STANDARD OPERATING PROCEDURE
SOP OP 08: Marine Communications

Contents

Scope and purpose

This procedure outlines the manner in which marine communications are managed by Marine Rescue NSW (MRNSW). These procedures must be followed by all members receiving or transmitting marine communications.

This procedure is to be read and understood by all operational MRNSW vessel crews and radio operations teams, who must understand their responsibilities in accordance with their ratings and assigned duties.

Policy context

MRNSW is tasked under NSW emergency management arrangements to undertake response for marine incidents and emergency situations in support of NSW Police Marine Area Command (MAC), which is responsible for high-level coordination of all on-water search and rescue incidents in NSW (in this document MAC is taken to include all NSW Water Police).

All MRNSW operations are regulated by state and commonwealth legislation, including:

- *State Emergency & Rescue Management (SERM) Act 1989*
- *State Rescue Policy 2021*
- *Marine Safety (Domestic Commercial Vessel) National Law Act 2012*
- *Marine Safety Act 1998*
- *Marine Safety Regulation 2016*
- *Radio-communications Act 1992*

This procedure is also informed by other MRNSW Standard Operating Procedures (SOPs), particularly SOP OP 03 Vessel Operations and SOP OP 06 Incident Response, and also the National Search and Rescue (NATSAR) Manual published by the Australian Maritime Safety Authority (AMSA) and the Marine VHF Radio Operator's Handbook published by the Australian Maritime College.

MRNSW units may also develop Local Operating Procedures (LOPs) where required to address particular issues arising from local conditions or arrangements, with approval from the Zone Duty Operations Manager (ZDOM). LOPs must not contradict any SOP or applicable legislation.

Procedure

1. Incident Response (including MAYDAY and PAN-PAN situations)

For information on how to respond to Incidents, including the management of and response to Mayday, Mayday Relay and Pan-Pan situations, refer to SOP OP 06: Incident Response.

2. Licencing requirements

2.1 Licencing requirements for members: Short Range Operators Certificate of Proficiency (SROCP)

MRNSW requires all rated vessel crew and radio operator members (including Radio Officers and Watch Officers), who are operating a Very High Frequency (VHF) marine radio, to hold a SROCP.

2.2 Licencing requirements for Marine Radio Bases, Rescue Vessels and other assets

MRNSW manages Australian Communications and Media Authority (ACMA) and Australian Maritime Safety Authority (AMSA) licensing and registration requirements on behalf of the organisation.

All MRNSW Units (MRUs) must comply with the call signs, identifiers and other standards as prescribed by the relevant SOP or Zone Commander (ZC) and Zone Duty Operations Manager (ZDOM).

Any MRU that requires modifications to any licences for radio frequencies or channels, must be directed to the Manager for Emergency Systems, in consultation with the ZC and ZDOM. Any MRU that requires modifications to any Maritime Mobile Service Identity (MMSI) or Automatic Identification System (AIS) identifiers must be directed to the Senior Manager Fleet, in consultation with the ZC and ZDOM.

No MRU is to request changes, additions or deletions directly with the ACMA or AMSA.

3. Identifiers

3.1 Marine Radio Base (MRB) identifiers

Station identification is the most commonly used method of identifying a MRB on the marine band radios. Station identification consists of two parts: the Marine Rescue salutation and the geographic designator.

For example, "MARINE RESCUE - COFFS HARBOUR".

In order to remain consistent throughout NSW, this station identification format is to be used without exception. Where a station is being remotely monitored, the identifier of the monitored station (not the monitoring station) should be used - see **Appendix E**.

Appendix A details station identifiers for each MRU, including spoken and alpha prefixes.

Station identifiers (of the calling station and intended receiving station) are repeated when establishing initial contact, generally stated three times on 27 MHz and twice on VHF. After initial contact has been established, there is no requirement to repeat station identifiers with each transmission, station identifiers may be stated once only.

There is no requirement for the repetition of station identification on DCN unless conditions require it.

3.2 Rescue Vessel (RV) identifiers

Vessel identification is the most commonly used method of identifying a MRNSW RV on the marine band radios.

The vessel identification consists of two parts: the geographic designator prefix that describes the vessel's MRU, and a two-digit numerical suffix that denotes the MRNSW Vessel Identification Class (VIC) – determined by the vessel survey length, and indicated by the number of vessels of the same category attached to the MRU.

This simple identification system provides radio operators and those managing incidents (typically ZDOMs or MAC) with an instant appreciation of deployed asset capabilities.

The first digit of the two-digit numerical suffix is intended to clearly identify the general capability of the asset by means of a numerical identifier. The numerical identifiers are listed below.

NOTE: the categories in the table are MRNSW VIC and in no way equate to State Rescue Board accreditation categories.

Vessel Survey Length (m)	Vessel Identification Class (VIC)
6m or less	1 ("One")
>6m to <8m	2 ("Two")
8m to 12m	3 ("Three")
>12m	4 ("Four")

The second digit of the two-digit numerical suffix is intended to clearly identify if the MRU has multiple assets of the same VIC – where the second digit is used to identify each one. If there is only one asset of its type at a given MRU, then the second digit will be 0 ("zero").

For example, if Narooma had two vessels both of which fitted the VIC of 2 ("two"), they would be identified as NAROOMA 21 ("NAROOMA TWO ONE") and NAROOMA 22 ("NAROOMA TWO TWO"), but if they only had one VIC 2 vessel then it would be identified as NAROOMA 20 ("NAROOMA TWO ZERO").

In order to remain consistent throughout NSW, this vessel station identification format is to be spoken without exception.

NOTE: Abbreviations of base names are not to be used, so say 'Broken Bay' not 'BB'.

Vessel honorific names must not be used to identify MR vessels on the radio.

Vessel station identifiers appear in abbreviated form on vessel topside surfaces and /or hull sides for identification by air or sea. These abbreviations can also be used when making an entry into the Vessel and Communications Log, the Operational Risk Assessment (ORA), and Seahawk Incident Management System (IMS).

For example, PORT JACKSON TWO ONE could be abbreviated to PJ21 (for record keeping only, not for radio or phone communication).

3.3 Vehicle, portable radio and other asset identifiers

Asset identification is the most commonly used method of identifying a MRNSW vehicle, portable, or other asset on the marine band radios. Asset identification consists of two parts: the geographic designator of the vehicle, portable, or other asset, and a numerical suffix denoting the type, and number of assets of that type. The numerical identifiers are listed below.

Asset Type	Numerical Suffix
Vehicle	5 (“FiFe”)
Portable (eg. Trailer, hand held radio)	6 (“Six”)

The second digit of the two-digit suffix has been devised to clearly identify if the MRU has multiple assets of the same class – where the second digit is used to identify each one. If there is only one asset of its type at a given MRU, then the second digit will be 0 (”zero”).

For example, if Batemans Bay had two vehicles, both fit the asset type of 5 (“fiFe”), therefore they would be identified as BATEMANS 51 (“BATEMANS FIFE ONE”) and BATEMANS 52 (“BATEMANS FIFE TWO”), but if they only had one vehicle then it would be identified as BATEMANS 50 (“BATEMANS FIFE ZERO”).

This identification system provides radio operators and those managing incidents (typically ZDOMs or MAC) with an instant appreciation of the assets over the marine radio band.

3.4 MRNSW state assets and State Operations Group (SOG) asset identifiers

Asset identification is the most commonly used method of identifying a MRNSW or SOG assets on the marine band radios. MRNSW/SOG asset identification consists of two parts: the MRNSW designator prefix that describes whether the asset is from MRNSW (State) or the SOG, and a numerical suffix that denotes the MRNSW asset identification class (per those previously advised for RVs, Vehicles, Portable and Other assets).

NOTE: SOG assets may be deployed locally with communications managed by unit bases, however during interagency operations communications will normally be managed at the incident location of by an Emergency Operations Centre.

The list of MRNSW/SOG prefixes is listed below:

MRNSW/SOG	Identifier Prefix
State	X (“Xray”)
SOG	MR (“Marine Rescue”)

This simple identification system provides radio operators and those managing incidents (typically ZDOMs or MAC) with an instant appreciation of deployed asset capabilities.

For consistency across NSW this asset identification format must always be used.

MRNSW/SOG asset identifiers appear in abbreviated form on vehicles, vessels, and trailer topside surfaces and/or hull sides for identification by road, air, or sea. These abbreviations can also be used when making an entry into the Vessel and Communications Log, the Operational Risk Assessment (ORA), and Seahawk Incident Management System (IMS).

For example, XRAY TWO THREE could be abbreviated to X23 (for record keeping only).

4. Radio monitoring and calling practices, and radio types

Marine Radio Bases (MRBs) monitor Very High Frequency (VHF) radio for general vessel communications, and some MRBs continue to monitor 27MHz radio (which is declining in usage and is expected to be phased out over the next decade). MRBs also monitor the Discrete Communications Network (DCN) for internal communications within MRNSW, and in some cases the Public Safety Network (which is being progressively rolled out - see below).

MRBs are equipped with the Frequentis digital radio system (though some are yet to migrate from the previous but similar Reditalk system), which allows the radio operator to select the radio and channels for monitoring and transmission, including remote radio transceivers. The ZDOM will advise Each MR unit which radios and channels must be monitored, taking into account local conditions, the proximity of other bases etc. Units should capture these instructions in LOPs and ensure the correct channels are monitored consistently. [Changes to what radios and channels are monitored by different MRBs may be introduced as MRNSW moves towards the 'Hub' model of radio coverage in 2024.]

Radio communications should be professional in tone, in clear English, concise and precise using minimal 'on-air time'. Repetition of call signs and messages should be limited in accordance with the clarity of transmission and reception as affected by local conditions. Radio protocols should be used as per VHF SROCP training and licencing.

For example, protocol words such as: "Over, Out, Yes, No, Message Received, Standby, Say Again" etc. ('Affirmative' and 'negative' are no longer recommended by ACMA.)

Members should be aware radio calls are recorded through the Frequentis system for training purposes and for provision to MAC in the event they are required for incident investigations.

4.1 Discreet Communications Network (DCN)

DCN is the internal MRNSW radio network. As such, MRNSW members are not required to use the "MARINE RESCUE" prefix when calling on DCN. The geographic designator is sufficient.

For example;

- *a MRB calling another MRB: "PORT STEPHENS BASE this is NEWCASTLE BASE, over"*
- *a vessel calling a MRB (and vice versa): "SUSSEX INLET BASE this is SUSSEX INLET TWO ZERO, over".*
- *a vessel calling another vessel: "TERRIGAL THREE ZERO this is LAKE MACQUARIE THREE ZERO, over"*

NOTE: It is important to distinguish vessels from radio bases for situational awareness, so the use of the word 'Base' and vessel class number such as 'Two Zero' is essential.

Once contact is established, there is no need to continue to repeat the station or vessel identification, these can be stated once only.

Appendix B details specific DCN channels allocated for each MRU.

4.2 Very High Frequency (VHF)

All MRNSW MRBs and vessels are to maintain a listening watch on VHF Channel 16.

The NSW State Rescue Policy states: *Marine Radio Bases are a specially designated facility, equipped and accredited to monitor maritime radio distress frequencies for the purpose of receiving distress calls. Marine Radio Bases operate for the purpose of*

receiving distress calls, monitoring routine radio calls, notifying the NSW Police Force Marine Area Command in the event that a marine rescue is required and maintaining communications with vessels in distress until rescue is affected.

Boaters must be advised that initial contact should be made on CH16. MRBs should not encourage usage of working channels for establishing initial contact.

On the VHF marine radio band, where there is little noise, station identification of the calling station need only be said twice in the initial contact. Thereafter, if conditions allow station identifiers need only be used once on CH16.

Upon initial receipt of a marine radio transmission on VHF Channel 16, except a Mayday, the calling vessel must be sent to a working channel and asked to repeat their call sign.

Appendix C details specific VHF working channels allocated to each MRB. MRBs should only use the working channels assigned to them in Appendix C, in this order of priority:
1. Primary working channel
2 Secondary Working channel
3. Assigned public repeater

Use of the public repeater should be avoided and can be managed by queuing and stacking multiple simultaneous calls on the primary and secondary working channels.

MRBs are to monitor Digital Selective Calling (DSC), where fitted.

4.3 27MHz

27MHz is still in use by a small and declining proportion of boaters, and MRNSW will continue to monitor 27MHz Channel 88 where radio bases have the equipment and ability to do this until it is officially phased out.

As 27MHz is not included in our remote monitoring capability (Frequentis and Reditalk), any vessels that log on over 27MHz should be advised of this, and provided with an alternative means of logging off, such as by phone (with a monitored phone number provided) or by VHF Ch16 where available (which is monitored remotely), to ensure the vessel can log off successfully even at times when 27MHz is not monitored locally.

MRNSW anticipates 27MHz monitoring will cease in coming years, and for this reason will not be making significant investments in 27MHz infrastructure. MRNSW will also continue to promote VHF as the preferred marine radio band, and will participate in any broader campaign of this type instigated by ACMA, AMSA or Transport for NSW.

4.4 Non Safety-Of-Life-At-Sea (SOLAS) Medium Frequency/High Frequency (MF/HF)

Monitoring of MF/HF radio is now contracted by the NSW Government to Kordia Solutions Australia, and accordingly MF/HF radio is no longer monitored by MRNSW.

4.5 SurfCom

Surf Life Saving (SLS) NSW owns and operates a state-wide Coastal Radio Network, comprising of 11 discreet Branch (region) systems linked back to the SLS State Operations Centre in Belrose, Sydney. It is used by all SLS Clubs/Patrols, and most paid Lifeguard services in NSW.

SurfCom radios have been supplied to some MRNSW units for use in MRBs and/or on RVs, to provide on-scene inter-agency communication. MRNSW MRBs and RVs should monitor Surf Channel 3 continually, however they should not inject themselves into

incidents without prior ZDOM approval. Use of SurfCom radios should be limited to the communication of critical operational information only.

MRNSW MRBs and RVs must follow SOP OP 06 Incident Response with regards to incident notification to MAC and the ZDOM – this is irrespective of direct communication with local SLS or Lifeguard services.

MRNSW radio operators should always identify the SLS NSW asset they are trying to contact via the appropriate Call Sign first, followed then by advising their MRNSW identifier. MRNSW RVs should identify themselves using the MRNSW prefix, followed by the RV name.

For example, "Pambula Patrol Pambula Patrol, this is Marine Rescue Merimbula Three One, Marine Rescue Merimbula Three One, on Surf Channel 2, over"

Appendix D details specific SurfCom radio channel profiles and SLS NSW Call Signs.

4.6 Public Safety Network (PSN)

Formerly the Government Radio Network (GRN), the PSN is being integrated into MR communications systems to support our operations and is currently undergoing trials. As the integration of PSN into MRNSW operations continues and expands, further details on the use of PSN will be added to this SOP.

4.7 Phones

MRNSW bases have phones with phone numbers published and on base signage, so members of the public may contact MRBs via phone. Published MRB phone numbers must be monitored at the base or diverted to another MRB with prior notification to the reciprocal base. Base phones should not be diverted to a non MRB phone such as a personal mobile or home phone. MRB phones should have a voice mail facility activated in case a call is missed for any reason.

MRNSW base phones are internet-based Telstra TIPT phones, and if connectivity is lost at the base the phones will not work. At such times calls will divert to another base as selected by the ZDOM in consultation with the unit and MRNSW IT team. MRBs also have mobile phones to provide another option for communication during such outages.

5. Other Marine Radio Base (MRB) systems and processes

5.1 SITREPs and monitoring of MRNSW vessels

MRNSW radio bases play a critical role in the safety of MRNSW vessels and crews. All MRNSW vessels are fitted with radio transceivers, and are required to log on prior to deployment and log off at the conclusion of the deployment with their MRNSW radio base (or another base or the ZDOM as specified in a LOP or by the ZDOM).

MRNSW radio operators advised of a deployed MRNSW vessel should request a Situation Report (SITREP) from each vessel at 30-minute intervals (or other intervals as requested by the ZDOM), advising their location, course, speed and activity. Vessels should also provide a SITREP at key deployment milestones such as entering open waters, arriving at a distressed vessel, commencing a tow etc.

SITREPs and general communications with MRNSW vessels should be via secure channels where possible, such as the Discrete Communications Network (DCN) or Public Safety Network (PSN) where fitted. Mobile phones and VHF radio may be used as backup or secondary methods.

All MRNSW operations are under the control of the ZDOM, who will provide guidance or instructions to all involved members (and may be acting under the direction of MAC). The ZDOM may delegate control to a MRNSW vessel master, Watch Officer or Radio Operator where appropriate. The only exception to this is where a MAC officer is present and assumes the role of On-Scene-Controller, in which case the ZDOM must be kept informed.

5.2 Seahawk and the Seahawk Incident Management System (IMS)

Seahawk is the primary, web-based system used by ROs for logging on all vessels who request to do so, and for capturing all general communications on a daily basis, as received by the MRB via marine radio, telephone, or direct in person. Seahawk is also the Incident Management System (IMS), whereby MRNSW incident response is formally logged, in particular as rescue vessels are allocated or 'tasked' to requests for assistance. All Operators are to maintain their skills, knowledge and currency of this system and understand the Operator's Manual.

5.3 Status Board and Handovers

MRNSW maintains a Status Board to provide real time information on vessel and base availability to radio bases, staff and MAC. The radio operator must update the Status Board in real time as RVs and MRBs are subject to changes in status, such as attending an incident, going offline etc. The radio operator should update the 'Status', 'Task' and 'Location/Comments' sections. Other changes are to be made by the ZDOM, or at the ZDOM's specific request.

In addition to real-time updates, the Status Board should be reviewed for accuracy at watch-changes and base closures, and at handover to/from a remote monitoring station (for units that are remotely monitored overnight). At watch changes or base handovers the outgoing radio operator must give the incoming radio operator a handover briefing, advising them of current status, any updates requiring entry on the Status Board, the current ZDOM on duty and anything else that may be relevant for the next shift.

5.4 Marine Rescue Messaging System (MRMS)

MRNSW uses MRMS for communications such as activating, confirming and standing down crews to improve operational response times, and also for communication with members of the public where appropriate. MRMS uses text messages delivered to mobile phones. SOP OP 11 details further information on MRMS, including standard templates.

5.5 Open Chart Plotter Navigation (Open CPN)

MRNSW has determined that Open CPN is the optimal software platform for displaying Automatic Identification System (AIS) data for the purpose of tracking vessel location and movement. Where a unit does not have Open CPN or has any technical issues with its use, the ZDOM should be approached in the first instance.

5.6 Remote Monitoring by the State Communications Centre (SCC) or Hub Stations

Radio Bases may be remotely monitored by the SCC or by Hub Stations out of rostered hours or during outages or service interruptions. Handover times are determined by ZDOMs for each summer and winter period in accordance with unit capability and distributed to all units at the start of that period. Handover times may need to change due to unforeseen circumstances, and this may be requested via the ZDOM, who will approach the remote monitoring station UC and the ZDOM supervising that station.

Procedures for remote monitoring handovers are provided at **Appendix E**.

6. Operational Readiness Inspections, maintenance, faults and system failure

6.1 Operational Readiness Inspections (ORIs)

MRBs are required to hold specific equipment, and to ensure compliance, periodic Operational Readiness Inspections (ORIs) are conducted by the ZDOM and MAC, as required under the State Rescue Policy and detailed in SOP OP 07. MRB equipment is also aligned with ACMA requirements, which may change as technology progresses and regulations are updated. **Appendix F** details a list of required equipment for MRBs.

MRBs are also inspected annually through the Preventative Maintenance Inspection (PMI) program, coordinated by the Emergency Systems Manager as detailed in SOP OP 10.

6.2 Radio equipment maintenance and faults

All major equipment maintenance, damage, and faults will be reported to the ZDOM and Emergency Systems Manager prior to commencement of repair or replacement.

All maintenance, repairs and servicing shall be conducted in line with manufacturers' guidelines, and by an appropriately qualified and certified technician/service agent.

Additional items of equipment may be utilised if/as approved by MRNSW. Some equipment may require prior testing/review before approving. Units should contact their ZDOM prior to making any additions.

SOP OP 10 provides detailed information on radio equipment and maintenance.

Appendix G details what to do and what information to capture where a fault is experienced.

6.3 System failure

In the event of any system failure that causes the remote monitoring of a MRB to cease, the relevant ZDOM must be contacted immediately to initiate alternative arrangements.

7. Marine Radio Base operations and voyage management

MRBs provide a full scope of MR capabilities through agreed defined hours of operation, including 'logging on' vessels to monitor their voyages and enable timely recognition of overdue vessels that may require assistance. Vessels may only log on when operating in NSW waters, with the exception of transiting vessels coming into NSW waters from interstate or overseas (see 7.2, 7.3 and Appendix G).

MRB must provide services using the equipment and capabilities schedule in **Appendix F**. The ZDOM must be notified of any reduction in this scheduled capability.

7.1 Vessel log on via marine radio or phone (local log on)

Upon initial receipt of a marine radio transmission on VHF Channel 16, except a Mayday, the calling vessel must be sent to a working channel and asked to repeat their call sign. **Appendix C** details specific VHF working channels allocated to each MRB.

Upon receipt of a log on call by marine radio or mobile phone, the radio operator taking the call is required to record the following mandatory information:

a) Vessel registration number* and name (if applicable)
b) On-board mobile number (if carried)
c) Persons on board
d) Departure point
e) Destination (the radio operator will need to identify if this is a local Log On or Transit – if a Transit, refer to section 7.2)
f) Estimated time of arrival/return

* Where an unregistered vessel logs on, ask the master to provide an identifier they will remember, such as their first name and year of birth (e.g. 'Sarah 1981') or similar, and enter this in the registration field, as this is a mandatory field. Additionally, ask for a description of the vessel (e.g. 'Yellow kayak') and enter this in the comments field.

When time permits, additional information should be obtained, prioritised as follows:

a) Onshore contact(s)
b) Trailer registration number or mooring number/marina berth number
c) Transport vehicle registration number (connected to trailer)
d) Full vessel details (per Seahawk descriptors)
e) Full contact details (per Seahawk descriptors)

If historical log on information is available to the radio operator, they are to verify the vessel registration and the last 3 digits of the on-board mobile number to ensure accuracy. If the radio operator identifies errors, the information is to be corrected.

The vessel operator should be advised that, for their safety, they should keep their marine radio switched on and monitor relevant safety channels, particularly VHF Channel 16.

If a vessel attempts to log on without providing required details, the vessel operator is to be informed that:

"Without the mandatory information, I am unable to Log On your vessel. I will make note of your departure, but not providing the information requested may jeopardise rescue efforts should you experience difficulties at sea."

Upon receipt of all information and successful logon in Seahawk, the radio operator is to advise the vessel:

"(vessel name) we have you logged on at (time). Please call us on VHF Channel 16 to confirm your safe return and log off at or by (time). Marine Rescue (base name), OUT"

7.2 Vessel log on via marine radio or telephone (transit)

In addition to logging on the vessel per 7.1 above, the radio operator should encourage the vessel operator to make scheduled contacts (skeds) along the voyage for their safety.

If the vessel operator requests skeds, the following steps must be taken:

a) The next expected sked location and date/time are to be recorded against the vessel's log on record

b) After Log On, the voyage information is to then be transferred to the next agreed MRU along the vessels transit route
c) The vessel is only considered transferred once the receiving unit has accepted the transfer
d) The MRU receiving/accepting a transfer is responsible for monitoring that vessel in respect to its sked/Log Off date/time only.

NOTE: Skeds should only to be arranged for logged-on vessels.

For further information on the management of transiting vessels, see **Appendix H**.

7.3 Vessel log on via MRNSW app (local log-on or transit)

The radio operator will receive a log on request (visual and audio alert) in Seahawk. Where possible, the radio operator shall immediately select the 'Details' button for the log on request and check that the following minimum details have been filled out and the information is appropriate:

a) Vessel registration number
b) On-board mobile number
c) Persons on board
d) Departure point
e) Destination
f) Time of return

If details provided are complete, the radio operator shall 'Accept' the log on request.

Where operational tempo or other factors limit the ability of the radio to check the log on details immediately, the log on may be accepted immediately and the details checked as soon as practicable following this, with the registration number noted down to ensure this is not forgotten.

If details provided require further clarification or editing, the radio operator shall try and make contact with the vessel immediately via phone, text and marine radio. If the vessel is uncontactable, the radio operator shall 'Accept' the log on request and record the attempt at making contact with the vessel master by selecting 'Add Comms' for that vessel. The radio operator shall continue to try and contact the vessel to resolve the log on information as far as is practical.

7.4 Scheduled contacts (skeds)

When the vessel has made their sked (or logged off), this will be recorded against the vessel voyage log. Minimum recommended details to update/record are:

a) Position
b) Course/speed
c) Next sked location and time

Regardless of whether a sked or a departure/final destination have been requested, the radio operator will advise the vessel operator that they will hand-off to the next agreed unit and state the name/call sign of that unit.

If noted that the voyage still has a distance to go with no skeds, the vessel operator should be encouraged to register the next sked as the vessel progresses along the transit route to verify their position and confirm their intentions.

If the vessel operator requests additional skeds, the next location and time are to be recorded with the vessel's voyage log. To ensure sked information is as accurate as possible (given potential changes/variables that can affect a voyage), it is recommended that only the final destination and the next leg of the voyage are recorded initially and then updated at each sked.

After a transiting voyage log on or sked, the voyage shall be immediately transferred to the next agreed MRU.

If a vessel wishes to register a log off date/time, the radio operator should suggest a sked, but ultimately must accept the log on and transfer to the end destination (log off) unit. The receiving unit should accept a transfer.

7.5 Vessels making contact without formal log on details provided

A vessel may make contact with MRNSW by marine radio, telephone or email to undertake a radio check and/or advise of a journey, however they may not provide sufficient details to enable a formal log on.

If insufficient detail is provided, or the vessel operator does not wish to log their journey, the radio operator should inform the vessel operator (by any available means) that they are not 'logged on' with MRNSW and their journey will not be tracked or skeds arranged. The details provided by the vessel operator are to be recorded in the communications log.

7.6 Vessel log off

Upon initial receipt of a marine radio transmission on VHF Channel 16, where the vessel has not already identified that they wish to log off, the calling vessel must be sent to a working channel and asked to repeat their call sign. Upon confirmation of request to log off, the voyage log will be modified accordingly and the vessel logged of. The radio operator is to advise:

"(Vessel name) we have you logged off at (insert time). Marine Rescue (base name), returning to VHF 16, OUT"

7.7 Overdue vessels (0-30 minutes), including vessels reported missing

When a vessel has not notified that they have arrived/returned to port, or has not 'logged off' or 'skedded' by the nominated time, or contacted MRNSW to extend/change its nominated time, the radio operator is to instigate the following action without delay:

a) Attempt to contact the vessel on all radio frequencies, and if details are held on file, by mobile telephone, and MRMS (using the 'Overdue Vessel' template)
b) Review AIS and attempt to identify vessel
c) Review last position update for vessel - if using tracking function on the App, and per advised destination details
d) Contact adjoining bases (if appropriate)
e) Contact other vessels in the area for a visual contact
f) If available, arrange a check of boat ramps, local marinas or anchorages if details are known (ZDOM to coordinate)

NOTE: The radio operator **must not under any circumstances** attempt to make contact with on-shore contacts or next of kin, as this must always be done by MAC. If an on-shore contact, family member, or member of the public contacts the MRB requesting information, refer them to MAC and give the phone number 1800 MACSAR (1800 622 727).

As soon as the radio operator initiates action for an overdue or missing vessel, they shall take care to ensure an accurate record is made of all actions in Seahawk (via the communications log against the logged on vessel.)

7.8 Escalation to Incident status

Where a vessel has become overdue by 30 minutes, the situation must be escalated to an Incident and the ZDOM contacted in accordance with SOP OP 06 Incident Response, section 3.3.

A situation may also be escalated to an incident for other reasons, such as where:

a) an operator believes the risk to a vessel has increased
b) a vessel is reported overdue or missing (whether logged on with MRNSW or not) by another party
c) a vessel is reported as adrift and unmanned (whether or not the occupants have been located)
d) other unusual circumstances, a significant breach of regulations or public safety risk are reported that warrant the attention of MAC

In such situations the radio operator should contact the ZDOM, who will coordinate with MAC and provide guidance to the radio operator.

Where any situation is escalated to an Incident, or where an Incident is initiated by a distress call or a tasking by the ZDOM or MAC, the radio operator should commence the process outlined in SOP OP 06 Incident Response.

8. Bar crossing advice, weather warnings and broadcasting securites

8.1 Bar crossing advice

If a vessel requests information about Bar Conditions (including whether the bar is ‘safe to cross’) the radio operator should reply in line with the following statement (with appropriate information included):

“Based on current BOM information, the seas are forecast as (insert) and the swell as (insert). The next tide is (insert high/low) of (insert height) at (insert time). (Include detail of any current BOM issued Hazardous Surf Warning for the area). Prior to crossing, you should stand off and observe conditions and make your own assessment of risk prior to proceeding. Extreme caution is always advised when crossing a bar”.

At no time, should the radio operator inform boaters that it is ‘safe’ to cross a bar or suggest/encourage a vessel to cross. Bars are inherently dangerous and it always remains the skipper’s responsibility to assess risk and decide whether to cross a bar.

Should dangerous conditions be observed or be known to exist on the bar, it is acceptable for the radio operator to discourage vessel operators from crossing a bar.

8.2 Weather warnings

If a weather warning has been issued by the Bureau of Meteorology (BOM), the radio operator should advise vessels logging on and conducting skeds that:

“There is a current weather warning in force, further details are available from the Bureau of Meteorology or from Marine Rescue NSW on request”

8.3 Broadcasting securites

MRBs often receive requests direct from inter-agency partners to broadcast a securite message, to inform mariners of important information such as:

- Exclusion zones
- Hazardous weather and sea conditions
- Navigational hazards
- Particular operations in place by an inter-agency partner.

Prior to the radio operator conducting any securite broadcasts, the ZDOM must be consulted. The ZDOM may also provide a standing approval for certain categories of securite broadcasts where required.

MRBs transmitting a securite message relating to weather or navigation hazards should commence transmission on VHF CH16 to announce the broadcast and instruct receiving stations to switch to CH 67 for the remainder of the message. MRBs with capacity to re-transmit the message subsequently on 27MHz should do so in a similar manner.

An example of a securite message is below;

"Securite, Securite, Securite, All Stations, All Stations, All Stations. This is Marine Rescue (insert name), Marine Rescue (insert name), Marine Rescue (insert name). For a navigational warning in relation to (insert reason for securite), in the area(s) of (insert local geographic area name), please go to VHF Channel (insert channel number). Changing channels now, Marine Rescue (inset name) OUT."

(The radio operator changes marine radio channels as nominated above and then continues their broadcast with the below)

"Securite, Securite, Securite, All Ships, All Ships, All Ships. This is Marine Rescue (insert name) with a navigational warning in relation to (insert reason for Securite)."

(The radio operator provides brief particular details required for the securite broadcast)

"Vessels are advised to proceed with extreme caution whilst navigating in the(se) area(s). Marine Rescue (insert name) OUT".

Roles and responsibilities

The MRNSW Deputy Commissioner Operations and Capability is responsible for approving and maintaining this SOP.

Zone Commanders, ZDOMs, and Zone Training Managers are responsible for ensuring members are aware of this SOP and have appropriate training and professional development relating to its implementation.

All operational members are responsible for implementation of this SOP.

Support, advice and feedback

Further support, guidance, and advice in relation to the contents of this SOP should be sought from the relevant ZDOM in the first instance.

Definitions & Acronyms

ACMA	Australia Communications and Media Authority
AIS	Automatic Identification System
AMC	Australian Maritime College
AMSA	Australian Maritime Safety Authority
BOM	Bureau of Meteorology
DCN	Discrete Communications Network
DSC	Digital Selective Calling
HF	High Frequency
IMS	Incident Management System
LOP	Local Operating Procedure
LROCP	Long Range Operator's Certificate of Proficiency
MAC	Marine Area Command
MF	Medium Frequency
MMSI	Maritime Mobile Service Identity
MR	Marine Rescue
MRB	Marine Radio Base
MRU	Marine Rescue Unit
Open CPN	Open Chart Plotter Navigation
ORA	Operational Risk Assessment
PMI	Preventative Maintenance Inspection
PSN	Public Service Network
SARCC	Search and Rescue Coordination Centre
SERM	State Emergency and Rescue Management
SOG	State Operations Group
SOP	Standard Operational Procedure
SROCP	Short Range Operator's Certificate of Proficiency
Surf Com	Surf Life Saving NSW Radio Network
VIC	Vessel Identification Class
VHF	Very High Frequency
ZC	Zone Commander
ZDOM	Zone Duty Operations Manager

Approval and document control

Draft	Author	Document status / change	Reviewer	Approver	Date
0.1	C Greenslade	Initial draft	Operations staff	N/A	N/A
0.2	D Duemmer	Revised draft	Operations staff & selected Unit Commanders	N/A	N/A
1.0	M Hammond	Final version	Operations staff	D Schott	10.23
1.1	M Hammond	Revision	Operations staff	D Schott	02.24
1.2	M Hammond	2024 revision	Operations staff	D Schott	11.24
Changes since previous version: Logon information that must be collected has been updated to enable logons to be accepted from unregistered craft and craft with no mobile phone on board (section 7.1) Vessels are now considered to enter/leave NSW waters at Cape Howe, not Gabo Island. Handover procedures for remote monitoring have been incorporated into this SOP as Appendix E, allowing the old SOP OP 14 to be archived (and resulting in re-lettering of appendices). Content in Appendix E now clarifies that a remote monitoring station should use the identifier of the station being remotely monitored where possible, or if not possible should use the identifier 'Marine Rescue NSW'.					

Appendix A: Station Identifiers

Unit Name	SPOKEN PREFIX	ALPHA PREFIX	RADIO BASE CALL IDENTIFIER	AIS SCREEN IDENTIFICATION
Point Danger	Point Danger	PD	Marine Rescue Point Danger	Marine Rescue PD-##
Brunswick	Brunswick	BR	Marine Rescue Brunswick	Marine Rescue BR-##
Cape Byron	Cape Byron	CA	Marine Rescue Cape Byron	Marine Rescue CA-##
Ballina	Ballina	BA	Marine Rescue Ballina	Marine Rescue BA-##
Evans Head	Evans Head	EH	Marine Rescue Evans Head	Marine Rescue EH-##
Iluka-Yamba	Iluka Yamba	IY	Marine Rescue Iluka Yamba	Marine Rescue IY-##
Wooli	Wooli	WI	Marine Rescue Wooli	Marine Rescue WI-##
Woolgoolga	Woolgoolga	WO	Marine Rescue Woolgoolga	Marine Rescue WO-##
Coffs Harbour	Coffs Harbour	CO	Marine Rescue Coffs Harbour	Marine Rescue CO-##
Nambucca	Nambucca	NH	Marine Rescue Nambucca	Marine Rescue NH-##
Trial Bay	Trial Bay	TB	Marine Rescue Trial Bay	Marine Rescue TB-##
Port Macquarie	Port Macquarie	PM	Marine Rescue Port Macquarie	Marine Rescue PM-##
Lord Howe Island	Lord Howe	LH	Marine Rescue Lord Howe	Marine Rescue LH-##
Camden Haven	Camden Haven	CH	Marine Rescue Camden Haven	Marine Rescue CH-##
Crowdy-Harrington	Crowdy Harrington	CB	Marine Rescue Crowdy Harrington	Marine Rescue CB-##
Forster-Tuncurry	Forster	FO	Marine Rescue Forster	Marine Rescue FT-##
Port Stephens	Port Stephens	PS	Marine Rescue Port Stephens	Marine Rescue PS-##
Lemon Tree Passage	Lemon Tree Passage	LT	Marine Rescue Lemon Tree Passage	Marine Rescue LT-##
Newcastle	Newcastle	NC	Marine Rescue Newcastle	Marine Rescue NC-##
Lake Macquarie	Lake Macquarie	LM	Marine Rescue Lake Macquarie	Marine Rescue LM-##
Norah Head	Norah Head	NR	Marine Rescue Norah Head	Marine Rescue NR-##
Tuggerah Lakes	Tuggerah Lakes	TL	Marine Rescue Tuggerah Lakes	Marine Rescue TL-##
Central Coast	Central Coast	CC	Marine Rescue Central Coast	Marine Rescue CC-##
Terrigal	Terrigal	TG	Marine Rescue Terrigal	Marine Rescue TG-##
Hawkesbury	Hawkesbury	HW	Marine Rescue Hawkesbury	Marine Rescue HW-##
Cottage Point	Cottage Point	CP	Marine Rescue Cottage Point	Marine Rescue CP-##
Broken Bay	Broken Bay	BB	Marine Rescue Broken Bay	Marine Rescue BB-##
Sydney / SCC	Sydney	SY	Marine Rescue Sydney	Marine Rescue SY-##

Unit Name	SPOKEN PREFIX	ALPHA PREFIX	RADIO BASE CALL IDENTIFIER	AIS SCREEN IDENTIFICATION
Middle Harbour	Middle Harbour	MH	Marine Rescue Middle Harbour	Marine Rescue MH-##
Port Jackson	Port Jackson	PJ	Marine Rescue Port Jackson	Marine Rescue PJ-##
Botany (Port) Hacking [Solander]	Botany Hacking	BH	Marine Rescue Solander	Marine Rescue BH-##
Port Kembla	Port Kembla	PK	Marine Rescue Port Kembla	Marine Rescue PK-##
Shellharbour	Shellharbour	SH	Uses Marine Rescue Port Kembla	Marine Rescue SH-##
Shoalhaven	Shoalhaven	SA	Marine Rescue Shoalhaven	Marine Rescue SA-##
Jervis Bay	Jervis Bay	JB	Marine Rescue Jervis Bay	Marine Rescue JB-##
Sussex Inlet	Sussex	SI	Marine Rescue Sussex Inlet	Marine Rescue SI-##
Ulladulla	Ulladulla	UL	Marine Rescue Ulladulla	Marine Rescue UL-##
Kioloa	Kioloa	KL	Marine Rescue Kioloa	Marine Rescue KL-##
Batemans Bay	Batemans	BM	Marine Rescue Batemans Bay	Marine Rescue BM-##
Tuross Moruya	Tuross	TU	Marine Rescue Tuross	Marine Rescue TU-##
Narooma	Narooma	NA	Marine Rescue Narooma	Marine Rescue NA-##
Bermagui	Bermagui	BG	Marine Rescue Bermagui	Marine Rescue BG-##
Merimbula	Merimbula	MB	Marine Rescue Merimbula	Marine Rescue MB-##
Eden	Eden	ED	Marine Rescue Eden	Marine Rescue ED-##
Moama	Moama	MO	Marine Rescue Moama	Marine Rescue MO-##
Alpine Lakes	Alpine Lakes	AL	Marine Rescue Alpine Lakes	Marine Rescue AL-##

Appendix B: Allocated DCN channels

Please note:

1. Using DCN repeaters is encouraged when vessels are operating offshore.
2. Repeaters are located on remote elevated sites.
3. Repeaters are higher powered transceivers than standard MRRB radios.
4. When using a repeater ensure the vessel and base are aligned on the repeater channel.

Unit Name	DCN - Simplex	DCN - Repeaters
Point Danger	4, 5, 8	
Brunswick	4, 5, 8	1
Cape Byron	4, 5, 8	1
Ballina	4, 5, 8	1
Evans Head	4, 5, 8	
Iluka-Yamba	4, 5, 8	
Wooli	4, 5, 8	
Woolgoolga	4, 5, 8	
Coffs Harbour	4, 5, 8	6
Nambucca	4, 5, 8	6
Trial Bay	4, 5, 8	6
Port Macquarie	4, 5, 8	6
Camden Haven	4, 5, 8	1
Crowdy-Harrington	4, 5, 8	1
Forster-Tuncurry	4, 5, 8	1
Port Stephens	4, 5, 8	3
Lemon Tree Passage	4, 5, 8	3
Newcastle	4, 5, 8	3
Lake Macquarie (Swansea)	4, 5, 8	3
Lake Macquarie (Pelican)	4, 5, 8	3
Norah Head	4, 5, 8	2, 3
Tuggerah Lakes (Toukley)	4, 5, 8	2, 3
Tuggerah Lakes (The Entrance)	4, 5, 8	2
Central Coast	4, 5, 8	2
Terrigal	4, 5, 8	2
Hawkesbury	4, 5, 8	2
Cottage Point	4, 5, 8	2
Broken Bay	4, 5, 8	2
Sydney / SCC	4, 5, 8	1, 2, 7
Middle Harbour	4, 5, 8	1

Unit Name	DCN - Simplex	DCN - Repeaters
Port Jackson (Birkenhead)	4, 5, 8	1
Port Jackson (South Head)	4, 5, 8	1
Botany Port Hacking (Solander)	4, 5, 8	1, 7
Port Kembla	4, 5, 8	7
Shellharbour	4, 5, 8	7
Shoalhaven	4, 5, 8	3, 7
Jervis Bay	4, 5, 8	3
Sussex Inlet	4, 5, 8	3
Ulladulla	4, 5, 8	3
Kioloa	4, 5, 8	2, 3
Batemans Bay	4, 5, 8	2
Tuross Moruya	4, 5, 8	2
Narooma	4, 5, 8	2
Bermagui	4, 5	
Merimbula	4, 5, 8	
Eden	4, 5, 8	
Moama	4, 5	
Alpine Lakes	4, 5, 8	

Appendix C: Allocated VHF working channels

Unit Name	Primary	Secondary	Tertiary	Repeaters
Point Danger	19	71	73	22
Brunswick Heads	73			22
Cape Byron	71	73		22
Cape Byron (Coopers Shoot)	71	73		
Ballina	19	73		82
Evans Head	73			82
Iluka-Yamba	19	73		21, 82
Wooli	73			82
Woolgoolga	71	73		82
Coffs Harbour	78	71	73	80, 82
Trial Bay	73	19		80
Port Macquarie	71	73	19	80, 21
Camden Haven	19	73		
Crowdy-Harrington	73			21
Forster-Tuncurry	19	73	71	21
Port Stephens	71	19	73	21, 80
Lemon Tree Passage	73			80
Newcastle	73			80
Lake Macquarie (Swansea)	78	71	73	80
Norah Head	73			80
Tuggerah Lakes (Toukley)	73			21, 80
Tuggerah Lakes (The Entrance)	73			21, 80
Central Coast	73 (CC/Terrigal)			21, 81
SCC Belrose	78	71	73	21, 22, 81, 82
Solander (including remotes)	73	71	78	82
Port Kembla (including remotes)	19	71	73	82
Shoalhaven	73	19		81
Jervis Bay (including Vincentia)	71	73		81
Sussex Inlet	73			81
Ulladulla (including Deering St)	71	78		81
Kioloa	73			80
Batemans Bay (including remotes)	78	73		80
Narooma	73	78		80
Bermagui	71	19	73	
Merimbula	73			81
Eden (including remotes)	78	71	73	81

Appendix D: SurfCom channels and call signs

D.1 Radio Channel Profiles

Channel Name	Channel Label	SLS Use	Explanation / MRNSW Use
Surf Channel 1	EMERGENCY	Emergency/Onsite Incident Communications	Simplex (line of sight) communication between incident rescue assets eg SLS Patrol, IRB, Duty Officer, RWCs, Westpac Rescue Helicopter etc. MRNSW Use: Not an initial operating channel – directed to use by Surf Com or local SLS Patrol
Surf Channel 2	PATROL	SLS Patrol Communications (local)	Simplex (line of sight) channel utilised by SLS clubs for general Patrol communications e.g. Patrol to IRBs, Roving Patrol, Quad Bike etc MRNSW Use: Potential initial 'heads up' contact channel and radio check channel.
Surf Channel 3	SURFCOM	SLS Patrol Log on/off, Incident Notification	Repeater Channel which links to all SLS Patrols in the branch (region) and SLS State Operations Centre (Belrose, Sydney). Handheld radios are programmed to 'vote' for the strongest radio repeater signal within that area. SurfCom channel should be used for notification and initial communications for an incident until directed to go to Channel 1. MRNSW Use: MRUs are advised to monitor Channel 3 continually.
Surf Repeater Channels	SURFCOM	SLS Patrol Log on-off, Incident Notification	Individual Repeater Channels are programmed to allow users to manually select a specific repeater if required (highly unlikely). MRNSW Operators should use Channel 3 for communication, and only manually select a repeater if unforeseen issues are encountered.

D.2 SLS NSW Call Signs

Asset	Call Sign
Clubs (Volunteers)	
State Operations Centre (Belrose, Sydney)	SurfCom
State Duty Officer	NSW 10
Duty Officers	[Branch/Council* Name] 10 (additional 11, 12, 13 etc)
Patrol Base/Tower	[Club Name] Patrol
Roving Foot/ATV Patrol	[Club Name] Roving or Mobile
IRB	[Club Name] IRB
RWC (Jetski)	Support Ski
SLS Gold Coast Helicopter	Lifesaver 45
Northern Region Helicopter (Lismore)	Lifesaver 2
Northern Region Helicopter (Lismore)	Lifesaver 4
Tamworth Helicopter	Westpac 3
Tamworth Helicopter	Westpac 4
Hunter Helicopter	Westpac 1
Hunter Helicopter	Westpac 2
Sydney Westpac Helicopter	Lifesaver 21
South Coast Westpac Helicopter	Lifesaver 23
Lifeguards (Paid)	
Patrol Base/Tower	[Beach Name] Lifeguard / Lifeguard Tower
Lifeguard RWC	[Beach Name] Support Ski
Roving Foot/ATV Patrol	[Beach Name] Roving or Mobile
Lifeguard Supervisor	[Council Name] 1

Appendix E: Remote Monitoring Handover Procedures

When remote monitoring is active for a MRB, the Hub Station or other remote monitoring station shall manage all radio traffic via the remote monitoring system.

All telephone traffic continues to be monitored by the local MRB under their normal arrangements, with call-forwarding engaged where necessary.

Where an on-water response is required the local MRB may be reactivated on the instruction of the ZDOM.

1. Handing over to the remote monitoring station

Handovers should occur at the pre-arranged time, unless there is an incident running, in which case the MRB should seek advice from the ZDOM on handover arrangements.

The Radio Operator handing over to a remote monitoring station must:

- Ensure that all Log-ons and Transits have been entered into Seahawk to enable the remote monitoring station to continue to monitor them
- Contact the remote monitoring station by telephone and advise that the MRB is ready to cease monitoring
- Provide weather/navigation warnings and other relevant information
- Check operation of all radios to be remotely monitored with the assistance of the remote monitoring station operator

NOTE: The MRB must not transmit a ‘base closing’ message over marine radio.

2. Monitoring by the remote monitoring station

The remote monitoring station should make every effort to manage all radio and phone traffic using the call sign or base name of the MRB they are covering to minimise confusion among callers. Where the remote monitoring station is unable to do this, such as where diverted phone calls are being received and the intended recipient is not known, they should use the identifier ‘Marine Rescue NSW’. If it subsequently becomes apparent that the caller needs to be made aware that they are not speaking to their local/intended base, the remote monitoring arrangement in place should be explained.

The Bureau of Meteorology (BOM) website shall be regularly checked for weather warnings for the areas monitored. Weather warnings marked as “Top Priority for Immediate Broadcast” by the BOM shall be immediately broadcast by the remote monitoring station on VHF Channel 16 & 67 using the most appropriate remote bases. Other weather warnings may also be broadcast at the discretion of the operator.

While monitoring on behalf of a MRB, the remote monitoring station must enter all Log-ons and Transits into Seahawk, with the Log-on reflecting the responsible base and destination based on the information provided by the vessel.

3. Duties of a MRB after standing down

The MRB must identify a Duty Officer to manage all incoming and outgoing telephone traffic, with call-forwarding arrangements in place where necessary. All telephone calls from the ZDOM or remote monitoring station must be answered.

Where a vessel logs on/off by phone during the period a MRB is stood down, the Duty Officer must immediately telephone the remote monitoring station and provide sufficient details for the operator to enter the log-on or voyage into Seahawk or log the vessel off.

4. Incident response

In the event that resources need to be activated in response to an incident, the remote monitoring station operator must respond in accordance with SOP OP 06. Depending on the situation and as directed by the ZDOM, the remote monitoring station may continue to co-ordinate an incident until resolved, or may hand over to the relevant MRB when reactivated, or to NSW Police Marine Area Command (MAC).

Where a MRB is reactivated by the ZDOM the remote monitoring station operator will be advised and must conduct the handover procedures described in section 1 (above). The ZDOM shall also advise MAC of the revised MRB status.

Where an incident is reported directly to the MRB by telephone or other means then the MRB Duty Officer shall respond as per SOP OP 06 and advise the remote monitoring station whether MRB is reactivating or whether remote monitoring should continue.

5. Handing back to a MRB by remote monitoring station

When ready to resume normal operations, the MRB shall telephone the remote monitoring station to advise they are ready to resume operations.

The remote monitoring station must then:

- Transfer all relevant Seahawk entries to that MRB
- Advise the MRB of any weather or navigation warnings and any other relevant information
- Advise vessels logged on that they are being transferred to the local MRB.

The MRB must then advise adjacent MRBs they have resumed normal operations.

NOTE: The MRB must not transmit a ‘base opening’ message over marine radio.

6. System failure

In the event of any systems failure that causes the remote monitoring of a MRB to cease, the remote monitoring station shall immediately contact the relevant ZDOM for alternative arrangements to be made.

Appendix F: MRB minimum equipment/ORI list

Item	Minimum requirement
Radio/Navigation/Electronics	
Radio Operator stations (consoles)	1 (2 for 24/7 MRBs)
Full array of local radios (redundancy) if using computer based radio system	As appropriate
VHF radio (with DSC)	1
VHF radio	1
DCN radio	1
27Mhz radio (existing only)	1
Navigation plotting equipment	1x set
Backup power supply – radio systems	As appropriate
Software and Program Access	
Frequentis/Reditalk (as available/installed)	Per each operator console
Seahawk	
Otter	
AIS feed (Marine Traffic)	
Open CPN	
Google Earth (with unit/asset and radio communication coverage overlays if applicable)	
Microsoft Office suite (Word, Excel, Power Point)	
Internet access for Bureau of Meteorology information	
MRNSW email	
Electronic Charts (Open CPN with AIS feed)	
Communication and Computer Systems	
Telephones (with call-waiting function and diversion)	2 (minimum of 1 copper line)
Computer with internet access	1 per operation console
MRV asset status board (digital or whiteboard)	1
Printer / copier	1
Documents/Publications (hard and soft copies – immediately accessible)	
MRNSW SOPs	1
Unit LOPs	1
Charts (relevant to coverage area)	1
Emergency contacts (relevant agency/units/personnel)	1 per operator station
Unit location and asset map	1
Marine Radio Operators Handbook	1
Learner Manuals (RO/WO)	1
Critical Incident Stress Support information and contacts	1
National Search and Rescue (NATSAR) Manual	1
State Rescue Board (SRB) Policy	1
Local Emergency Management Plans (EMPLANs)	1
NSW Tsunami Sub-Plan	1
NSW Storm Sub-Plan	1
NSW Flood Plan	1
Logs and Forms (hard and soft copies – immediately accessible)	
Communications Log	1 per operator station
Seahawk IMS form	5 per operator station
Other operational forms and logs	1 per operator station

Radio network fault reporting log	1 per operator station
Pens and paper	As appropriate per operator station
Amenities and Facilities	
Air conditioning	As appropriate
Clock (24hr time) – wall mounted, battery operated	1 per operational room
Back-up power supply – general	1
Chart table / Planning table	1
Whiteboards and markers	2 (at least 1 mobile whiteboard)
Chairs and desks	As appropriate for operators, supervisors, and additional agencies
Notice board	1
Safety/First Aid	
Waterproof torches (battery operated)	2
Binoculars (where appropriate)	1
First Aid Kit (Workcover compliant) with first aid sign identifier	1
CPR poster (displayed in common area)	1
Lone worker device	1
WHS and Building Code	
As required to meet minimum statutory and building code requirements	

Appendix G: Radio troubleshooting fault log and fault notification form

G.1 Troubleshooting Fault Log

Date	Issue	Brand (e.g. VHF, 27 MHz, DCN)	Channel(s) or Frequencies	Readability	Additional Notes (e.g. testing)	Issue Resolved (Y/N)

G.2 Fault Notification Form

OPERATIONAL COMMUNICATIONS FAULT REPORTING FORM			
Unit		**Date Lodged**	
Contact Name			
Contact Telephone			
Contact Email			
Brief Description of Issue(s)			
Fault Identification Process Undertaken			
Findings & Data Collected			
Band (e.g. VHF, 27 MHz)			
Channels or Frequency			
Readability			
Additional Information That May Assist With The Fault Rectification			

Appendix H: Additional information on vessels transiting interstate or overseas

MRNSW can only monitor voyages in NSW waters or where the destination is a named NSW location. Note that Lord Howe Island is a valid NSW location. The Northern Boundary for log off is Seaway Tower Southport. The Southern Boundary is Cape Howe.

Different jurisdictions require different approaches, and information is provided below for transits to and from Queensland, Victoria, Tasmania and overseas destinations.

H.1 Queensland

1.1 All inbound and outbound Transits from and to Queensland are managed through Seaway Tower Southport. That base is on the Gold Coast Seaway entry/exit and is jointly staffed by Volunteer Coast Guard and Volunteer Marine Rescue. It effectively operates 24/7. When Seaway Tower is closed the service is provided by VMR Southport. Both bases use Seahawk for NSW transits using the base designation of “Seaway Tower”.

1.2 Vessels heading outbound to Queensland must be logged on with a destination of Seaway Tower. Vessels must be advised that they must log off at Seaway Tower. We cannot log them on for a destination beyond Seaway Tower. If they want to log on for a Voyage further North, they must contact Seaway Tower and make arrangements with them.

1.3 Vessels inbound from Queensland will be logged on by Seaway Tower, usually to their final destination in NSW. Occasionally the Seaway Tower operator may only log them on to Point Danger and the voyage will need to be updated once the vessel skeds there.

1.4 If an outbound vessel is transferred to Seaway Tower and there is no response or is reported as overdue at Seaway Tower and no action appears to be being taken phone Seaway Tower (or VMR Southport if Seaway Tower is closed - phone numbers are in Seahawk) to check for follow up.

H.2 Victoria

2.1 Volunteer Coast Guard Victoria no longer provides a Voyage tracking service and is no longer the official Marine Distress listener. Marine Radio Victoria (under a contract with commercial provider “Kordia”) now monitor VHF 16. We have no formal arrangements with Marine Radio Victoria. The MAC will follow this up through the National SAR committee.

2.2 For vessels outbound to Victoria, until there are formal arrangements in place we cannot log on or provide vessel details to any Victorian authority. Vessels must be advised to log off with MR Eden when they pass Cape Howe, and also advised that we cannot transfer voyage details to any Victorian authority and that they must contact Marine Radio Victoria directly on VHF 16 or by telephone to ascertain whether they will provide a Voyage tracking service.

2.3 A vessel inbound from Victoria may contact MR Eden (or any other base) to advise of their inbound voyage. In that case the vessel should be advised to contact MR Eden to log on when they enter NSW waters (i.e. pass Cape Howe), and the conversation should be recorded in the comms log. When the vessel does advise MRNSW that they have entered NSW waters the vessel should then be logged on in Seahawk.

H.3 Tasmania

3.1 Tas Maritime Radio (TMR) is a volunteer organisation that provides a voyage tracking service but is only open 0600 to 1900 daily. Outside of those hours a contracted third-party (Golden Electronics Security) listens to VHF 16 and will respond to calls to TMR. MRNSW has formal arrangements in place with TMR for providing and receiving vessel voyage details by email as outlined below.

3.2 For vessels outbound to Tasmania the Logged-on Seahawk destination must be Cape Howe. The vessel must be advised that they must contact MR Eden when they are abeam Cape Howe and Log off in Seahawk.

3.3 As soon as it is made clear that the vessel is outbound for Tasmania, details should be obtained for the Tasmanian destination and ETA and recorded as Destination comments or Voyage Comms in logged on vessel in Seahawk. The vessel should be advised that the MRB will provide their Voyage details to TMR and the vessel contact TMR when they are within VHF range of Flinders Island.

The radio operator should advise TMR of the Voyage details, including the vessel destination and ETA, by email using the email template below, with an attached PDF version of the Seahawk voyage details. This can be downloaded from Seahawk by finding the vessel on the voyage log screen, clicking the down arrow at the right of the vessel, selecting ‘details’, then clicking the printer icon and selecting ‘save as PDF’, then saving it to the desktop and attaching it to the email.

The email must be sent from the base email account and cc’d to eden@mrnsw.com.au and base.sydney@mrnsw.com.au

Sample email notification to TMR:
Message to: ops@tasmaritime.com.au
CC: eden@mrnsw.com.au / base.sydney@mrnsw.com.au
Subject: TasMaritime Operators - Notification of incoming vessel: ENTER VESSEL NAME HERE from Marine Rescue ENTER UNIT

Message Body: Please be advised that vessel ENTER VESSEL NAME HERE has departed Eden heading for: ENTER THE FINAL DESTINATION HERE with an ETA of ENTER DATE AND TIME HERE
Attached as a .pdf file, you will find the vessel details from their NSW log on, with on-board contact numbers. The skipper has been advised that they must log-off with Marine Rescue NSW when they arrive at Cape Howe. They have also been advised to contact you when within VHF range of Flinders Island via VHF Channel 16 or mobile phone. In addition, they are advised that they can contact Marine Radio Victoria on VHF 16. Please acknowledge receipt of this email message. Thank you for your assistance.
ENTER YOUR NAME HERE
Marine Rescue ENTER UNIT NAME AND CONTACT PHONE/EMAIL

Once sent, the sending email account must be monitored for the TMR reply email. If an email is received with further information from TMR (such as a transit number) while the vessel is still within radio or telephone range, contact should be made with the vessel to provide the information to them. As TMR close at 1900, emails sent to them after this time will not be responded to until the following day.

3.4 MRNSW may be advised of a vessel inbound from Tasmania by email to MR Eden from TMR or by direct contact (to any base) from the vessel. In that case the vessel should be advised to contact MR Eden to log on when they enter NSW waters (i.e. pass Cape Howe), and the conversation should be recorded in the comms log (and MR Eden advised if this is done by another base). When the vessel does advise MRNSW that they have entered NSW waters the vessel should then be logged on in Seahawk.

H.4 Overseas Voyages

4.1 MRNSW cannot monitor an outbound voyage where the destination is an international port. If the vessel is transiting the NSW Coast before departing NSW waters for their international destination the vessel may be logged on to their NSW destination or transit point but must be logged off there.

4.2 For inbound voyages to a NSW Coastal location the vessel can be logged on only if they can provide a satellite phone number. The vessel should only be logged on if the destination for this leg of their voyage is a NSW coastal location. That is, there should be no planned stop overs on the voyage to the NSW destination. The vessel should be advised that we cannot provide radio voice communication outside NSW Coastal waters and should be encouraged to set up sked calls using the Sat phone.

4.3 Note that some vessels are now using website/apps that provide automated satellite position reports by email. If an inbound vessel requests the use of such a service, the radio operator should determine the appropriate timetable (preferably 12 hourly but no later than every 24 hours) that these reports will be received by and set that as a sked time with an unknown destination but with destination comments that the base email must be monitored for receipt of the position report. When the position report is received the sked should be updated with the position detail and the next sked set up for the expected position report. If an expected position report is not received, we follow the usual overdue procedure. If the vessel cannot provide a confirmed timetable for the receipt of the reports they must be informed that we cannot monitor the progress of the voyage and can only monitor their expected arrival time in NSW.