

# LOP's for Forster Tuncurry Wallis Lake FO20



**Version 1.0**

**23-09-2018**

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Second Section MRNSW SOP's

Third Section MR Forster Tuncurry SMS's



These LOP'S are to be read in conjunction with MRNSW SOP'S located at the back of this document

## DOCUMENT CONTROL

<b>Category</b>	Operations
<b>Version</b>	1.0
<b>Effective Date</b>	Oct 2018
<b>Authorized By</b>	Unit Commander
<b>Review Date</b>	23-10-2018

### 1 Purpose

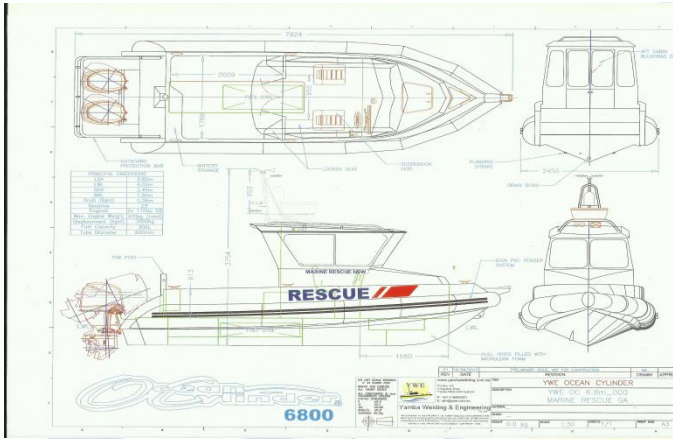
- 1.1 These LOP's have been developed and written only for rescue vessel WallisLake but do not replace MRNSW SOP's but must be read in conjunction with them and a copy is to be kept on board the vessel
- 1.2 Each LOP is subject to review or update as required because of changed local conditions or a review of MRNSW SOP's. all updates will be recorded in the update page located in the front of this manual
- 1.3 These LOP's have MRNSW SOP's located in the back of this manual and must be read if they are referred In the LOP
- 1.4 If skippers and crew hold copies of this document they are responsible for keeping them up to date

David Gibson

Unit Commander

[illegible]

## 2.0 Dimensions



Length Overall (LOA) 6.8 meters

Beam (B) 2.5 meters

Beam Internal 1.7 meters

Gunnel Height 600mm

Gunnel Door 1

Draft 540 mm Heavy

Displacement (loaded) 3.5 tonnes

Rear work deck length 2.00 meters

Cabin Storage area 1200mm x 1000mm

Rear Deck work area 2.00 x 1.7 meters

Dead rise 25deg

Hull weight 670kg

## 2.1 Engineering

Outboards 115 Hp x 2

Total engine weight 400kgs

Main engine - Voltage 12V D.C.

Outboard draft Min 540mm

Max speed 30knots

Counter rotating props ( yes )

POB max 6

Lockable cabin ( yes)

Rear deck partial roof ( yes )

Crew seating 2

Fuel tank capacity 300 litres. 1 x 100ltr 1 x 200ltr

### Suggested Crew Requirements

**Enclosed waters**

Day light Leading crew ,, 2 MRC

Night Opps Leading crew, 2 MRC

**Open waters**

Master/Coxswain and 2 MRC

## 2.2 Codes for Personnel Involved In This LOP

TITLE	ROLES	MINIMUM RATING REQUIRED
Skipper	Master of vessel, Helm in critical and Emergency situations	Coxswain/Leading Crew
1 <sup>st</sup> Officer	Primary helm, Fire, Tow master	Leading Crew
Crew	Deck hand, Life ring deployment, Radio Operator	MRC

## 2.3 Codes for Personnel Involved In This SOP

Marine Rescue Crewman	MRC
1 <sup>st</sup> Officer	Leading Crew
Master of the vessel	Coxswain/Leading crew
Radio Operator	R/O
Helmsman	Helm
Tow Master	TM
Fireman	FM
Bow hand	BH
Aft deck hand	ADH
Trainee (person being trained on a specific aspect of operations)	Trainee

Max plying limit from shore, 7Nm with a MR Master/Coxswain, Inshore Leading Crew

This vessel is operational only in Wallis and Smith lakes not including training when open water can be used notifying the ROM.

Refer to MRNSW SOP 26 Vessel off shore limits in the rear of this manual

All incidents involving damage to the vessel or injury to a crew member, must be reported to the Boating Officer, Operations Officer, Unit Commander and ROM



Refer to MRNSW SOP 06 and 17 Notifiable Incidents in the rear of this manual.

3.0	<i>Skippers Responsibilities</i>
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**The Master of the Wallis Lake is responsible for:**

- 3.1 Holding a valid General Boat Licence, MR Cert II Marine Transport or a higher Qualification.
- 3.2 Ensuring that they are competent to perform the required tasks and that they are not under the influence of any alcohol or drugs, including medications that may impair their ability to operate the vessel.
- 3.3 Assigning roles to crew.
- 3.4 Being familiar with the LOP's, SMS, MRNSW SOP's and associated documents.
- 3.5 Ensuring that vessel operations have been approved by the appropriate authority prior to putting to sea including obtaining operational plan part A from radio room prior to departure.
- 3.6 The decision to commence vessel operations based on the weather, the condition of the vessel, the abilities of those on board and the tasks to be performed.
- 3.7 The decision to cease vessel operations if conditions become unsafe or are likely to become unsafe.
- 3.8 Considering the views of those on board when assessing the safety of operations including the decision to cease or cancel operations.
- 3.9 Ensuring that all appropriate safety equipment is on board and operational before setting off.
- 3.10 The safety of themselves and the others on board the vessel.
- 3.11 Performing a pre-trip briefing for all personnel on board.
- 3.12 Issuing clear and concise instructions to those on board when necessary.
- 3.13 Allocating tasks to those on board and ensuring that they have sufficient instruction or experience to perform those tasks.
- 3.14 Refer to MRNSW SOP OP17



**3.15** Monitor navigation by maintain adequate situational awareness, by reference to ships head, charts, visual observation all around vessel and her environment, the Chart plotter and Radar which has been ranged to provide an adequate view of the area around the vessel.

**DO NOT RELY ON ELECTRONIC DEVICES ALONE.**

**3.16** Controlling and coordinating emergency responses and delegating tasks.

**3.17** Complying with all relevant rules and directions in relation to the operation of the vessel, including but not limited to:

**3.17** The International Regulations for Preventing Collisions at Sea (COLREGS)

Marine Safety Act 1998

Water Traffic Regulations 2000

Marine Safety (Commercial Vessels) Regulation 2010

State Rescue Board Statutes relevant to MRNSW

Marine Rescue NSW SOP

MACSAR

The directions of a Relevant Officer

Local Operating Procedures

**3.18** The maintenance of the vessel whilst it is in their use.

**3.19** Performing daily maintenance checks prior to departure.

Reporting any maintenance issues to the Designated Person as soon as practical.

**3.20** The correct reporting of any incidents, including to MRNSW, MACSAR, NSW Maritime.

**Refer to MRNSW SOP 06/17**

**3.21** Reviewing the operational and emergency procedures of the vessel and reporting any suggested changes to the Boating and Ops Officers.

<b>4.0</b>	<b><i>First officer Responsibilities</i></b>
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- 4.1 Holding a valid General Boat Licence, MR Leading Crew or a higher Qualification.
- 4.2 With instruction and supervision from the Skipper, become familiar with the handling characteristics of the vessel (manoeuvring, docking, anchoring, etc.)
- 4.3 Operation of critical systems (electronic navigation aids, steering, towing, safety apparatus, etc.)
- 4.4 Perform navigational watches while underway and safety/anchor/dock watches at other times
- 4.5 Assist the Skipper with the maintenance of required logbooks according to established practice and in established formats.
- 4.6 Under instruction of the Skipper, direct and supervise all members of the crew, and ensure that each understands and performs his/her assigned duties adequately.
- 4.7 Assist Skipper with training and orientation of new crew members.
- 4.8 Coordinate line-handling when coming to port, anchoring, towing, rafting
- 4.9 Deck maintenance and safety.
- 4.10 Participate in the design and execution of emergency drills, generally taking charge of on-scene response actions.
- 4.11 Help ensure written drill reports are properly logged.
- 4.12 Supervise Start up and Shut down checklist tasks.

## **5.0 *Crew Responsibilities***

Holding a valid General Boat Licence, MR Crew or a higher qualification.

- 5.1 Maintaining an active visual watch for other vessels and obstructions.
- 5.2 Line-handling when coming to port, anchoring, towing and rafting.
- 5.3 Deck maintenance and safety.
- 5.4 Participate in emergency.
- 5.5 Perform Start up and Shut down checklist tasks.
- 5.6 Preparation of vessel for sea
- 5.7 Operation of all electronic and mechanical apparatus within the scope of MRC responsibilities.



## **Risk Assessment**

<b>Category</b>	<b>Operations</b>
<b>Version</b>	<b>1.0</b>
<b>Effective Date</b>	<b>23.10.2018</b>
<b>Authorised by</b>	<b>Unit Commander</b>
<b>Review Date</b>	<b>Oct 2018</b>

### **1.0 Purpose:**

To identify and understand the risks and hazards associated with marine operations, to analyze the risks and hazards, and develop procedures and practices that will allow us to operate safely.

### **1.1 Scope:**

Risk assessment and resultant management technique is to be used each time our operation is faced with performing a unique, non-routine task that is not covered by a written SOP or Operations Directive.

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Risk assessment and resultant management technique is to be used each time our operation is faced with performing a unique, non-routine task that is not covered by a written SOP or Operations Directive.

### **1.3 Safety/Hazards**

Standard PPE to be worn by all crew members.

**Refer to MRNSW SOP OP 04 wearing of life jackets on MRNSW vessels**

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### **1.5 Safety/Hazards**

Standard PPE to be worn by all crew members.

**Refer to MRNSW SOP OP 04 wearing of life jackets on MRNSW vessels**



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<b>1.2.1</b>	Codes for Crew
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Coxswain/Master	<b>Skipper</b>
First Officer	<b>1<sup>st</sup> Officer</b>
Marine Rescue Crew	<b>MRC</b>
Navigator/Radio Operator	<b>R/O</b>
Bow hand	<b>BH</b>
Aft deck hand	<b>ADH</b>
Trainee	<b>Trainee</b>

## **1.6 Special Precautions**

When conducting a risk assessment it is important that all aspects of the operation being assessed are addressed and documented on the Risk Assessment work sheet. Addressing all aspects will ensure the analysis will produce results by which sound operational decisions may be made.

## **1.7 Overview:**

Risks are inherent in many of the Units activities. While risks cannot be eliminated completely, risk can be minimized and consequence mitigated by systematic risk assessment and management techniques.

Risk Analysis is a function of the probability of an incident occurring measured against the severity of its consequence(s).

Risk = Probability x Consequences

## **1.8 When to conduct a Risk Assessment**

1.5.1	When faced with a task that you or your crew has not before experienced.	All
1.5.2	When faced with a non-routine task for which there is no approved Standard Operating Procedure or Directive.	All
1.5.3	When faced with a task which in your opinion, or that of your crew, could lead to an unplanned event occurring.	All
	<b><i>Eg: Pulling a large yacht off a sandbar</i></b>	

## **1.6. Beginning the Risk Assessment**

1.6.1	Call a Crew Resource Management meeting.	Skipper
1.6.2	Obtain a Risk Assessment work sheet	1 <sup>st</sup> Officer
1.6.3	Discuss the task, identify and list „What could go wrong“?	All
1.6.4	Discuss and list the probability of this going wrong.	All
1.6.5	Discuss and list the consequence if that did go wrong“?	All
1.6.6	Apply each „probability/consequence“ to the Risk Matrix	1 <sup>st</sup> Officer
1.6.7	Where the „probability/consequence“ falls in the <b>Green</b> section of the Risk Matrix, develop your plan and continue with the task.	Skipper

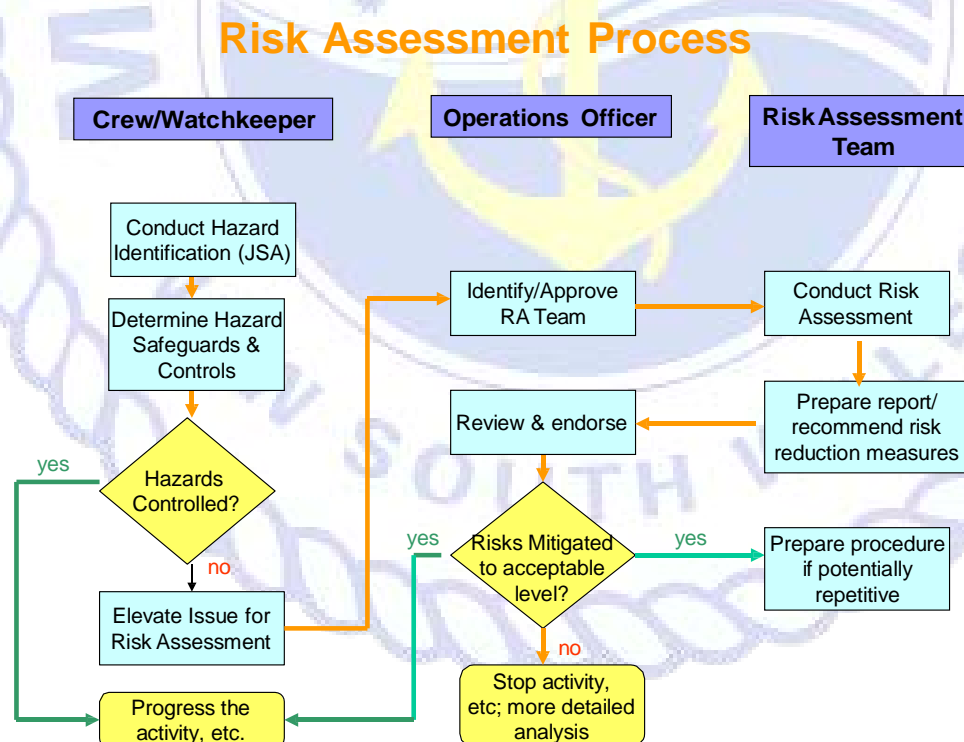
## **1.7 Risk and/or Consequence Mitigation**

1.7.1	Where the „probability/consequence“ falls in the <b>Yellow</b> section of the Risk Matrix, proceed to identify any means which will reduce the risk and/or mitigate the consequence.	All
1.7.2	Assuming these mitigation measures have been put in place, again apply your resultant „probability/consequence“ to the risk Matrix.	1 <sup>st</sup> Officer
1.7.3	If the „probability/consequence“ now falls in the Green section of the Matrix, develop your plan and continue with the task.	All
1.7.4	If the „probability/consequence“ remains in the <b>Yellow</b> section of the Matrix (after mitigation measures are in place) then consult with the Operations Officer prior to taking any further action.	Skipper
1.7.5	Where the „probability/consequence“ falls in the <b>Red</b> section of the Risk Matrix, Unit Commander is to be consulted before any further action is taken.	Operations Officer
1.7.6	In the case of 1.7.5 above, the Unit Commander will convene a detailed Risk Assessment, attended by the Operations Officer, Boating Officer and vessel Skippers. <b>Under no circumstances shall an operation be attempted if it falls in the „Red“ section of the matrix.</b>	Unit Commander

### 1.8 Follow-Up to Risk Assessment

1.8.1	Following any task which involved a Risk Assessment, a detailed de-brief shall be conducted.	Skipper
1.8.2	Where there is potential for a repeat of the incident, a Standard Operating Procedure shall be developed and submitted for approval.	Operations Officer

### 1.9 Risk Assessment Process



### 1.10 Risk Assessment Matrix

**Risk Assessment Matrix**

	A	B	C	D	E
1					
2					
3					
4					

#### Probability

10 **A** : Possibility of repeated incidents

**B**: Possibility of isolated incidents

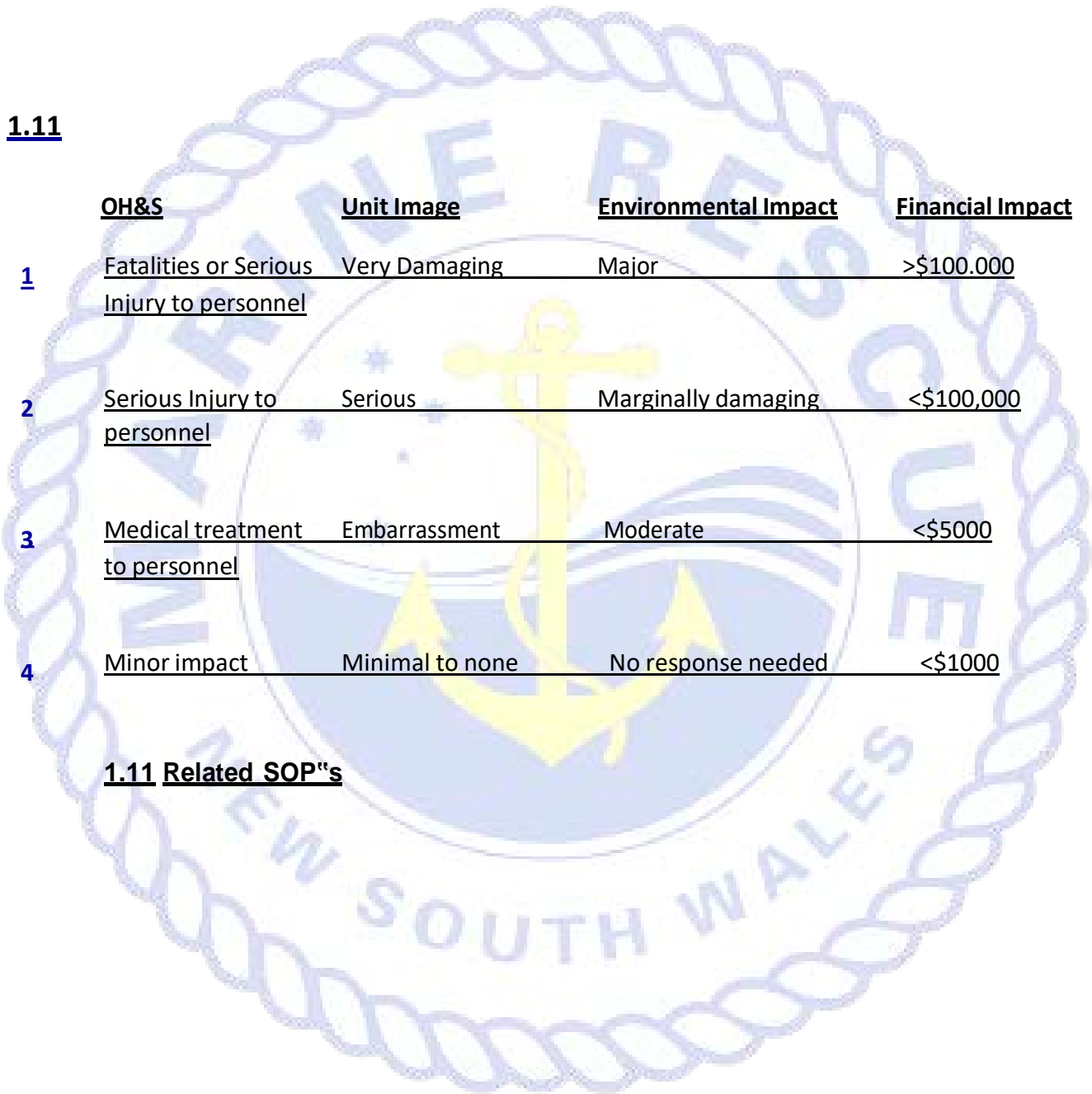
**C**: Possibility of occurring some time

**D**: Not likely to occur

**E**: Practically impossible

## Consequence

### 1.11



	<u>OH&amp;S</u>	<u>Unit Image</u>	<u>Environmental Impact</u>	<u>Financial Impact</u>
<u>1</u>	Fatalities or Serious Injury to personnel	Very Damaging	Major	>\$100,000
<u>2</u>	Serious Injury to personnel	Serious	Marginally damaging	<\$100,000
<u>3</u>	Medical treatment to personnel	Embarrassment	Moderate	<\$5000
<u>4</u>	Minor impact	Minimal to none	No response needed	<\$1000

### 1.11 Related SOP"s



## **Risk Assessment Work Sheet**

Date: \_\_\_\_\_ Prepared by: \_\_\_\_\_

Vessel Crew \_\_\_\_\_

\_\_\_\_\_

Operational Task \_\_\_\_\_

\_\_\_\_\_

### **Preliminary Assessment**

#### **Risk**

What could go wrong 1? \_\_\_\_\_

What could go wrong 2? \_\_\_\_\_

What could go wrong 3? \_\_\_\_\_

#### **Probability**

What is the Probability of it going wrong? \_\_\_\_\_

#### **Consequence**

What would be the consequence of 1? \_\_\_\_\_

What would be the consequence of 2? \_\_\_\_\_

What would be the consequence of 3? \_\_\_\_\_



# LOP Wallis Lake Forster Tuncurry

<b>2.0</b>	<b><i>Leaving Drive On Berth</i></b>
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## *Purpose*

**2.1** The purpose of this Local Operating Procedure is to provide a standard approach to operations whenever Lifeboat Wallis Lake is “Leaving the Drive on Berth”, such that all crew are aware of their respective duties and no conflict in methodology will occur due to the changing of skippers and/or crew from one crew to another.

## *Scope*

**2.2** This Local Operating Procedure covers that period of time between the crew’s arrival at the vessel, through to departure from Cape Hawke Harbour (outside the entrance).

## *Safety/Hazards*

**2.3** The following standard Safety Equipment shall be worn by, or be available to all crew members;

PFD1\*  
Sunscreen\*  
Marine Rescue hat or cap\*

Sunglasses\*  
Safety harness  
Personal EPIRB  
Wamblee location beacons

(\* Hereafter referred to as Standard Personal Protective Equipment (PPE))

## *Definitions/Terminology*

**2.4** Cape Hawke Harbour: From the bridge to the north eastern extremities of the break wall.

**2.5** Forster Boat Harbour: The marina in which the vessel is normally moored.

**2.5** Berth. The Drive On pontoon cradle which lifts “Wallis Lake FO20” clear of the water.

**2.5** PULSE POWER. The momentary application of throttles. Placing engines in and out of gear at idle speed in a PULSE action to move the vessel at the slowest/ Safest possible speed.

## *Special Precautions*

**2.6** TBA

**2.7** Due to the potentially confused or rough conditions on the bar, all crew must maintain a minimum 3 point hold on the vessel while crossing the bar.



# LOP Wallis Lake Forster Tuncurry

**2.8** The skipper of the vessel must warn crew members to hold fast, prior to accelerating the vessel.

**2.9** It is expected that the Skipper should take the helm during emergency and critical maneuvering situations.

## *Overview*

**2.10** Each time the rescue vessel departs the mooring and proceeds to sea it provides an element of interest to other vessel operators and the public at large. Accordingly, the image of Marine Rescue is on display and therefore it is of the highest importance that we are seen to act in a most professional and courteous manner at all times.

## **3.0**

<b><u>3.4</u></b>	<b><u>Pre Departure Checks</u></b>
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### **3.4.1**

Prepare vessel activation log for risk assessment, and complete vessel startup checklist.

**3.4.2** Brief crew of the purpose of the task (rescue, training etc.)

**3.4.3** Discuss Crew Resource Management

**3.4.4** Assign individual duties to crew

**3.4.5** Check vessel log for fuel quantity, defects or items of note

**3.4.6** Turn on engine management systems port and starboard Centre switch stays off turn on dash supply

**3.4.7** After initialization select day or night mode

**3.4.8** Select appropriate Ray marine MFD mode, for each station from Home screen.

**3.4.9** Crew to don communication heads sets and confirm comms with each other

**3.4.10** Confirm all radios and navigation aids are operational and worn ie wambellees

**3.4.11** Raise appropriate flags. Australian flag must go on starboard crosstree halyard as this is the position of most significance on our vessel, if other flags are to be flown. No flags flown at night.

**3.4.12** The NSW flag is to go on the port cross tree halyard, and the MR Flag to be flown at the cabin top flag staff.

**3.4.13** Confirm lifejackets are correctly worn by all crew

**3.4.14** Confirm all emergency equipment is accessible



# LOP Wallis Lake Forster Tuncurry

**3.4.15** Start engines and confirm each is running normally

**3.4.16** Check water flow from both engine exhausts

<b><u>3.5</u></b>	<b><u>Communications</u></b>
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**3.5.1** Provide watch room with identification numbers of the crew and create activation log

**3.5.2** Obtain latest weather and tidal information

**3.5.3** Obtain relevant position data of target (if relevant)

**3.5.4** Obtain description of target and circumstances at present time (if target is vessel requiring assistance)

**3.5.5** Create a waypoint for target on chart plotter. Name it target.



# LOP Wallis Lake Forster Tuncurry

<b>3.6</b>	<b><u>Leaving the Berth</u></b>
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**3.6.1** Call crew “prepare to leave berth”

**3.6.2** Skipper checks all clear astern visually and by using head sets to request confirmation from rear deck MRC

**3.2.6** Skipper calls “Release stern lines” – stern lines will be released followed by “Stern lines clear” in a loud and clear voice.

**3.2.7** MRC on starboard side to be the only person to communicate with wheelhouse.

**3.2.8** Ensure lines are outboard of Berth and laid on the dock clear of obstructions.

**3.2.9** Check if Harbour is clear and advise wheelhouse “Harbour Clear”

**3.2.10** TBA

**3.2.11** TBA

**3.2.12** TBA

**3.2.13** TBA

**3.2.14** Advise wheelhouse of any obstructions during all maneuvers when going astern from berth

**3.2.15** Skipper to check Helm is centered. 0 deg indicated on helm angle indicator.

**3.2.16** Skipper to advise crew “Going astern” and give three short blasts of horn.

**3.2.17** Reverse vessel from pontoon slowly using engines.

**3.2.18** TBA

**3.2.19** Call “Harbour stations” when clear of berth and moving toward marina entrance.

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# LOP Wallis Lake Forster Tuncurry

<u>Category</u>	<u>Underway</u>
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## **3.7 When underway**

- 3.7.1** Proceed from mooring at minimum safe operating speed.
- 3.7.2** Advise watch room of departure and estimated time of arrival at the target area
- 3.7.3** Sound appropriate signal(s) on departing the marina
- 3.7.4** Ensure all hatches and windows are closed
- 3.7.4** Limit speed to the minimum practical speed (less than 8 knots) until clear of the break wall if proceeding to sea and obey speed limits in the lake
- 3.7.5** Secure the cabin for sea, with cabin door open. Crew must maintain firm hand holds at all times.
- 3.7.6** Contact watch room every 30 minutes and provide a situation report
- 3.7.7** Check engine oil pressure, engine temperature, and alternator output every 30 minutes. Write up engine log every hour or at least once if operations are less than one hour in total duration.



# LOP Wallis Lake Forster Tuncurry



<i>Category</i>	<i>Returning to Berth</i>
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## 3.8

### *1. Purpose*

To provide a standard approach to Returning to Berth operations, so that all aboard are aware of their respective duties and there is no conflict in methodology through the changing of skippers and/or crew from one crew group to another

### *2. Scope*

Covers that period between the vessel entering Cape Hawke Harbour and the crew departing Forster Boat Harbour

### *3. Safety/Hazards*

Standard PPE to be worn by all crew members.

### *4. Terminology*

Cape Hawke Harbour. From the bridge to the north eastern extremities of the break walls.

Forster Boat Harbour. The boat Harbour in which the rescue vessel is normally moored.

Berth. The Drive On pontoon cradle which lifts "Wallis Lake FO20" clear of the water.

### *5. Special Precautions*

Due to the potentially confused or rough conditions at the entrance to Cape Hawke Harbour, all crew must maintain a minimum 3 point hold on the vessel while entering the harbour.

The skipper of the vessel will warn the crew to hold fast prior to accelerating or decelerating the vessel.

It is expected that the Skipper should take the helm during emergency and critical maneuvering situations.

### *6. Overview*

Each time the rescue vessel enters Cape Hawke Harbour whether towing or training, it provides an element of public interest. This gives an opportunity for all to demonstrate courtesy and a high professional standard of seamanship to other vessel operators and the public at large.



# LOP Wallis Lake Forster Tuncurry

<b>Category</b>	<b>Entering Harbour ,Marina and Berthing</b>
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## **3.9 On Entering Cape Hawke Harbour**

- 3.9.1** Advise the crew of the intention to enter the harbour.
- 3.9.2** Stow all deck and cabin gear. Advise crew to maintain a 3 point hold on the vessel.
- 3.9.3** Once in the harbour, reduce speed to less than 8 knots, observe 4 knot and no wash zones.
- 3.9.4** Assess weather conditions as relates to its effect on berthing.
- 3.9.5** Advise 1st Officer of special requirements.

## **4.0 Entering the Marina**

- 4.1** Announce Harbour Stations.
- 4.2** Reduce speed to minimum practical operating speed
- 4.3** Enter the marina at right angle to the entrance, giving consideration to wind and tide. Sound the appropriate sound signals(s)
- 4.4** Approaching berth, maneuver the vessel at slow speed, using PULSE POWER mainly to position the vessel.
- 4.5** Check mooring area for lines or debris in the water.

## **5.0 Berthing the vessel**

- 5.1** Approaching the berth, the Skipper will announce "Prepare to berth" crew to maintain a three point hold during manouver
- 5.2** Skipper will use forward or reverse PULSE POWER to bring vessel in to berth, until lined up with the V blocks on the dock and drive on under controlled power until bow sprite touches bow stop.
- 5.3** Once the starboard and port stern lines have been attached to cleat. Announce "SECURE"

# LOP Wallis Lake Forster Tuncurry



<u>Category</u>	<u>Securing Vessel</u>
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## **6.0 Securing the vessel**

- 6.1** Shut down engines
- 6.2** Lower flags and stow all gear
- 6.3** Check fuel quantity and advise skipper
- 6.4** Notify the Base the vessel is now secured on the mooring and closing down.
- 6.5** Return all Raymarine MFD to home screen
- 6.7** Write up the ships log, maintenance log and communications log
- 6.8** Hose down upper works, paying particular attention to the search light, Flir camera, and ADF aerial.
- 6.9** Ensure FLIR is in home position.

# LOP Wallis Lake Forster Tuncurry



Category	Flushing Engines and Power Down
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## **8.0 Engine Cooling System Flush out**

- 8.1** Connect to the fresh water hose to both the starboard and port outboard engines flushing ports and run fresh water at full flow for 10 min no need to run engines
- 8.2** From dock check water is flowing freely from water uptake under the hull
- 8.3** TBA
- 8.4** TBA
- 8.5** TBA
- 8.6** TBA
- 8.7** TBA
- 8.8** TBA
- 8.9** TBA
- 8.10** TBA
- 8.11** TBA
- 8.12** Turn off fresh water, close blue valve, and disconnect fresh water hose.
- 8.13** Power off on Fin Scan panel and replace all Raymarine MFD and Finscan covers then turn off main switches on the starboard side of the tow rope locker
- 8.14** Debrief crew
- 8.15** Collect all rubbish and vacuum floors
- 8.16** Wash/broom down the vessel
- 8.17** Carry out a visual scan of the vessel, confirming all is secure
- 8.18** Take rubbish bag off vessel and place in bins ashore
- 8.19** Lock the vessel cabin door
- 8.20** Lock Pontoon gate

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# LOP Wallis Lake Forster Tuncurry

Category	Operating at sea
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## 1.1 Purpose

To ensure that during periods spent at sea the vessel is operated in a manner that ensures crew safety and comfort and, vessel safety and efficiency. Further, that the crew monitor their work environment to reduce all foreseeable hazards and dangers.

## 1.2 Scope:

This LOP covers any period when the vessel is proceeding to, or returning from a task, but is not actively carrying out an activity covered by a specific LOP e.g. SAR, towing, rafting.

## 1.3 Safety/Hazards

Conditions at sea may be dangerous, when underway crew should be seated in the cabin unless engaged in specific and necessary duty on the deck. When crew is engaged in deck work the vessel must be helmed so as to provide them with a stable work platform. Also, crew on deck should maintain 3 points of attachment whenever possible.

Standard PPE to be worn by all crew members. When operating at sea standard PPE includes the attachment of a Personal Locator Beacon (5 available) to the crew PFDs.

Crew on duty outside the cabin engaging in deck work must also wear a Wamblee MOB beacon which will activate should it come into contact with sea water.

## 1.4 Terminology

PLB – Personal Locator Beacon

Wamblee – AIS MOB beacon

## 1.5 Special Precautions

Crew must monitor their work environment to reduce all foreseeable hazards and dangers. Skipper / 1<sup>st</sup> Officer must ensure all safety equipment is utilized by crew. Crew for their part should be vigilant during any passage whether at day or night and assist the Helm and Skipper by mentioning anything which may impact on the vessels progress **(IF YOU SEE SOMETHING, SAY SOMETHING)**.

The vessels electronic equipment which includes Radar, Chart plotter, Sonar, AIS, Flir Camera, and radios must be powered up and ready for use whenever the vessel is underway.

It is expected that the Skipper should take the helm during emergency and critical maneuvering situations.

## 1.6 Positions and duties





# LOP Wallis Lake Forster Tuncurry

The Skipper is responsible for navigation of the vessel including maintaining under keel clearance, plotting of waypoints, setting course and clearing distances.

The 1st Officer may if suitably experienced, take direction from the skipper in the performance of, any of the above.

## **1.7 Helm**

At no time shall the helm be left unattended.

Helm the vessel primarily by observation, secondarily by reference to Electronic Aids. Take direction from the skipper as to course and speed. Adequately warn the crew of all changes of vessel speed and course.

Monitor helm instruments to ensure engine temperatures and pressures and batteries charge at acceptable levels.

Maintain a look out for other vessels in the area of operation.

All helm orders shall be repeated by the helmsman prior to implementing.

All helm orders shall be confirmed by the helmsman once implemented.

## **1.8 Helm and Throttle orders are to take the following form.**

Orders depicted as port or starboard are examples, and can be used in either the port or starboard context.

Helm orders shall be given in degrees of rudder angle, e.g. "port twenty" = 20 degrees of port rudder.

Course orders shall be given as a compass course in degrees e.g. "steer two two zero"

The term "pulse power" refers to a method of throttle use where the throttle levers are engaged into gear for the briefest time possible to turn the propeller before taking the engine out of gear again. This method is used for close quarters maneuvering to restrict the vessels speed through the water to the minimum possible.

Order	Response	Confirmation	Meaning
Port 10	Port 10	10 of Port Wheel on	Turn the helm to indicate 10 degrees of Port rudder
Port 20	Port 20	20 of Port Wheel on	Turn the helm to indicate 20 degrees of Port rudder
Steer 240	Steer 240	Course 240	Alter course to 240 deg
Pulse Power	Pulse Power	NA	Until the skipper cancels this mode, all engine



# LOP Wallis Lake Forster Tuncurry

			commands are in pulse mode
Ahead port  When in pulse power condition	Ahead port	NA	Pulse ahead on the port engine by going into gear at idle then immediately back to neutral
Astern Starboard  When in pulse power condition	Astern Starboard	NA	Pulse astern on the starboard engine by going into gear at idle then immediately back to neutral
Slow ahead both	Slow ahead both	Both engines ahead slow	Place both engines in forward gear at idle
Stop Both	Stop Both	Both engines stopped	Put throttles into neutral
Stop Port	Stop Port	Port engine stopped	Put Port throttle into neutral
Slow ahead port	Slow ahead port	Port engine ahead slow	Put the port engine into gear at idle
Revolutions for 20 knots	Revolutions for 20 knots	Speed 20 Knots	Slowly advance throttles to bring the vessels SOG to 20 knots
Emergency stop	Emergency stop	Engines stopped	Pull throttles to neutral as quickly as possible and be prepared to go astern when ordered
Half astern both	Half astern both	Both engines half astern	Bring both engines to 1500 RPM in reverse gear

Never go directly from being in gear through neutral and back into gear without pausing a few seconds in neutral to allow the screws to stop revolving.

# LOP Wallis Lake Forster Tuncurry



<u>Category</u>	<u>Radio</u>
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## **1.9 Radio**

Obey all lawful commands made by the Skipper or 1<sup>st</sup> Officer.

Respond to all radio calls made to the vessel.

Maintain 30 minute SKED calls to base if Base has not called

Monitor Chart plotter, Radar and Sonar to maintain the safe passage of the vessel.

Monitor radios (VHF, DCN and 27Meg) and, at the direction of the master maintain radio communication with the MRB/other vessels, record radio communications in the vessel log.

Assist the Master and Helm by maintaining a look out for other vessels in the area of operation.

## **1.10 MRC**

Assist the Master, Helm and Navigator as requested.

Obey all lawful commands made by the Skipper or 1<sup>st</sup> Officer.

Maintain a look out for other vessels in the area of operation.



# LOP Wallis Lake Forster Tuncurry

<b>Category</b>	<b>Fuel Consumption</b>
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## 1.11 Fuel consumption at various speeds

<b>RPM</b>	<b>Liters/hr. per engine</b>	<b>SOG Knots</b>	<b>ENDURANCE Hours/900 liters</b>	<b>RANGE 900 liters Nautical Miles</b>
1200	5.2	7.7	86.5	666
1400	9.7	8.6	46.4	399
1600	15.2	9.3	29.6	275
1800	24	11	18.8	206
2000	32	13	14.1	183
2200	38	16	11.8	189
2400	45	18	10.0	185
2600	47	22	9.6	211
2800	56	24	8.0	190
3000	67	26	6.7	178
3200	72	30	6.3	184

Optimum cruising speed - green zone.

Maximum range - blue.

# LOP Wallis Lake Forster Tuncurry



<u>Category</u>	<u>MFD Operation</u>
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## **1.12 Operation of radar**

From the Home screen, select Chart and Radar, or just Radar.

Touch Radar pane if Chart and Radar selected to highlight Radar pane.

Select Menu bar

Select Power to turn the radar on/off, the radar will always power up in standby.

Select Radar to switch from standby to transmit

## **1.13 Operation of Chart plotter**

From Home screen, select one of the various chart and or combined chart/sonar, chart/radar screens

Use the – and + signs to zoom in or out

Touch the screen to set the cursor location. Distance of cursor to vessel is displayed in the top tool bar and cursor coordinates are displayed in bottom left corner of screen.

## **1.14 Operation of Sonar**

From Home screen, select one of the various sonar and or combined chart/sonar, screens if operating MFD while on dry dock switch sonar **OFF**

## **1.15 Collision prevention watch keeping using AIS**

The AIS is set to show any targets in range of the vessel.

Don't play with it.

## **1.16 Operation of Flir Camera**

From the Home screen select Flir camera all operations of the camera are performed on the MFD toggle top right hand corner or screen swipe

Select scene mode to objects/people in water.

The direction the camera is pointing is indicated at the bottom left of the screen.

# LOP Wallis Lake Forster Tuncurry



<u>Category</u>	<u>Weather</u>
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## **1.17 TBA**

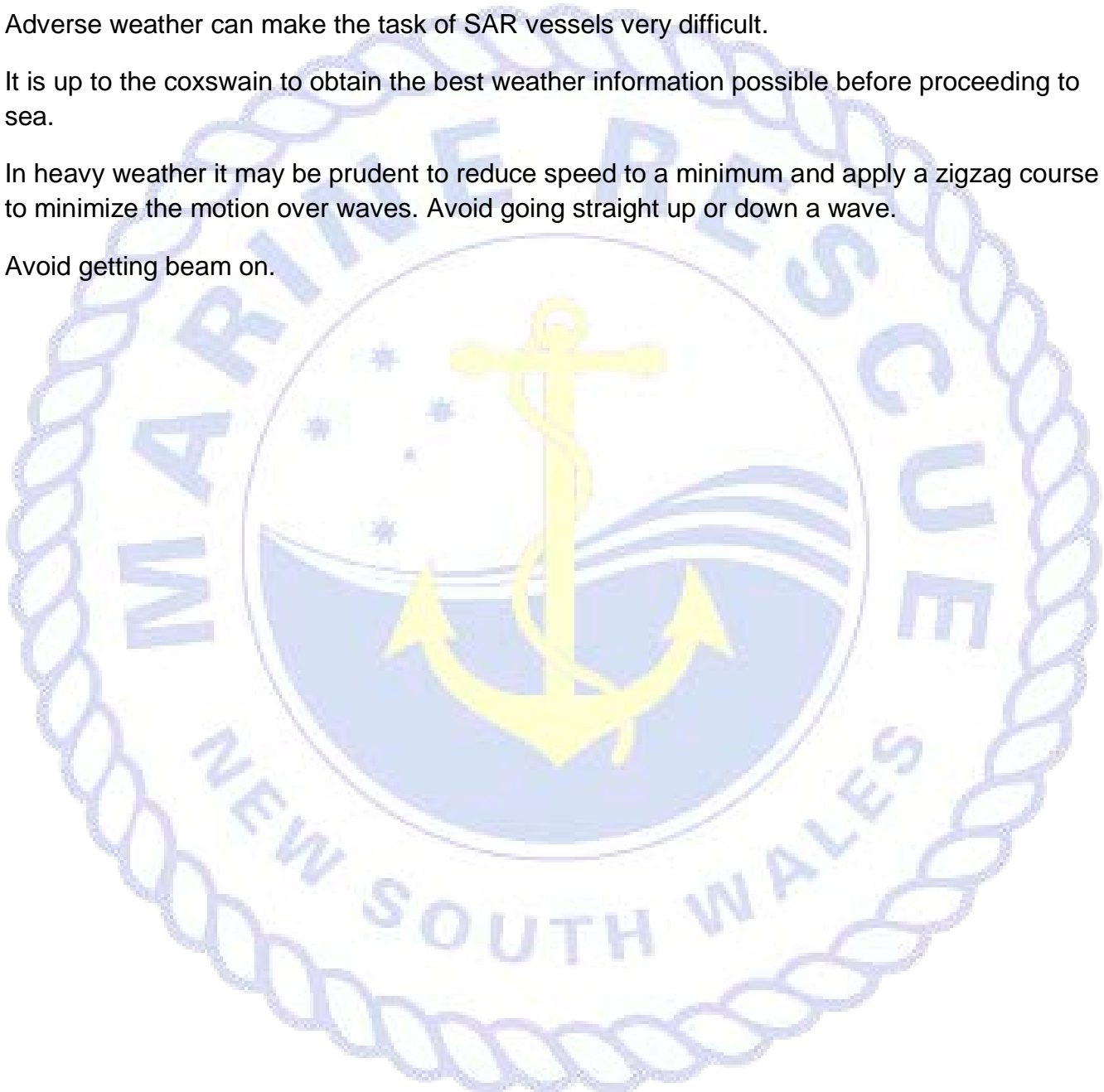
## **1.18 Adverse weather or sea conditions**

Adverse weather can make the task of SAR vessels very difficult.

It is up to the coxswain to obtain the best weather information possible before proceeding to sea.

In heavy weather it may be prudent to reduce speed to a minimum and apply a zigzag course to minimize the motion over waves. Avoid going straight up or down a wave.

Avoid getting beam on.



# LOP Wallis Lake Forster Tuncurry



Category	Night Operations
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## 2.0 Night Operations

As previously noted operating the vessel at night is inherently more difficult and dangerous than, during the day.

Vessel speed should be reduced to suit visibility as per COL REGs, and a sharp lookout maintained for hazards and other vessels.

Vessel speed should be further reduced during whale season, and extra lookouts posted to check for whale sign, and the FLIR camera should be monitored constantly.

To ensure the safety of the crew and vessel the Master / Helm must travel at a speed which allows forward vision and a safe stopping distance in case of an emergency.

Cabin to be illuminated by dimmed MFD and instruments only to maximize night vision.

Night Operations are especially dangerous in that deck and cabin areas of the vessel will be dimly lit to maintain night vision. Extra care must be taken when undertaking any deck duty at night. At all times crew need to be aware of the movements of fellow crew around the vessel and monitor their safety and health. Loss of personnel overboard has the potential to quickly escalate into a major incident especially so at night in poor light.

### 2.1 Helm

Helm the vessel primarily by observation, secondarily by reference to Electronic Aids. Take direction from the skipper as to course and speed. Adequately warn the crew of all changes of vessel speed and course.

Monitor Chart plotter, Radar, Sonar

Monitor helm instruments to ensure engine temperatures and pressures and batteries charge at acceptable levels.

Maintain a look out for other vessels in the area of operation.



# LOP Wallis Lake Forster Tuncurry



## **2.2 Radio**

Monitor Chart plotter, Radar, Sonar and, if directed by Master operate and monitor the FLIR camera, to maintain the safe passage of the vessel.

Monitor radios (VHF, DCN and 27Meg) and, at the direction of the master maintain radio communication with the MRB/other vessels, record radio communications in the vessel log.

Assist the Master and Helm by maintaining a look out for other vessels in the area of operation.

## **2.3 MRC**

Assist the Master, Helm and Navigator as requested.

Maintain a look out for other vessels in the area of operation.

## **2.4 Hoisting restricted maneuverability lights**

When towing at night the Restricted Maneuverability Light pendant, should be hoisted on the Main Flag Mast and the power lead plugged into the starboard cockpit DC Outlet. Ensure that DC Outlets are on in Fin Scan





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# LOP Wallis Lake Forster Tuncurry



<b>Category</b>	<b>MOB and Body Recovery</b>
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## *Man over Board and Recovering a Person from the Water*

***ALSO Refer to MRNSW SOP OP 27/06***

### **Purpose:**

To provide a method by which to ensure the safe and efficient means of recovering a person from the water.

### **Scope:**

Covers the time from the sighting of a person in the water through to the landing the person on the rescue vessel, checking of his/her wellbeing, communicating the situation to the radio base, and landing the recovered person onshore. Also includes the post incident debrief.

### **Safety/Hazards**

Standard PPE to be worn by all crew members.

### **Terminology**

Nil

### **Special Precautions**

Care must be taken to ensure the rescue vessel engines are in neutral when the person is being brought to the rescue gate of the vessel. Crew members attending the rescue gate shall attach their tether lines to the vessel prior to opening the gate.

### **Overview**

This procedure addresses three (3) scenarios involving the recovery of a person or persons from the water:

Recovery of a person overboard from the rescue vessel.

Recovery of a person from another source (another boat, swimmer, diver etc.)

Recovery of a body. (No contact is to be made with a body without consultation with the NSW police).

# LOP Wallis Lake Forster Tuncurry



## **Recovery of a Man Overboard from the rescue vessel**

Immediately a 'Man Overboard' is apparent, call 'Man Overboard' on (port/stbd) side of the vessel.

Press 'Man Overboard/Set wpt button on the MFD and hold for three seconds.

Skipper to decide to execute the appropriate turn (Williamson turn if wind is from astern, Anderson turn if wind is from ahead) **reduce speed for Anderson turn**

Maintain a visual watch on the MOB, indicating position by hand signal.

Appoint crew to man the rescue door and discuss plan of action

Crew attaches tether lines to the vessel and open the rescue door

Manoeuvre the rescue vessel with bow into the wind, so as to bring the MOB alongside the rescue door and "Heave to" Helm to place engines in neutral and call "screws stopped"

Recover the MOB onto the rescue vessel (may require more than two people)

Check the condition of the MOB. If medical assistance is required call the Radio Base and give details. Administer 1st Aid to the MOB.

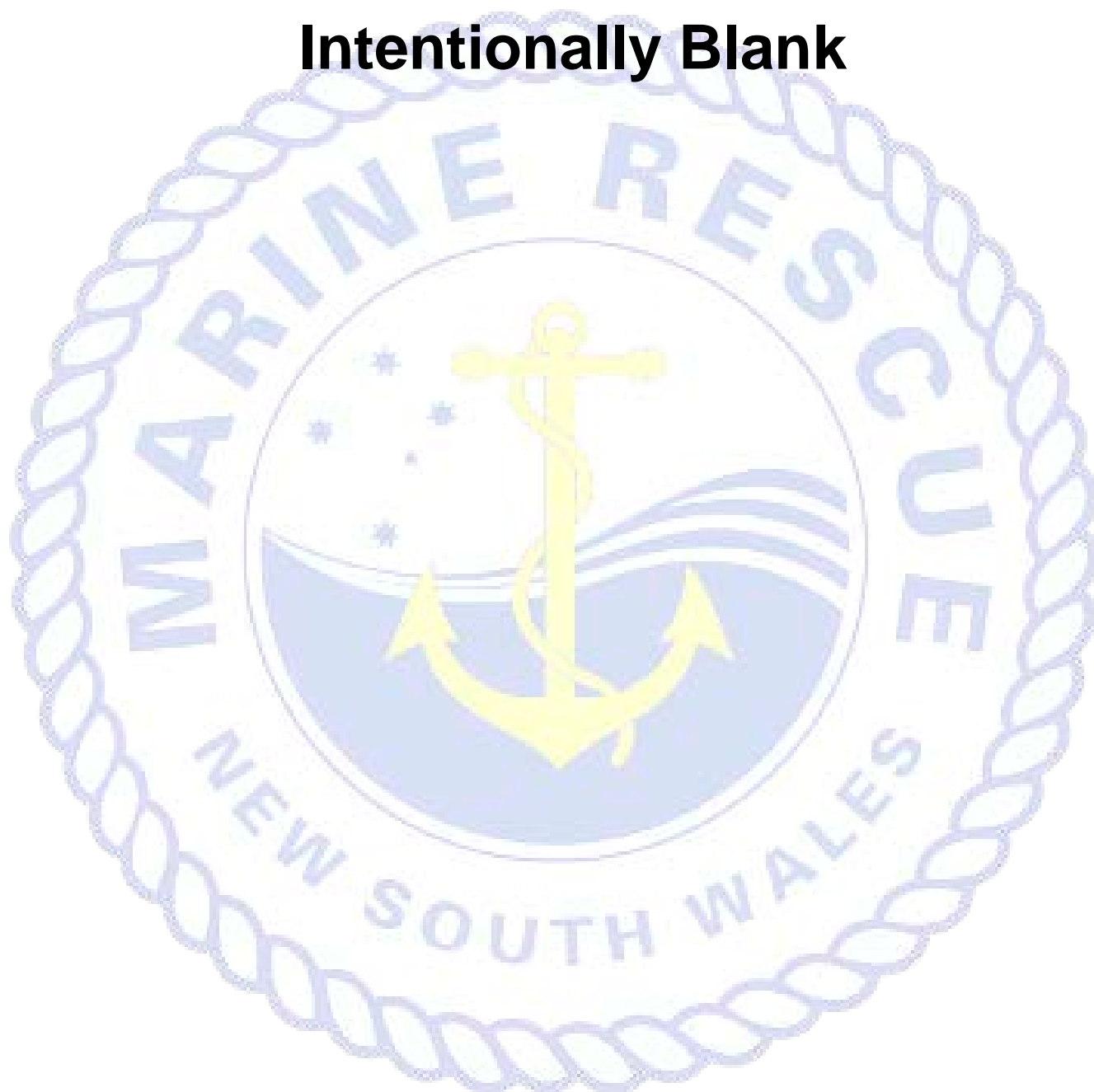
If medical assistance is required, cease all previous activity and return to harbour.

If medical assistance is not required, return to previous activity.

On return to harbour, conduct a full debrief of the incident and prepare an Incident report in accordance with LOPs/SOPs. **Refer to MRNSW SOP OP 06/17**



## Intentionally Blank



# LOP Wallis Lake Forster Tuncurry



## Recovery of a person or persons from another source

*ALSO Refer to MRNSW SOP OP 27/06*

Skipper to take the helm and record the position of the person in the water

Notify the Radio Base that a person or persons have been located in the water

If more than one person in the water, manoeuvre first to the downwind person

Appoint crew to man the rescue door and discuss plan of action

Crew attaches tether lines to the vessel and open the rescue door

Manoeuvre the rescue vessel so as to bring the person in the water alongside the rescue door and "Heave to"

Recover the person from the water onto the rescue vessel

(May require more than two people)

Check the condition of the recovered person. If medical assistance is required call the Radio Base and give details. Administer 1st aid.

Recover any additional persons from the water in accordance with steps above

Immediately return to base with the recovered person(s)

Present the recovered persons to medical authorities prior to releasing them from the vessel

Conduct a full debrief of the incident. Third party representatives to be notified and invited to attend

# LOP Wallis Lake Forster Tuncurry



## **Recovery of a body from the water**

### ***ALSO Refer to MRNSW SOP OP 27***

On sighting a body in the water, immediately record the position

Manoeuvre the vessel as close to the body as possible in order to determine there is no sign of life

Advise the Radio Base that a body has been located in position (Lat Long). Pass this message on either DCN1 or by mobile phone. Avoid the use of 27 MHz or VHF

Appoint lookouts to maintain a visual watch on the body.

Manoeuvre the vessel so as to maintain visual contact with the body

Await advice from the Radio Base prior to any further action

If a member of the NSW police is on the vessel when the body is sighted, discuss the recovery plan

(Is body bag and latex gloves available?)

Recover the body and place in the charge of the police

Return to shore and complete a debrief, attended by the Operations Officer and the police



# LOP Wallis Lake Forster Tuncurry

<b>Category</b>	<b>Refueling</b>
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## ***Refuelling***

### **Purpose:**

To provide a standard approach to refueling the vessel in order to ensure safety of the vessel crew and the vessel, and to prevent any fuel spill into the vessel or the environment.

### **Scope:**

From the period immediately prior to mooring at the fueling wharf, through to departure from the wharf.

### **Safety/Hazards**

Standard PPE to be worn by all crew members.

Fire extinguishers to be checked prior to refueling.

### **Terminology**

Nil

### **Special Precautions**

Only those crew essential to the refueling operation shall remain on the vessel while fuel is being transferred. Remaining crew are to relocate to the wharf and be available should an unplanned event occur.

Fire extinguishers shall be made readily accessible on the wharf, and a check made of any firefighting equipment provided on the fueling wharf.

### **Overview**

The vessel is fitted with 2 fuel tanks, Both amidships. one tank has a nominal capacity of 100liters the other 200ltrs These tanks are not interconnected.

During any refueling operation there is the potential for fuel spillage which could result in either fire or pollution. Accordingly, every attempt will be made to prevent spillage by closely monitoring fuel tank levels and fuel hose condition. Clean up rags are to be available to wipe up minor spillage.

Should a fuel spill in excess of one liter escape into the water during the refueling operation, the Skipper will immediately report this to the Operations Officer, outlining the amount spilled and the direction of travel (tide running in/out).

### **Securing at the Fisherman's Cooperative fuel wharf**

Deploy fenders on the relevant side of the vessel





# LOP Wallis Lake Forster Tuncurry

Bring the vessel alongside the fuel wharf, bow to the current

Secure a bow line to the fuel wharf

Secure a stern line to the fuel wharf

Secure a spring lines from the fuel wharf to the stern and bow of the vessel

Snug up all lines

Shut down engines

Advise tower FO20 will be off the air for refueling and will be back on air (insert time).

## **4.1 Refueling**

**4.2** Shut down all electrics aboard vessel

**4.3** Turn off all mobile phones

**4.4** Make ready fire extinguishers and mop up rags

**4.5** Hoist refueling flag (flag Bravo)

**4.6** Remove non-essential crew to the wharf. One person will remain onboard and man the fuel hose

**4.7** Obtain quantity of fuel required from finscan Dash Board

**4.8** Remove fuel cap one at a time to prevent loss of capes over board they are attached to each other

**4.9**

**4.10**

**4.11** confirm the amount to be pumped into each tank.

**4.12** Pass fuel hose from the wharf to the rear deck

**4.13** Advise the After Deck Hand of the amount of fuel to be taken in each tank

**4.14** Stand by at the bowser to call fuel quantity delivered

**4.15** Begin to deliver fuel into first tank

**4.16** Cease fueling when required amount is delivered (as called by the crewman at the bowser)

**4.17** Replace the fuel cap on the open fuel tank

**4.18** Repeat steps for other fuel tank.

# LOP Wallis Lake Forster Tuncurry



## **4.2 On completion of refueling**

- 4.2.1** Verify quantity of fuel delivered against invoice
- 4.2.2** Mark invoice with liters delivered and vessel name, then sign invoice
- 4.2.3** Replace fire extinguishers, lower flag 'Bravo' and secure after deck
- 4.2.4** Check fuel quantity onboard and record in logbook
- 4.2.5** Power up electrics
- 4.2.6** Call tower and advise intentions.
- 4.2.7** Start engines
- 4.2.8** Remove spring line and stern line
- 4.2.9** Remove bow line
- 4.2.10** Depart the fuel wharf
- 4.2.12** Recover fenders
- 4.2.13** Deliver fuel invoice to Treasurer's office at the Base

# LOP Wallis Lake Forster Tuncurry



Category	Towing
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***ALSO Refer to MRNSW SOP OP 05***

## **Purpose**

Towing disabled vessels is an integral part of Marine Rescue. The purpose of this Standard Operating Procedure (SOP) is to the rescue crew with a safe and systematic approach to securing the towline to the target vessel and affecting the tow to the designated drop off point.

## **Scope**

The scope of this SOP is from the time the rescue vessel first approaches the target vessel, through to the time the target vessel is delivered to the designated drop off point and the tow line is released.

## **5.1 Safety/Hazards**

Standard Personal Protective Equipment (PPE) to be worn.

Beware of extreme loads on towline. **Max tow load 1500kg. Achieved at 1300 RPM**

## **5.2 Definitions/Terminology**

<b>Pay Out</b>	To let out line to increase the length of the towline
<b>Shorten</b>	To take in or reduce the length of the towline
<b>Make Fast</b>	To secure the towline to the towing post
<b>Let Go</b>	To release the designated line
<b>Stbd Tow</b>	Angle the towline from the towing post to the stbd bollard
<b>Port Tow</b>	Angle the towline from the towing post to the port bollard

# LOP Wallis Lake Forster Tuncurry



## **5.3 Special Precautions**

During towing operations extreme loads on the towline and towing post are to be expected. Crew must remain forward of the towing post at all times.

Vessels less than 6 meters may be towed with the bar set and gates closed.

Vessels over 6 meters should be towed with the gates open and the tow line once around the lower Sampson post with a 3-2-1 knot at the top. Figure eights are preferred to a half hitch to replace the "1" when the tow is from the bottom of the post.

## **Overview**

While the basics of towing a vessel are constant, the size of the vessel being towed, the configuration of that vessel and the prevailing weather and sea conditions will determine the final actions. This is particularly so when bringing a vessel onto the drop off point, be it a mooring, a wharf, or releasing into the vicinity of a boat ramp or safe haven. The key to success in each such case lies in the application of Crew Resource Management where the final action plan is determined prior to commencing the relevant activity.

Communication with the target vessel will be on 27 MHz channel 94 or VHF channel 77

## **5.4 Preparing the tow**

Radio: maintain calling frequency until vessel has been sighted and identified then change to a working frequency. Slow the rescue vessel and approach the target vessel dead slow

Using the radio ask Vessel's Skipper to Confirm that he accepts responsibility for the tow and any damage incurred

Advise crew prepare for tow

Prepare towline

Attach the bitter end of the heaving line to the towline at neck of eye splice using round turn with two half hitches and place eye of towline over the rear port bollard. Then prepare the heaving line

Advise the Skipper when the tow gear is ready

# LOP Wallis Lake Forster Tuncurry



## **5.5 Approaching and securing the target vessel**

Radio: Brief the target vessel we will circle you at minimum safe distance have you any lines in the water or debris nearby. We will approach on your port side to pass the heaving line to a person on the bow to retrieve the heaving and tow line and fasten towline to a strong point closest to the bow. Then secure your vessel and determine drop of point for target vessel, don lifejackets, and lower and centre motor and trim the vessel aft, have anchor available if needed and maintain a listening watch

Manoeuvre rescue vessel around the target vessel to check for lines in the water and debris and assess sea conditions

Manoeuvre rescue vessel into optimum position to pass heaving line to target vessel, MRC adjacent to targets bow area and

“Heave to” (Starboard side to target vessel)

Pass heaving line to target vessel

Advise target vessel to haul in the heaving line with towline attached and secure towline to a strong point closest to the bow

Pay out towline

Manoeuvre rescue vessel dead slow ahead and “Heave to”

Advise rescue skipper when towline is secure on target vessel

When towline length established order “Make Fast”

Secure tow line to towing post using Tow hitch as low on post as possible, and announce “Made Fast”

Switch on towing light and red/blue flashing lights (if required)

Hoist Flag D. On port crosstree halyard, or on cockpit flagstaff if seas too large for safety (Keep clear of me, I am maneuvering with difficulty)



# LOP Wallis Lake Forster Tuncurry

## **5.6 At night, hoist restricted maneuverability lights instead of D flag**

When towing at night the Restricted Maneuverability Light pendant, should be hoisted on the Main Flag Staff and the power lead plugged into the starboard cockpit DC Outlet. Ensure that DC Outlets are on in Raymarine Fin Scan

Broadcast Security alert, warning vessels in the area to clear of vessel under tow

Advise target vessel crew to secure their vessel, don lifejackets lower and Centre the motor and trim vessel aft have anchor available if needed and maintain a listening watch

## **5.6 Commencing the tow**

Initially manoeuvre the rescue vessel off centre at an angle of 30 - 40 degrees ahead of the target vessel to avoid snubbing

Once under way maintain sufficient speed to keep a taught tow line

The towing line must be kept within the stops on engine protection bars either side of the transom to prevent heeling of the vessel.

Remain forward of the tow post at all times during the tow

Advise the base the target vessel is now under tow

Note: It may be necessary to periodically adjust the length of the tow line in order to optimise the position of the towed vessel relative to swell and sea condition

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# LOP Wallis Lake Forster Tuncurry

Category	MOB during Tow
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## **5.7 Action in the event of Man Overboard (either vessel) during tow**

### ***ALSO Refer to MRNSW SOP OP 27***

Announce 'Man Overboard' followed by 'where' (Stbd side of relevant vessel)

Press the Man Overboard keys on the GPS

Stop the rescue vessel and announce 'drop the tow'

By Radio advise target vessel to release the tow line

Maintain a visual watch on 'man overboard', indicating direction by pointing with extended arm.

Recover the tow line onboard

Proceed to recover the MOB on Starboard side of rescue vessel

Recover MOB and check and report condition

Arrange 1st Aid and further treatment as necessary

If tow is to be resumed, approach the target vessel and resume the tow in accordance with steps 7.8.6 through 7.8.10

## **5.8 Approaching the harbour entrance**

Assess sea conditions at the harbour entrance

Determine the need for additional measures to ensure the integrity of the tow, e.g. deploy a drogue from towed vessel

Determine the need for berthing assistance Advise towed vessel to deploy additional measures (if deemed necessary)

Secure the rescue vessel for entering harbour

Request Radio Base to broadcast Securite alert

Note: If conditions at the entrance are considered potentially unsafe, the skipper may elect to remain at sea until conditions improve





# LOP Wallis Lake Forster Tuncurry

## **5.9 Shortening the tow**

Advise crew to prepare to shorten the tow

Manoeuvre the rescue vessel to provide slack in the tow line

Reduce the hold on the towing post to one turn

Shorten the tow, maintaining a clear deck.

Advise 1st Officer to "Make Fast" when tow is reduced to required length

Secure tow line on the towing post using 3, 2 & 1 hitch and announce "Made Fast"

## **5.10 Releasing the target vessel at the designated drop off point**

Discuss action plan to drop off the target vessel

Deploy fenders Stb side rescue vessel, port side target vessel

Manoeuvre the rescue vessel as necessary to bring the target vessel to the designated drop off point

Advise target vessel to release the tow line

Recover the tow line and the heaving line

Recover fenders

Obtain details as necessary to complete Assist report form

Advise the Watch room the tow is now complete

Note: When approaching the marina entrance or if required to drop-off a large vessel at a wharf, skippers should consider transferring the tow to either the port or starboard bollard to maintain the vessel's desired position astern.

If a vessel is to be laid off on the pump out wharf it must first be towed into the southern end of the marina, turned around and then berthed starboard side to the pump out wharf.

# LOP Wallis Lake Forster Tuncurry

Category	Rafting
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**5.11 Rafting.** The following is provided for use in the event a vessel is to be rafted to the rescue vessel. Rafting will only take place inside the harbour.

Discuss and determine the action plan. Plan will include anchoring the target vessel prior to rafting

By Radio: pass action plan and instructions to the target vessel

Prepare rafting ropes. Minimum of 4 ropes required

Deploy fenders as necessary

Come alongside the pre-determined side of the target vessel

Secure target vessel to rescue vessel with a forward breast line and then a stern breast line, passing the eye end of the line to the target vessel.

Deploy forward and aft spring lines

Adjust lines so as to warp the target vessels stern ahead of the rescue vessel stern by approx. 2 meters

Adjust all lines so as to parallel each vessel fore and aft

Tighten and secure all lines

Proceed to designated drop off point

If target vessel is to be put alongside a wharf, advise target vessel crew to have lines ready

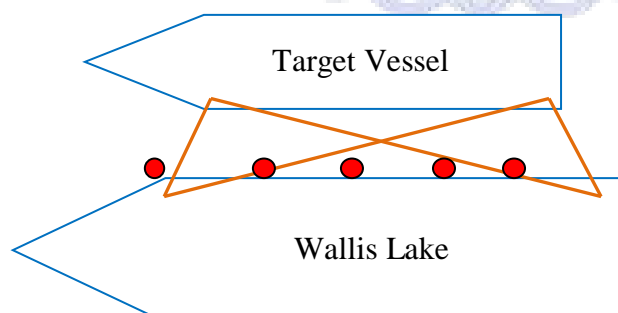
Releasing the target vessel at the designated drop off point will require the removal of the various lines at a time determined by the skipper.

Ensure crew have sufficient time to remove lines, verify all unrequited lines are clear.

Proceed with beaching

## 1. Rafting

**To read in conjunction with MRNSW SOP OP 05**



Prior to rafting a vessel alongside the rescue vessel, the skipper will conduct a crew resource meeting to discuss the size of the vessel to be rafted, the number and position of lines and position of fenders.

# LOP Wallis Lake Forster Tuncurry





# LOP Wallis Lake Forster Tuncurry

Category	Fire
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## 6.0 Fire on Board

### **Purpose:**

To provide the crew with an efficient and systematic approach to fighting a fire onboard the rescue vessel, using the onboard firefighting equipment and passive mitigation systems.

### **Scope:**

From the first indication of fire through to the finalization of the post incident debrief.

### **Safety/Hazards**

Standard PPE to be worn by crew at all times

Ingestion of smoke and/or toxic fumes

Burns

Asphyxiation

### **Fire Fighting Terminology**

“Fire, Fire, fire”, followed by location of the fire

E.g.: “Fire, Fire, Fire, fire in the engine room compartment”

### **Special Precautions**

The use of firefighting agents in confined spaces will displace air and therefore inhibit breathing. If a crewman is required to enter a confined space when there is a fire onboard, there must be a backup crewman in support in order to retrieve the first mentioned crewman in case of distress or collapse.

### **Overview**

The master is to train the crew in the location and correct usage of fire equipment on board and conduct fire drills on Monday crew change over.

The master is also to use the Find, Fault, Isolate, Alarm Monitor test panel located on cabin helm station, as well as train crew in appropriate responses to alarms and faults.

In the event of a fire onboard, the Skipper will take the wheel, the radio operator will transmit a PAN PAN and location, the First Officer will fight the fire, and will be supported as necessary by the Marine Rescue Crew.

This vessel is equipped with 2 portable fire extinguishers for Conventional firefighting of small containable fires. All items are in accordance with NSCV PART C SECTION 4 “FIRE SAFETY”

# LOP Wallis Lake Forster Tuncurry



Location of extinguishers are alongside port seat and starboard side next to main battery switches

**ABE Powder:            Red with a white band            All fires**

## ***In the event the fire is controlled and extinguished***

Advise the Base the situation via hand held once in raft

Assess the damage and determine the seaworthiness of the vessel

Determine if the engines can be safely restarted

If the vessel can be made operational, return to base.

If the vessel is not operational, request assistance.

## **On the announcement Fire Fire Fire, Fire in the vessel cabin**

Take a position fix on the GPS

Assemble both fire extinguishers and fire blanket away from the fire area

Broadcast Pan Pan and notify the Base of the vessel position and situation position and situation

Investigate the location and nature of the fire

Assign a crewman to the bow to prepare to release the life raft.

If the fire is of an electrical nature, deploy the Red (Dry Chemical) extinguisher, and switch off all circuits on the Ray marine Fin Scan panel and breaker panel near the rope locker stb side stern. This will disable all radios communication must now be carried out via mobile, satellite phone, or hand held VHF.

If the fire is consuming combustible materials such as furnishings, cushions etc., deploy either extinguisher and or the fire blanket.

On controlling the fire, assess the damage and notify the Base of the situation

If the fire cannot be controlled, act in accordance with steps 8.6.10 through 8.6.15

If the vessel can be made operational, return to base.

If the vessel is not operational, request assistance.

# LOP Wallis Lake Forster Tuncurry

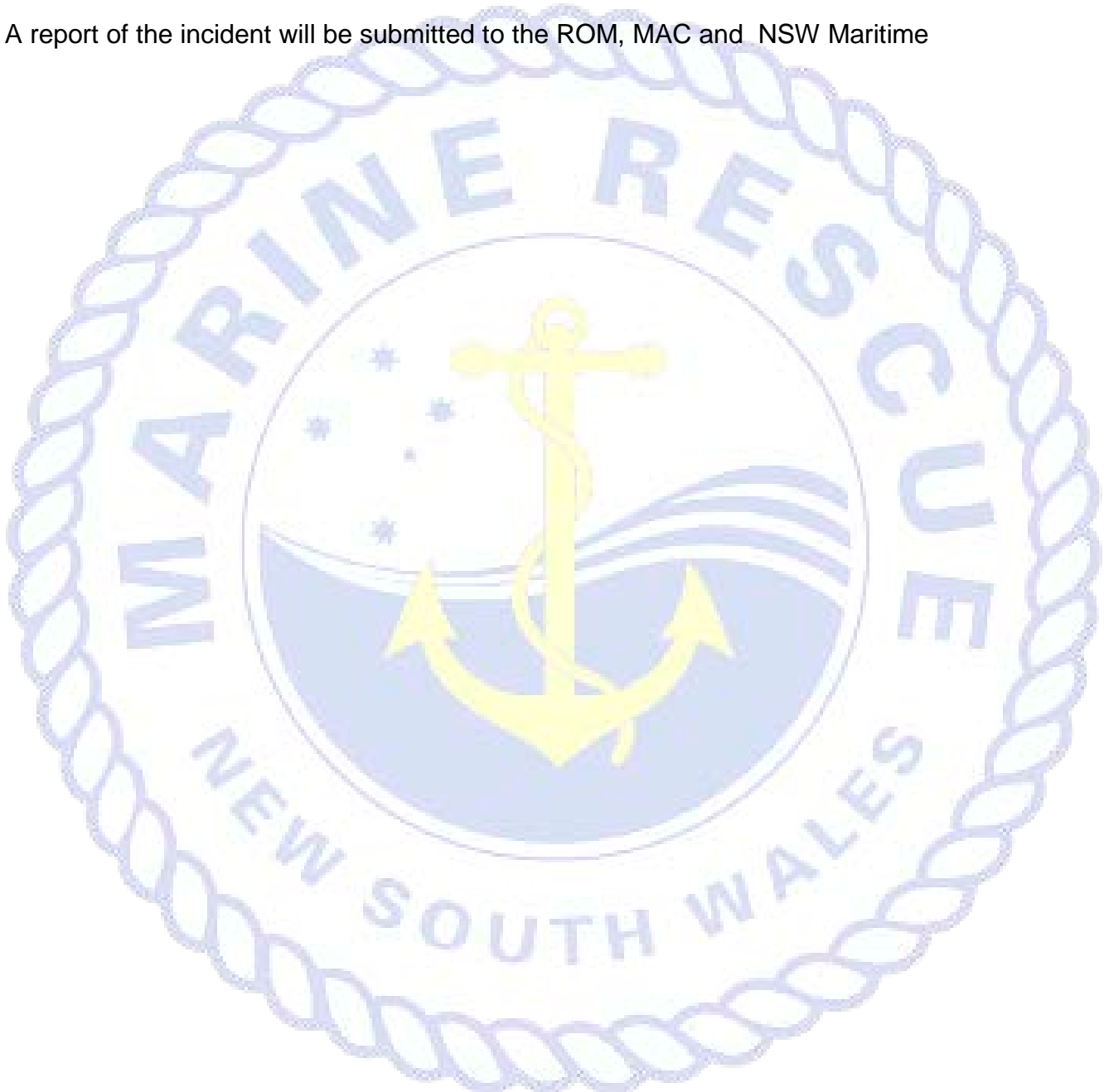


## **On return to base**

After securing the vessel (or being landed by another vessel) a full debrief will be conducted. This will be attended by all crewmen and the Operations Officer

Following the debrief, a full report on the incident will be compiled for submission to the Unit Commander

A report of the incident will be submitted to the ROM, MAC and NSW Maritime







# LOP Wallis Lake Forster Tuncurry

Category	Anchoring
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## 8.0 Anchoring

### 8.1 Purpose:

This Standard Operating Procedure (SOP) outlines the action steps necessary to safely and efficiently anchor the rescue vessel, monitor the location of the anchor, and to recover and secure the anchor.

### 8.2 Scope:

The scope of this SOP is from the time the skipper of the rescue vessel brings the vessel into the desired position for the placing the anchor, through to when the anchor is safely secured and stowed and the vessel is again underway.

### 8.3 Safety/Hazards

Standard PPE is to be worn (see **LOP 2**).

Crew must exercise care when working in the vicinity of the anchor chain. Crew on the bow of the vessel must operate from inside the bow rail and wear and securely attach a safety tether.

### 8.4 Definitions/Terminology/Hand Signals

Verbal	Use Head Sets
Lower the anchor	Thumb pointing down
Anchor on the bottom	Moving hand horizontally back and forth
Stop Lowering or Raising	Palm open and hand vertical, arm outstretched towards the operator
Veer more chain	Number of fingers to required meters of chain to be veered, 1 fingers = 10 meters of chain
Raise the anchor	Thumb pointing up
Move ahead	Bending arm at elbow in up and down motion
Direction of anchor	Arm pointing in direction also means continue forward at current speed.



# LOP Wallis Lake Forster Tuncurry



## **8.5 Special Precautions**

When the anchor is being lowered the warp must not be allowed to surge and the anchor warp must never be veered to its total length such that the weight of the rode is taken on the bitter end of the warp.

## **8.6 Overview**

The rescue vessel is equipped with 10 meters of chain, plus 100 meters of warp and a 9 kg plough anchor.

The anchor is veered from the cabin hatch to a bowman and the rode fed through the hatch to the bowman to avoid rope burn damage to the vessel

Water depth to anchor rode ratio should not be less than 3:1 when the vessel is anchored for a short period of time and 5:1 if the vessel is to remain at anchor for an extended period.

## **8.7 Preparing to anchor**

Maneuver the vessel to the required position, bow to the wind/swell

Ascertain depth of water and amount of warp to be veered

Advise crew to take Anchor Stations

Open the anchor hatch and remove the anchor from forward locker and pass up to bowman

Advise Skipper that crew are in position and ready to lower

## **8.7 Lowering the anchor**

Advise the bow man of the length of warp to be veered

Signal the bow man intention to lower the anchor (thumb down)

Lower the anchor

Bowman to signal anchor on bottom (hand horizontal, back and forth)

Press MOB switch on GPS to record anchor position

Allow vessel to ride backwards of the anchor, with wind and tide, and use pulse power if required to prevent chain from stacking on bottom

When appropriate length of warp have been reached, Bowman to cease veering chain

Bowman to check if anchor is holding.

## **8.8 While at anchor**

Maintain contact with the watch room every 30 minutes



# LOP Wallis Lake Forster Tuncurry

Check the position of the anchor at 30 minute intervals by referencing the MOB position recorded in the GPS

Monitor the wind and sea conditions, giving consideration to the length

## **8.9 Weighing the anchor (from the bow position)**

Advise crew to take Anchor Stations

Bowman signals all OK

Signal weigh anchor (thumb up)

Bowman indicates to Skipper direction of the anchor rode and begins to manually lift the anchor feeding the anchor line back down the hatch to crew below for storage

Maneuver the vessel forward in order to minimize the load on the anchor .

Signal when chain is being recovered

Engage power to maintain vessels head into wind/sea

Indicate to Skipper that anchor is clear of the water and pass down the hatch for storage

Snug the anchor into the anchor into the locker to prevent damage to surrounds Close the anchor hatch and return to aft deck

Clear MOB position from the GPS



# LOP Wallis Lake Forster Tuncurry

Category	Scattering of Ashes
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## 9.0 *Scattering Ashes*

### **Purpose**

The purpose of this Standard Operating Procedure (LOP) is to provide a safe, compassionate and dignified service when scattering ashes from the rescue vessel.

### **Scope**

The scope of this LOP includes but is not limited to meeting the family of the deceased at the designated departure point and concludes when the family of the deceased are landed back onshore. Additionally, there may be need for a Pastoral visit prior to, and/or after the scattering of the ashes.

### **Safety/Hazards**

5.0 Standard PPE will be worn by crew and family members

The crew of the rescue vessel will ensure the family members are correctly attired and aware of hazards associated with the motion of a vessel at sea.

### **Definitions/Terminology**

**Ashes Urn.** The Ashes Urn is normally a plastic container, rectangular in shape that contains the ashes of the deceased. There is a round seal at one end and it is this seal that is to be opened prior to departure

### **Special Precautions**

This activity must not be carried out during adverse sea conditions. Family members will be required to remain in the cabin while crossing the bar.

### **Overview**

The scattering of Ashes at sea is an activity which is conducted by the Unit as is deemed appropriate and must be approved by the Unit Commander. It involves family members of the deceased and a Chaplain. Numbers on the vessel during the activity are limited to the approved vessel capacity.

On arrival at the designated position the Skipper will bring the vessel into a comfortable riding position. The Chaplain will then conduct a service that will take approximately 10 minutes prior to the scattering of the ashes. During this time appropriate music will be played. If requested or if considered appropriate the Last Post and the Rouse may be played.



# LOP Wallis Lake Forster Tuncurry

## **Preparing for departure**

Greet the family at the designated departure point

Ascertain who will scatter the ashes and brief him/her accordingly

Break the seal on the Urn

Record the names of the family and advise the watch room

Plot the position of the location for scattering the ashes and enter in the GPS

Issue family with appropriate PPE and brief in its use

Brief family on safety aspects of proceeding to sea

Seat family in the cabin of the vessel (Family members will remain in the cabin until clear of the bar)

## **Departing the designated departure point**

Lower flags to half-mast (masthead and stern)

Proceed to sea in accordance with SOP

## **On arrival at the designated location**

Remove caps

Assemble all personnel

Conduct the Service

Prepare to scatter the ashes from the starboard side of the vessel.

Safety harness to be worn by Family Member

Bring the vessel in the optimum position relative to wind and sea conditions

Commence playing the selected music

Scatter the ashes

Record Lat and Long and provide details to Chaplain and Tower.

Play Last Post and The Rouse if appropriate

Raise flags and replace caps

The Skipper will then circle the area giving a prolonged salute on the vessel horn prior to proceeding back to harbour



# LOP Wallis Lake Forster Tuncurry

<u>Category</u>	<u>Emergency Drills</u>
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## 10.0 Emergency Drills

### Purpose

To ensure that crews are ready for emergencies at sea these drills should be performed every Monday during crew change and records kept via Activation log and ships log.

### Scope:

This LOP covers Monday morning crew change and any time the vessel is proceeding to, or returning from a task, but is not actively carrying out a specific operation.

### Safety/Hazards

Standard PPE to be worn by all crew members.

### Terminology

Nil

### Special Precautions

All crew are to be aware that an emergency could arise at any time; therefore all must remain alert and be prepared to react appropriately.

### Overview:

Drills required to be performed six monthly for all crew.

- Person overboard.
- Fire on board, in and outside the engine space.
- Towing.
- Collision/grounding.
- Flooding.
- Emergency steering
- Persons injured.
- Fuel spill.
- Heavy weather management and policies
- Prepare to abandon ship and abandon ship

## Location of equipment

