

Marine Communications Non-SOLAS Vessels

There are only a few pieces of safety communications equipment that a pleasure craft must carry when operating at sea within the Northern Territory, these are:–

- 2 orange smoke flares and two red flares;
- If the vessel is over five metres a V-Sheet; and
- If the vessel is more than two nautical miles from the coastline an EPIRB.

There are however many pieces of additional equipment a pleasure craft may choose to carry. There can be no better reason for installing a marine radio in your boat other than one day it may save a life. That life could be yours or of a member of your family.

The sea can be a frightening and lonely place, especially if you are in trouble. A marine radio gives you the ability to advise other people that you need help. It may be your only contact with the outside world.

Marine communication systems

There are two main marine safety communication systems operating in Australia. AMSA's Safety OffShore System and the State and NT Government's Coast Radio Australia System.

Safety off shore

This system is based on GMDSS (Global Maritime Distress and Safety System) principles which are part of the SOLAS Convention (Safety Of Life At Sea) which focuses on large vessels.

There are two equipment types used; these are HFDS (Digital Selective Calling) and Sat-C satellite communications. Pleasure craft operating in remote areas or participating in extended voyages such as cruising yachts may choose to use this equipment.

This system is managed and monitored at the Rescue Coordination Centre (RCC) in Canberra. There are two HF radio stations used to operate this system one at Wiluna (VMW) in Western Australia and Charleville (VMC) in Queensland.

Further Information can be gained from <http://www.amsa.gov.au/aussar/sos.htm>



Safety off shore system

Coast radio Australia

This system consists of nine stations located around Australia, with one radio in each state except Queensland and Western Australia which have two. They are all monitored by local people who are able to communicate with local authorities and each other. They monitor 2182, 4125, 6215 and 8291 kHz HF frequencies for distress, urgency and safety calls.



Coast Radio Australia system

Operational procedures

In a boating emergency, unless correct radio procedures are followed, things can become chaotic. It is important that you know how to effectively call for help and also to recognise that another boat is calling for assistance. Standard radio procedures have been laid down and are used by vessels of all nationalities. These are explained in detail in the Marine Radio Operators Handbook. This book is compiled by the Australian Maritime College and the Australian Communications Authority, a copy may be accessed from www.amcom.amc.edu.au/handbook/. The basic procedures are summarised below:–

Distress call

To be used if in grave and imminent danger and you require immediate assistance. Example vessel sinking or on fire.

Mayday, Mayday, Mayday

This is [Name and call sign if you have one] (spoken three times)

Mayday

[Name and call sign if you have one]

Details of the vessel's position

Nature of distress and assistance required

Other information including number of persons on board

It is recommended that you also activate your EPIRB in addition to making a Mayday call.

Urgency call

The urgency call is used when there is concern on the safety of your vessel or a person. Example medical emergency or a man overboard.

Pan Pan, Pan Pan, Pan Pan

Hello all stations, Hello all stations, Hello all stations

This is [Name and call sign if you have one] (spoken three times)

Details of the vessels position

Details of assistance required and other information

Safety call

The safety warning is used if you need to broadcast an important safety warning. Example a partly submerged object or an accidentally activated EPIRB.

Saycure-e-tay, Saycure-e-tay, Saycure-e-tay

Hello all stations, Hello all stations, Hello all stations

This is [Name and call sign if you have one] (spoken three times)

Details of the warning / announcement

VHF Distress, Urgency and Safety calls can be initiated on channel 16, they may be continued on channel 67.

HF Distress, Urgency and Safety calls can be initiated on 4125, 6215 and 8291, they may be continued on these channels or change to channels 2182, 12290 or 16420 if better reception is required.

Marine safety information

Marine Safety Information (MSI) is broken up into two main areas, weather and other MSI. The other MSI consists of information such as navigational aid details, obstructions and similar.

Weather

The Bureau of Meteorology is responsible for the broadcasting of weather on HF radio through a contract with TVNZ(A).

There are two sets of frequencies, one covering the East of Australia (VMC) the other the West (VMW), these are continually broadcasting on a four hour cycle which means weather for any one area is broadcast six times in any 24 hour period.

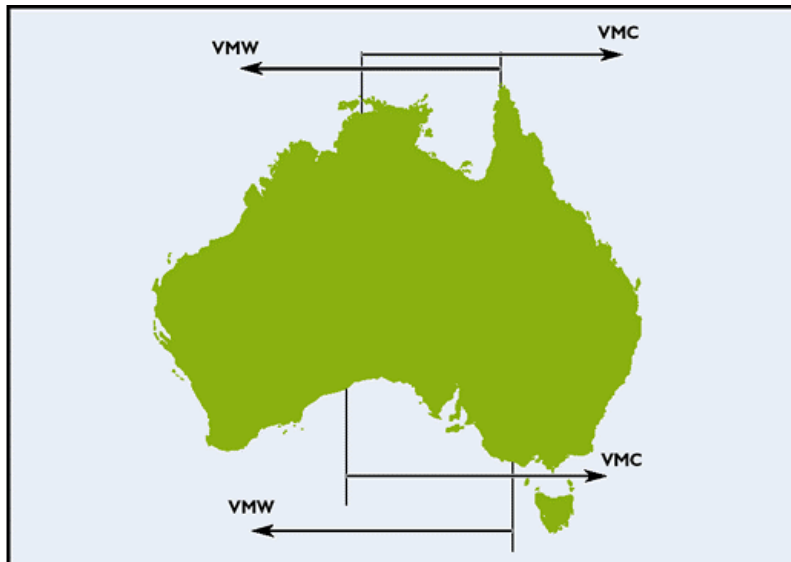
Other ways to access weather information

VHF broadcasts Weather is also broadcast over VHF channel 67 by Coast Radio Darwin at 0803 and 1803 each day. This consists of the forecast for Darwin Harbour and surrounding areas plus the Coastal Waters Forecast for Daly River to Cape Don.

Phone for weather There are various types of weather information that can be gained over the phone including:–

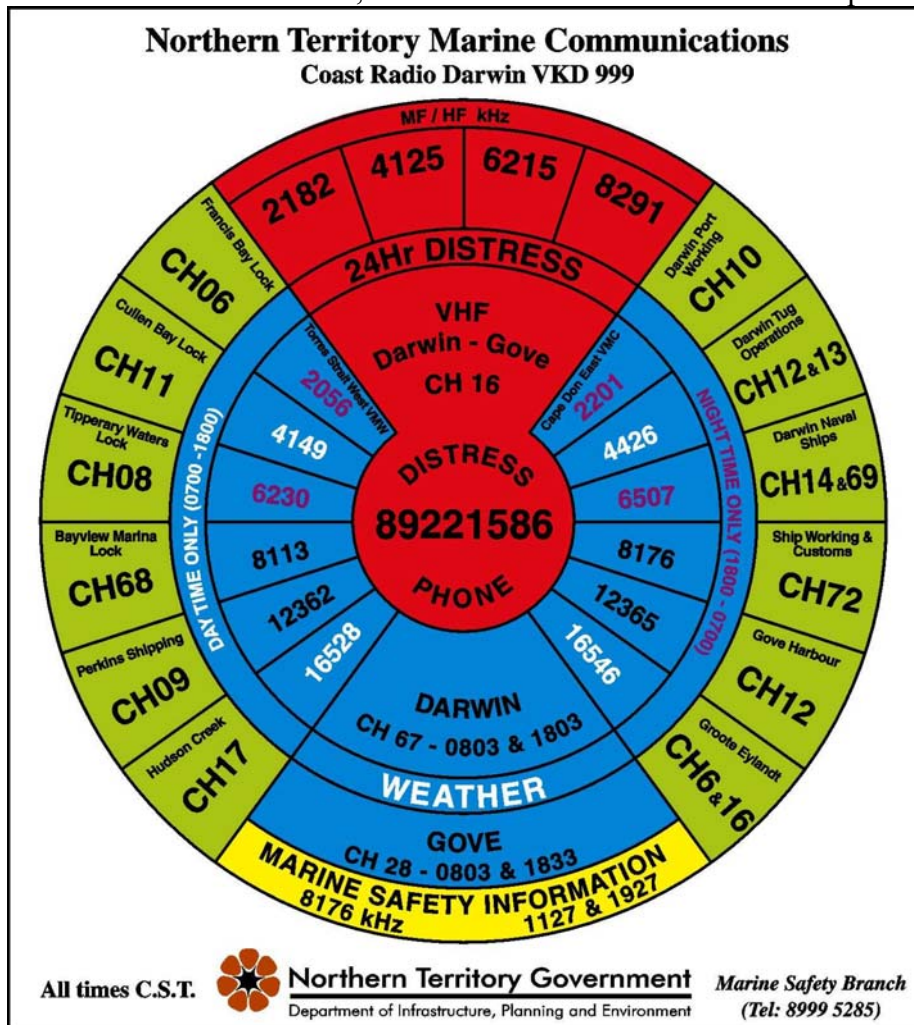
- 1900 955 367 – Coastal forecasts, warnings and observation bulletins.
- 1300 659 214 – Non cyclone warnings including coastal waters and wind warnings.
- 1300 659 211 – Tropical cyclone warnings and information.

(1300 numbers are equal to the cost of a local call; 1900 numbers have a cost per minute)



Coastal Coverage from Wiluna and Charleville Stations

Coast Radio Darwin Distress, Weather & Port Communication Frequencies



Weather communications from Wiluna and Charleville Stations

Transmissions will be on four HF frequencies simultaneously

White are day time only (7am to 6pm)

Red are night time only (6pm to 7am)

Black are 24 hours a day

Weather on the web

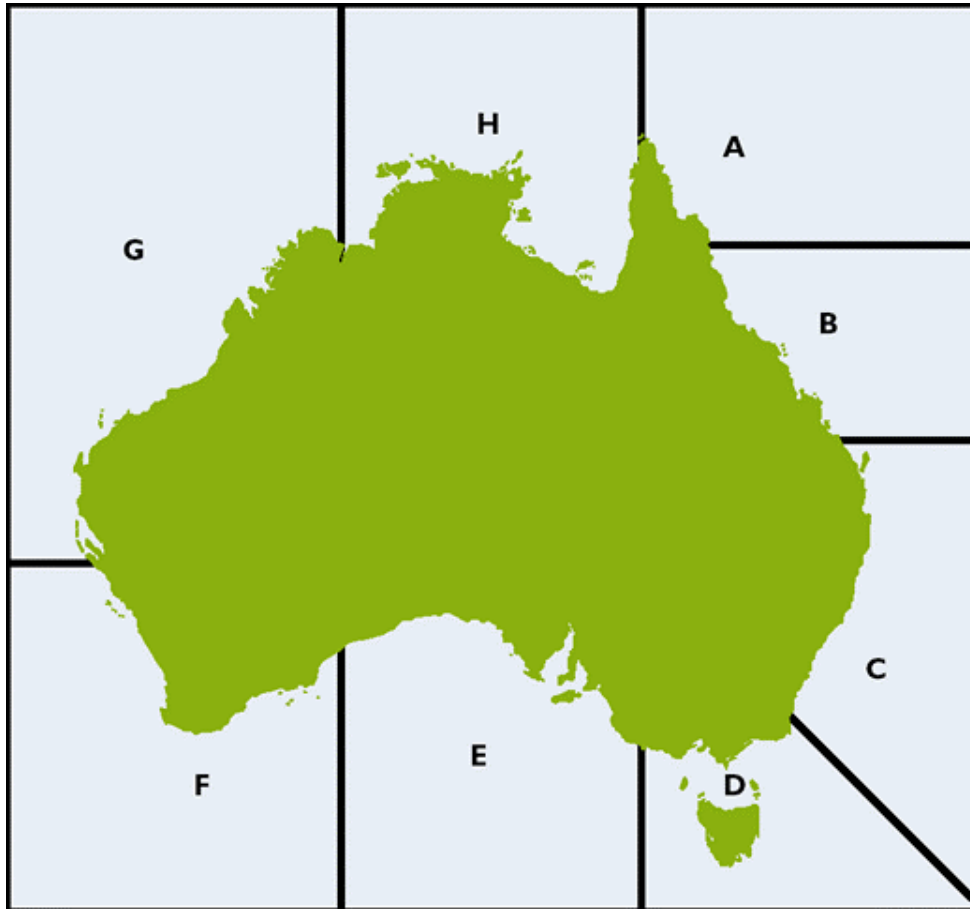
There is a wide range of weather available on the web which can be checked and printed before going on a day's water outing including forecasts, warnings and observations. There is also a wide range of additional information on ways you access weather: <http://www.bom.gov.au/marine/>

For today's weather warnings and forecasts go to www.bom.gov.au/weather/nt/

Other marine safety information (MSI)

All marine safety information, excluding weather, is broken down into eight segments around Australia and given a letter from A through to H. These areas are known as the Auscoast Areas or Navarea X.

Marine safety information is broadcast at 57 minutes past the hour somewhere in Australia, see schedule below, on HF radio 8176 kHz. Each HF station broadcasts the warnings for its adjacent area plus the one either side. A Sat-C system instantly receives them as they are issued.



Station	Primary	Secondary	Area
Adelaide	0357 UTC	0757 UTC	D,E,F
Cairns	2357 UTC	1257 UTC	H,A,B
Darwin	0157 UTC	0957 UTC	G, H, A
Darwin	1127 (local)	1927 (local)	G, H, A
Gladstone	2257 UTC	1157 UTC	A, B, C
Hobart	0557 UTC	-	C, D, E
Melbourne	0257 UTC	2157 UTC	C, D, E
Perth	0657 UTC	1057 UTC	E, F, G
Port Headland	0457 UTC	0857 UTC	F, G, H
Sydney	0057 UTC	1357 UTC	B, C, D

Marine communications equipment licensing

VHF

Individual ship licences are not required for VHF radios. Previously call signs used to be issued as part of the process of licensing VHF as this is no longer required, radios in a new installations and installations where the licence has expired will not have a call sign. A vessel in this situation is to use the name of the vessel to identify themselves.

Users are still required to hold an operators qualification. The qualification may be a Restricted Radiotelephone Operators Certificate of Proficiency, or a Third Class Commercial Operators Certificate of Proficiency, or a Marine Radio Operators Certificate of Proficiency, or a Marine Radio Operators VHF Certificate of Proficiency.

HF

HF radios must have an apparatus licence. More information on getting one of these licences can be found at www.aca.gov.au.

Users are required to hold an operator's qualification. The qualification may be a Restricted Radiotelephone Operators Certificate of Proficiency, or a Third Class Commercial Operators Certificate of Proficiency, or a Marine Radio Operators Certificate of Proficiency.

Mobile phones and satellite phones

With the increased coverage of mobile and satellite phones they are becoming a common item carried on pleasure craft and provide excellent general communications between vessels and the shore however, they should not be seen as a substitute or replacement for emergency communications.

Some points to consider include:-

A mobile phone only allows for communication between two people at any one time which may necessitate messages being passed via a third party with a real risk that vital information may be lost or misinterpreted, causing a delay to the response. Few rescue vessels will be fitted with or carry cellular phones.

The cellular system does not provide for distress priority alerting, consequently it is possible that calls may not be immediately connected if the system is very congested, such as in areas around major cities.

Mobile phone range is very restricted and within the Territory it is easy to travel outside the range. In a case of an emergency the phone may not be in range.

Rescue vessels cannot home in on a mobile or satellite phone signal. Use of recognised maritime communications equipment allows direction finding equipment to be used.

Mobile and satellite phones are more prone to damage from water and have only limited battery capacity.

If you do have a phone on board your vessel in the Northern Territory, you may contact the police/search and rescue on 8922 1586. This will be instantly recognised as a marine incident.