearing a lifejacket/PFD:
 - i. NSW – <https://www.nsw.gov.au/driving-boating-and-transport/waterways-safety-and-rules/lifejackets-and-safety-equipment/when-to-wear-a-lifejacket>
 - For SCU operation in NSW in ‘enclosed waters’ it is a NSW legal requirement that a PFD be worn if operating a vessel <4.8 m in length alone, and for all persons on board between sunset and sunrise.
 - ii. QLD – <https://www.msq.qld.gov.au/Safety/Life-jackets>
- h. Lifejackets/PFDs must be serviced periodically to manufacturers’ specifications. A lifejacket/PFD Service Record is to be maintained by the Boating and Diving Officer or delegated person as part of the *Vessel Management Database* (see **Section 18**).
- i. Failure to comply with the requirements of lifejacket/PFD wearing may result in:
 - I. Removal from vessel operations
 - II. Suspension of field activities

21. Vessel Logbook

- a. A logbook must be kept for each vessel, and all entries kept for a minimum of 5 years;
- b. All vessel use must be recorded in the logbook, and at least one entry made for each day of use;
- c. Logbooks for FSE vessels are accessed via a QR code located in each vessel’s safety folder or on the engine cowling, or otherwise a hardcopy is completed (on the day) and submitted to the Boating and Diving Officer, as soon as practical following trip completion;
- d. The logbook must be begun prior to departing shore;
 - a. The logbook includes safety briefings which are required prior to departure
- e. The logbook must be completed at the completion of each day’s field work.

22. Vessel Re-fuelling

The following requirements apply to all re-fuelling of SCU University vessels and final responsibility lies with the Master. These procedures are designed to minimise fire, explosion, environmental contamination and personal injury risks associated with handling fuels.

22.1 Incident Control

- a. Immediate action if fuel is spilled:

- i. Stop re-fuelling immediately.
 - ii. Contain the spill using absorbent materials.
 - iii. Dispose of waste according to environmental guidelines.
 - iv. Notify the Boating and Diving Officer as soon as practicable.
- b. Further information and possible legislative reporting requirements can be found within Section 31

22.2 General Requirements and PPE

- a. Smoking, vaping, open flames and spark-producing activities are strictly prohibited within **10 m** of the re-fuelling area.
- b. Mobile phones and other electronic devices are **not to be used** during re-fuelling.
- c. Eye protection (from splashback)
- d. Ensure all caps are tightly secured on fuel containers and vessel tanks.
- e. Wipe up residual fuel and if necessary ventilate enclosed spaces before starting the engine.
- f. Fuel containers **must** be stored upright and secured during transport.
- g. Complete any required documentation in the vessel Logbook.

22.3 Portable Fuel Containers

- a. If on land, **Portable fuel containers must be removed from the vessel** and placed on the ground prior to filling.
 - i. This prevents static electricity discharge into the container.
 - ii. Containers must be placed on a stable, level surface and filled slowly to reduce splashback and vapour generation.
 - iii. Only use approved fuel containers that comply with Australian Standards and are in good condition (no cracks, degraded seals or missing caps) or those provided by SCU.
- b. If at sea, all care must be taken to protect the environment; containers may be re-fuelled in-situ ensuring
 - i. Local and state legislation is adhered to
 - ii. Sea- state is calm and risk of spillage is minimal
 - iii. Equipment such as funnels, spill kit, rags, absorbent material, drip tray, pouring spout are all implemented

22.4 Colour Coding of Containers

- a. To ensure safe fuel identification:

- **Red** – Unleaded petrol (including **4-stroke** outboards)
- **Green** – **2-stroke** premix fuel
- **Yellow** – Diesel

Only the correct fuel type is to be dispensed into each container. Labels should be clearly visible.

22.5 Fixed Fuel Tanks

- a. Engines, electrics and **all** ignition sources **must** be switched **off**
- b. Conduct re-fuelling in open, well-ventilated areas.
- c. Avoid overfilling. Leave adequate expansion space.
- d. Always maintain contact between the fuel nozzle and the fuel container or tank filler to dissipate static.
- e. Keep absorbent pads or spill kits nearby.

22.6 Storage of Fuel Onboard

- a. Storage of fuel onboard must be detailed in the FWRA and BSP
- b. A risk assessment must be completed for; both
 - i. An environmental pollution, and
 - ii. fire/explosion, and
 - iii. be included with the FWRA and BSP
- c. Only permitted fuel tanks will be considered (refer Portable Fuel Containers)
- d. Only;
 - i. calculated volume of fuel required for duration of daily voyage, or
 - ii. 40lts maximum permitted whichever is less
- e. The Boating and Diving Officer must be advised of intention to carry and stow fuel onboard prior to the vessel departing

23. Crew Safety Briefing

- a. The Master must undertake a crew safety briefing immediately prior to departing shore for all crew members and other personnel using the *Crew Safety Briefing Guide*.
- b. The crew safety briefing should include relevant details of the voyage and vessel operations, location and function of emergency safety equipment, communication and emergency protocols, crew welfare and any research/activity specific tasks.
- c. Completion of the crew safety briefing must be recorded in the vessel's *Logbook* and signed by the vessel's Master.

24. Scheduled Calling

- a. If operations are in an estuary or marine environment, the Master or Fieldwork Leader (or delegate) must logon with Marine Rescue either via the App, VHF ch.16 radio message or phone call.
- b. The Fieldwork Leader must implement a scheduled calling system to a University nominated onshore contact (designated contact person).
- c. If mobile reception in the area of operation is not reliable, then the Fieldwork Leader must organise an alternative communication device (e.g. InReach GPS unit, satellite phone).

- d. Details such as vessel's name, registration, number of persons on-board, accurate location (including GPS) and scheduled calling times must be communicated with the designated contact person/s.
- e. The designated contact person must also have a copy of the approved *Boating Safety Plan, Fieldwork Risk Assessment* and any associated documents.
- f. The designated contact person must fully understand their roles and responsibilities in the unlikely event your returned ETA has passed and be prepared and able to take on all tasks required to initiate emergency services

25. Weather and Sea Conditions

- a. Boats and other vessels must not operate in rough or hazardous weather conditions.
- b. The Master must check and monitor weather forecasts (i.e. wind, wave, swell, current and tidal predictions) prior to undertaking the activity and while on the water to ensure safe operating conditions.

26. Working Remote from a Vessel

In instances where members of the crew will be separated from the vessel, the following will occur:

- a. One member of the group must hold a current First Aid and CPR certificate. Minimum standard is HLTAID11 which includes CPR.
- b. The group must carry a suitable communication device (i.e. at minimum a mobile phone, however if required a satellite phone, VHF radio or InReach GPS unit).
- c. A field first-aid kit must be carried.

27. Maintenance of Vessels and Equipment

27.1 Scheduled Maintenance

- a. A scheduled vessel maintenance program (**Table 7**) is conducted to ensure that University vessels, trailers and related equipment is safe to operate and maintained in accordance with relevant rules and regulations, SCU requirements and manufacturer's specifications.
- b. Scheduled maintenance is managed by the Boating and Diving Officer and Designated Person/s, and completed by vessel users, the Designated Person/s and external contractors.
- c. All maintenance is recorded in the vessel *Logbook*. Detailed maintenance records are filed electronically on the *Vessel Management Database* (SCU FSE W: drive).

Table 7. Scheduled vessel maintenance program.

Item	Maintenance Schedule	Summary of Inspection
Vessel and Trailers	Before each trip	Visual inspection of vessel and trailer (<i>Vessel Pre-departure Checklist</i>)
	Completion of each trip	<ul style="list-style-type: none"> • Visual inspection of vessel and trailer • Wash vessel, trailer and motor
	Quarterly inspection	<i>Quarterly Vessel Inspection Checklist</i> completed
	Annual service	<ul style="list-style-type: none"> • Full service on the motor • Wheel bearings on the trailer replaced
Personnel Floatation Devices	Before each trip	Visual inspection (<i>Vessel Pre-departure Checklist</i>)
	Completion of each trip	Visual inspection
	Annual certification	Undertaken by a contractor
Fire Extinguisher	6-monthly inspection	Undertaken by a contractor
First Aid Kit	Before each trip	Visual inspection (<i>Vessel Pre-departure Checklist</i>)
	Completion of each trip	Updated as required
	Annual inspection	Visual inspection by FSE Technical Staff and updated as required
Flares	Before each trip	Visual inspection (<i>Vessel Pre-departure Checklist</i>)
	Quarterly inspection	Replaced prior to expiry date

27.2 Unscheduled Maintenance

- Very basic unscheduled maintenance can be undertaken by vessel Masters and crew.
- The Boating and Diving Officer can also be contacted for guidance and assistance.
- More complicated unscheduled maintenance should only be completed by qualified Designated Persons (or delegate) or contractors.
- All unscheduled maintenance records are filed electronically on the *Vessel Management Database* (SCU FSE W: drive).

27.3 Vessels Purchased by Research Funds

- Vessels purchased using research funds are to be managed and maintained using research funds for the duration of the project.

- b. At completion of the research project for which a vessel was purchased, the vessel will be transferred into the FSE vessel fleet (where appropriate), at which time ongoing management and maintenance will be undertaken by FSE.
- c. Once transfer into FSE vessel fleet is complete, FSE have full authority to utilise the vessel including hiring back to the initial research funding group;
- d. FSE then take on full authority of the vessel including removing from FSE vessel fleet if vessel becomes superseded, surplus to needs or otherwise without requiring input from other departments; and
- e. Seek to utilise those proceeds as FSE see fit.

28. Towing Trailer Vessels

- a. Only suitably experienced Masters are permitted to tow trailer vessels with a Gross Vehicle Mass >2 t.
- b. Masters must undertake a vessel *Towing a Trailer Induction* as part of the vessel safety induction delivered by a Boating and Diving Officer (or delegated person).
- c. Inexperienced Masters must always be supervised whilst towing a trailer vessel until they are deemed competent.
- d. Additional towing training with an external registered training organisation is recommended for trainee Masters with limited towing experience.
- e. Prior to departure, the towing capacity of the vehicle used must be checked that it is safe and legally compliant to tow the total weight of the vessel, trailer, and equipment.
- f. The braking mechanism and trailer must be checked quarterly by suitably experienced technical staff. Refer to the *Trailer Towing Safe Work Procedure* for further information.
- g. Any issues, damages or defects to reported to the Boating and Diving Officer

29. Fatigue Management

- a. Fatigue is recognised as a significant risk to safe vessel operations. The vessel operator implements a risk-based fatigue management approach.
- b. Personnel must be fit for duty prior to undertaking vessel operations. Personnel must;
 - i. Declare fatigue concerns prior to departure
 - ii. Report fatigue during operations
- c. The Master is responsible for assessing fatigue risk before and during operations. The Master must;
 - i. Monitor crew condition periodically
 - ii. Adjust operations as required or if requested
 - iii. Delay, modify or cancel operations where fatigue risk is unacceptable
- d. Fatigue risk factors include:
 - i. Extended work hours or field programs
 - ii. Inadequate sleep or rest
 - iii. Environmental conditions (heat, cold, sea state)
 - iv. Travel time to/from field site

- v. Repetitive or physically demanding tasks
- e. Voyage planning must consider:
 - i. Work/rest cycles
 - ii. Transit duration
 - iii. Environmental conditions
- f. Shifts over 10 h in a 24-h period, whilst operating vessels or operating motor vehicles, are not permitted.
- g. Whilst towing, a 15-minute break, every 2 h, is recommended to reduce driver fatigue. Refer to the *SCU Driving Safety Policy* for further guidance.

30. Smoking, Alcohol, Drugs and Prescribed Medication

- a. Given that University vehicles and vessels are considered as workplaces, smoking and vaping by any person is not permitted within either.
- b. The operation of, or participation in the operation of, the vessel while **under the influence of alcohol or drugs** that impair judgment, coordination or performance is strictly prohibited.
- c. Prescription or over-the-counter medications that may impair performance **must be declared to the Master** prior to departure.
- d. The Master has absolute authority to:
 - i. Refuse boarding
 - ii. Remove individuals from operations
 - iii. Suspend or terminate voyage activities where impairment risk is identified
- e. The following are prohibited behaviours onboard SCU or third-party vessels:
 - i. Consumption of alcohol or illicit drugs prior to or during operations
 - ii. Possession of illegal substances onboard
 - iii. Failure to declare impairing medication
- f. Any suspected impairment must be reported immediately to the Master
- g. The Master must:
 - i. Stand down the individual
 - ii. Record the incident
 - iii. Escalate via SCU incident reporting procedures where applicable
- h. All personnel must also consider the influence and/or side effects that prescription medications may have (e.g. hay fever or seasickness tablets can cause drowsiness).

31. Emergency Procedures

- a. Generic *Emergency Plans* have been developed as a guide to deal with a range of potential emergency situations and provide a co-ordinated, prompt and effective response to an identified emergency.
- b. The *Emergency Plans* are available as an appendix to each vessel's SMS.
- c. Additional considerations specific to the boating operation are to be included in the relevant section of the *Boating Safety Plan*.
- d. All persons onboard the vessel, including onshore support persons, must be prepared for emergencies by completing relevant training, knowledge and duties (**Table 8**).

Table 8. Training, knowledge and duties required for emergency preparedness.

Role	Training, Knowledge and Duties
Master	<ul style="list-style-type: none"> • Read, understand and have access to a copy of the vessel’s SMS and <i>Boating Safety Plan</i> for knowledge of relevant emergency procedures; • Undertake annual emergency drills relating to the <i>Emergency Plans</i>; • Master to brief crew on relevant emergency procedures through conducting scenario-based drills; • Master to conduct the vessel’s <i>Pre-departure Checklist</i> • Knowledge of the location and use of all communication devices, safety gear, fire extinguishers and first aid kits; • Possess a current First Aid qualification (minimum standard is HLTAID11 which includes CPR); and • Knowledge of local emergency contacts.
Crew	<ul style="list-style-type: none"> • General knowledge of the vessel operations; • Read, understand and have access to a copy of the vessel’s SMS and <i>Boating Safety Plan</i> for knowledge of relevant emergency procedures; • Undertake annual emergency drills relating to the <i>Emergency Plans</i>; and • Knowledge of the location and use of all communication devices, safety gear, fire extinguishers and first aid kits.
Other Personnel	<ul style="list-style-type: none"> • Knowledge of the location of the SMS and associated <i>Emergency Plans</i>; and • Knowledge of the location and use of all communication devices, safety gear, fire extinguishers and first aid kits.
Designated Contact Person	<ul style="list-style-type: none"> • Knowledge of all vessel operations for which they are notified; • Be familiar with and have access to the approved <i>Fieldwork Risk Assessment, Boating Safety Plan</i> and associated emergency procedures; • Be contactable at all times during vessel operations; • Initiate the <i>Emergency Response Process</i> (as described on the FWRA) when contact is not made at the completion of a voyage; • Maintain communications between those on board the vessel, SCU and emergency services if required; and • Escalate matters to authorised personnel when necessary.

32. Incidents, Hazards and Near-Misses

- a. To comply with Schedule 1 (Clause 9) of Marine Order 504, SCU must ensure that a written record is kept for the following matters:
 - i. Each hazardous occurrence;
 - ii. Each non-conformance; and
 - iii. The result of each investigation into a hazardous occurrence or non-conformance, including any corrective action taken to prevent it from happening again.

- b. If an incident has occurred, the Master must:
 - i. If required, contact local emergency services/authorities;
 - ii. Record hazards, near-misses, occurrences and non-conformances in the vessel *Logbook*;
 - iii. Notify the Boating and Diving Officer and onshore designated contact person of the issue as soon as reasonably practical after handling the incident;
 - iv. Record incidents, near-misses and hazards as soon as practicable (or at least within 24 h of it occurring) in SCU's incident and hazard management solution [RiskWare](#); and
 - v. If required, notify and submit the relevant forms to AMSA (c–e below).
- c. **Marine safety concerns** (any event that could endanger the safety of vessels or persons) are reported via the [marine safety concern form 355](#);
- d. **Marine pollution** must be reported using the online [Marine Pollution Report](#) or by calling the incident response number (1800 627 484); and
- e. If the marine incident is considered as '**notifiable**', the Owner or Master must, as soon as reasonably possible after becoming aware of the incident, submit [incident alert form 18](#). Additionally, within 72 h of becoming aware of the incident, [incident report form 19](#) must be completed. Notifiable marine incidents include:
 - i. Death of or injury to a person on board;
 - ii. Loss or presumed loss of a vessel;
 - iii. Collision with another vessel or an object;
 - iv. Grounding, sinking, flooding or capsizing of a vessel;
 - v. Fire on board;
 - vi. Loss of stability that affects the safety of a vessel;
 - vii. Structural failure of a vessel;
 - viii. Close-quarters situation; and
 - ix. Loss, or possible loss, of a person from a vessel (i.e. person-overboard, even if picked up).
- f. All submitted RiskWare reports will be initially reviewed by the SCU WHS team and relevant Supervisor/s. The Owner/Designated Person/s will review the incident with the Master (and crew if required), including what happened and actions to prevent similar incidents from occurring in the future.

33. Non-Compliance

- a. All SCU staff, students and other personnel must always adhere to these procedures.
- b. If non-compliance with these procedures occurs, relevant persons will receive a written warning detailing the remedial actions to take.
- c. A face-to-face debrief or re-induction will be arranged if required (e.g. failure to complete the Logbook or other mandated document).

- d. If the non-compliance continues, the issue will be immediately escalated to the Faculty Manager and Executive Dean.
- e. Any intentional non-compliance will result in immediate escalation to the Faculty Manager and Executive Dean.
- f. The Boating and Diving Officer and other Designated Persons have the authority to refuse access to FSE vessels.

34. Related Documents and Links

The SCU Boating Procedures, Boating Safety Plan template, approved Safe Work Procedures and other relevant boating information can be found on the [WHS and Technical Services](#) Blackboard Site.

Refer to **Section 3.13** for relevant SCU Policies and Procedures.

AMSA documentation and information:

- [National Law Act 2012](#)
- [Index of marine orders](#)
- [Marine order 504—Certificates of operation and operation requirements—national law](#)
- [Marine order 505—Certificates of competency—national law](#)
- [Exemption 2 - Marine Safety \(Certificates of survey\) Exemption](#)
- [Exemption 3 - Marine Safety \(Certificates of operation\) Exemption](#)
- [Exemption 15 - Marine Safety \(Scientific research and educational activities\) Exemption](#)
- [Domestic commercial vessels](#)