

Allan's Radiocommunications Guide



Compiled by Allan Adolphson
for Karadi's proposed trip to Hobart in February 2007

Friday, 17 November 2006

Cover picture: *Marathonisi lighthouse, Peloponnese, Greece.*

A magnificent structure built of marble on an island just off the city of Gythio in the southern Peloponnese.

Picture taken by Allan Adolphson in June 2005 ©

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Jargon Kit

Acronym Buster

27MHz	marine radio band (27.68 - 27.98 MHz), using AM transmission
AM	Amplitude Modulation (a form of transmission)
AMSA	Australian Maritime Safety Authority
BoM	Bureau of Meteorology
CB	Citizen Band (terrestrial, not marine: old = 27MHz, new = UHF)
DSC	Digital Selective Calling
DST	Daylight Savings Time (State dependent) = EST + 1 hr
EPIRB	Emergency Position Indicating Radio Beacon
EST	Eastern Standard Time = UTC + 10 hrs
FM	Frequency Modulation (a form of transmission)
GMDSS	Global Maritime Distress and Safety Service
GMT	Greenwich Mean Time (now UTC)
HF	High Frequency band (3-30 MHz), using SSB
INMARSAT	International Maritime Satellite Organisation
kHz	kilohertz (= 1,000 Hertz)
MF	Medium Frequency band (300 kHz -3 MHz), using SSB transmission
MHz	megahertz (= 1,000,000 Hertz)
MSI	Marine Safety Information
RCC	Rescue Co-ordination Centre
Rx	Receive frequency
SAR	Search and Rescue
SOLAS	Safety of Life at Sea (Int. Convention for vessels over 300 tonnes)
SSB	Single Sideband (a form of transmission)
Tx	Transmit frequency
UHF	Ultra High Frequency band (not marine, but the new terrestrial CB)
UTC	Coordinated Universal Time (was GMT), often abbreviated as Z (zulu)
VHF	Very High Frequency band (30-300 MHz), using FM transmission

Some Definitions

Duplex	HF transmission and reception on one channel set up as two different frequencies, one for Tx, and one for Rx
Radphone	HF access to the Telstra phone network
Seaphone	VHF access to the Telstra phone network
Simplex	HF transmission and reception on the same frequency
Squelch	Noise suppression dial
Time	Time in this document refers to AEST (Australian Eastern Standard Time = UTC + 10 hours) unless otherwise stated

Introduction

This guide sketches current HF, VHF, and 27MHz marine radio communications used for distress, safety and weather information for the eastern seaboard of Australia between Sydney and Hobart.

I started writing this document as a refresher course for myself following an invitation from Alan Clark to cruise to Hobart for the 2007 Wooden Boat Festival aboard Karadi. Almost immediately there was interest from others who suggested that I make it available to the cruising fraternity. I intend to make it freely available for free, but please do heed the warning below.

I've aimed to produce a document that is up-to-date as at February 2007, with no real intention of keeping it up to date following that date. Depending on my own cruising habits I may decide to expand and update it, but I'm not promising anything.

Please contact allan_adolphson@tpg.com.au if you detect any errors in this document or notice any glaring omissions.

Warning

This document may contain errors, definitely contains omissions, and may even contain misleading information.

If you use this document you do so at your own risk and recognise that it may contain inaccurate or out of date information.

It should be read as a guide rather than a gospel. Anyone setting to sea should do their own homework on the ins and outs of marine radio by consulting official sources of information. Do not rely on this guide alone.

Copyright

I claim copyright over this document.

Distribution of this radio guide

This document may be distributed freely provided that it is distributed in its entirety and is not modified in any way.

I'll make an electronic version of this guide available from the Balmain Sailing Club web site when I get closer to a final version.

Allan's summary

Offshore radio communication pretty much means HF radio, with VHF for coastal work and ship to ship, and 27 MHz for chatting to a fisherman in a tinnie in inshore waters. The UHF radio is not used in the marine environment. The AM/FM broadcast jukebox radio can also be used for elementary weather information. In case of an emergency we carry an EPIRB. We can access the telephone network using HF radio (Radphone) or using the VHF radio (Seaphone). And then there is the mixed blessing of mobile phones and satellite phones.

This guide concentrates on HF radio as it is generally the least well understood piece of equipment on any offshore yacht, and there have been huge changes in recent times.

As personal background I used HF extensively during the late 1980's and early 1990's for long offshore yacht racing and yacht deliveries from Mooloolaba in the north, Hobart in the south and Lord Howe Is in the east.

A great link for HF radio communication is the NSW-based private radio station Penta Comstat (<http://www.pentacomstat.com.au>). I include some information from Penta Comstat's web site for background and reference, as I think it is relevant to the aims of this document. Unfortunately this service has closed its membership and will cease voice services on 30 Sep 06. I have used this service extensively in the past. It is the quintessential personable and professional radio station.

A thing called the Global Maritime Distress and Safety System (GMDSS) heralds a new communications era, particularly for HF radio. Satellite technology, digitisation and automation are combining to mean the end of voice communication as the primary distress signal for ships. The modern HF radio needs frequencies up to 16 MHz and Digital Selective Calling (DSC) to effectively utilise the facilities on offer as part of GMDSS. We are in a transition phase at the moment, and there is still support for older HF radios and their lifeline - voice calls.

I note that the old national network of thirteen radio stations set up by OTC and maintained by Telstra until 2002, which included Sydney Radio, no longer exists. It has been superseded by a national service operating out of just two stations, one in Charleville in Queensland, the other in WA. A listening watch is not part of this service, so voice calls do not work. A modern HF radio with DSC is required just to initiate a call. It no doubt facilitates a better distress and safety system, but for basic communication it caters more for large vessels than cruising yachts. With Karadi's radio we can listen but cannot make contact with Charleville. We can get broadcast weather and marine safety information (MSI) through Charleville.

This situation has been well predicted and is not a cause for alarm or consternation. It is part of Australia's input to GMDSS. It has been designed for large vessels over 300 tonnes - called SOLAS vessels (SOLAS = Safety of Life at Sea). Non-SOLAS vessels, i.e. Karadi and all other small vessels, need access to something more low-tech (voice) as well as a link to the high-tech GMDSS facilities.

The States have set up "Coast Radio" stations to bridge the gap for small craft. Sydney, Melbourne and Hobart ("Coast Radio Sydney" etc) are all there for us to use on our planned trip south. However, the monitoring of "voice" is likely to remain fluid if not problematic. I note that there is a current discussion paper on discontinuing Coast Radio

voice monitoring of distress frequencies by 2010. So you should expect changes and not rely on dragging this guide out of your chart table on future journeys without checking for changes.

The volunteer rescue organisations are also available for 27MHz, VHF, and HF radio voice communications and broadcasts.

I should bring to your attention that a radio operator's licence is required for each person intending to use HF/VHF. An operator's licence is not required for 27MHz. These personal licences are in addition to Karadi being a licenced radio station. At this stage I have confirmation that AllanA has a full licence, Dave has a VHF licence, and Rowan does not hold a licence.

In short, we have ample communications options for the trip given our communications equipment and talent base.

Shore Stations

National Radio (Charleville)

Scope of Service

HF broadcasts of weather & MSI. HF calling is only via DSC. No VHF or 27MHz service. Automated 406 MHz EPIRB detection.

History¹

Midnight UTC 30 June 2002 (1000 EST 1 July) marked the end of an era when the Australian coast radio network closed after more than 90 years of service.

The closure was preceded by an emotional announcement from each of the coast stations in turn with the final transmission from VIT, VIB and VIS "Hello all stations, hello all stations, hello all ships. This is Brisbane Radio VIB, Sydney Radio VIS and Townsville Radio VIT. These stations are closing down now. This is our final broadcast. Since 1912 the Australian Coast Radio Service has provided a continuous Distress and Safety service to mariners in Australian Coastal Waters and on the High Seas. We thank everyone for their kind cooperation over the years and wish all seafarers fairwinds and following seas. At this time we remember and salute the radio officers past and present. Without his dedication and skill many lives would have been lost. This is Brisbane Radio VIB, Sydney Radio VIS and Townsville Radio VIT OUT."

The new GMDSS service is now provided through two new stations at Charleville in Queensland and Wiluna in WA, both remotely controlled from Canberra with the station identification of RCC Australia VIC. This service complies with the Commonwealth obligations to provide distress and safety services for SOLAS vessels (generally vessels over 300 grt). The voice listening watch on the distress and safety frequencies has ceased and initial contact with VIC must be made by DSC (Digital Selective Calling).

Non-SOLAS vessels (most small craft) are the responsibility of States and Territories and they are now providing a 24 hour distress, urgency and safety service on VHF channel 16, and the HF distress frequencies 4125, 6215 and 8291 kHz. The stations are located at Cairns, Gladstone, Sydney, Melbourne, Hobart, Adelaide, Perth, Port Hedland and Darwin. Each station operates as "Coast Radio" followed by the location.

Small craft can use the GMDSS services through RCC Australia if they fit appropriate equipment - a HF GMDSS transceiver with DSC facilities. Otherwise they must rely on the services provided by the Coast Radio stations or the services available from the volunteer rescue organisations.

Background

As part of a global system (GMDSS) the Australian Maritime Safety Authority is operating a national service based on HF-DSC. There are two stations, VMC at

¹ From the Penta Comstat web page

Charleville in Queensland and VMW at Willuna in WA. Note that a listening watch is not part of this service.

Karadi's HF radio does not have DSC, so we cannot call Charleville. We can, however, listen to their weather & MSI broadcasts.

Distress and Safety

The national service is set up for SOLAS vessels with modern HF radios with DSC. Karadi cannot access this service with her current HF radio.

Non-SOLAS vessels, which includes Karadi, are the responsibility of the States and Territories. Karadi's primary distress & safety lifeline should be Coast Radio (see below).

Weather Broadcasts & MSI

The Bureau of Meteorology broadcast all the weather forecasts for the Australian coast and high seas areas from Charleville and Willuna.

MSI broadcasts contain warnings for mariners sent out by the Rescue Co-ordination Centre in Canberra.

Weather forecasts are broadcast every four hours, and MSI every hour, on four frequencies simultaneously using HF frequency bands 2, 6, 8 and 12 MHz at night, and 4, 8, 12 and 16 MHz during the day.

Broadcast Frequencies

Day Time (7 am to 6 pm)	Night Time (6 pm to 7 am)
4426, 8176, 12365, 16546	2201, 6507, 8176, 12365

Coastal Waters Forecasts and Warnings Schedule

Warnings for QLD, NSW, VIC, TAS and SA	Every hour commencing 0000 EST
Special Announcements	Five minutes to every hour
Forecasts for NSW	0130, 0530, 0930, 1330, 1730, 2130 EST
Forecasts for Vic	0130, 0530, 0930, 1330, 1730, 2130 EST
Forecasts for Tas	0230, 0630, 1030, 1430, 1830, 2230 EST

Marine Radio High Seas Forecasts and Warnings Schedule

Warnings	Every hour commencing 0000 EST
Special Announcements	Five Minutes to every hour
Forecasts for South Eastern Area	0030, 0430, 0830, 1230, 1630, 2030 EST

Note that this is a cut down list relevant to Karadi's proposed voyage. See the BoM web for more detail.

Coast Radio

Scope of Service

HF broadcasts of weather & MSI. HF calling & listening watch, though not necessarily a 24 hr service.

VHF broadcasts of weather & MSI. VHF calling & listening watch, though not necessarily a 24 hr service.

No 27MHz service.

Background

An integrated network of stations operated around Australia by the States and the NT monitors VHF and HF distress and calling frequencies and broadcasts navigation warnings and MSI relevant to their broadcast areas.

Coast Radio stations are located Cairns, Gladstone, Sydney, Melbourne, Hobart, Adelaide, Perth, Port Hedland and Darwin. They are called as "Coast Radio Sydney", etc.

Distress and Safety

Safety services for non-SOLAS vessels are the responsibility of the States and Territories. All stations maintain a 24 hour distress and safety listening watch on 4125, 6215 and 8291 kHz.

"Coast Radio" is Karadi's lifeline voice service for distress and safety.

The old primary distress and safety frequency of 2182 kHz is now allocated as a ship to ship distress and safety frequency. Coast Radio stations do not monitor MF, which includes 2182 kHz.

Weather Broadcasts & MSI

Coast Radio Hobart broadcast weather - see Coast Radio Hobart below.

The Coast Radio stations broadcast MSI twice daily on 8176 kHz.

The Coast Radio network has limited availability to working frequencies since they will be used largely for weather broadcasts. The Coast Radio network therefore has only three minutes to broadcast MSI at each scheduled time on 8176 kHz. This three minute interval may be insufficient when there are a large number of warnings to broadcast. In such cases, "Coast Radio Hobart" (at least) will:

broadcast the heading information of each MSI;

advise ship stations that full details of any MSI can be obtained by calling "Coast Radio Hobart" on 4125, 6215 or 8291 kHz.

Coast Radio Station	Broadcast 1 (EST)	Broadcast 2 (EST)
Adelaide	1357hrs	1757 hrs
Cairns	0957 hrs	2257 hrs
Darwin	1157 hrs	1957 hrs
Gladstone	0857 hrs	2157 hrs
Hobart	1557hrs	
Melbourne	1257 hrs	0757 hrs
Perth	1657 hrs	2057 hrs
Port Hedland	1457 hrs	1857 hrs

Sydney	1057 hrs	2357 hrs
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Coast Radio Hobart

Coast Radio Hobart is operated by the Tasmanian Small Craft Marine Radio Group (TSMRG) from 0715 - 1945 hrs daily and by the Hobart Ports Corporation from 1945-0715 hrs daily, local time. TSMRG monitor distress and safety channels during the day and the Hobart Ports Corporation monitor for distress calls at night.

Coast Radio Hobart	
call sign	VMT 232
VHF Services.	
Ch 16 monitoring	0730 - 1930 hrs (local time)
Weather forecasts	0745, 1345, & 1903 hrs (local time) - announce on Ch 16 - provide on Ch 67 & Ch 68
Weather warnings	broadcast on receipt - announce on Ch 16 - provide on Ch 68
MSI	1557 hrs EST (1657 hrs Tas DST) - announce on Ch 16 - provide on Ch 68
Sked	After weather broadcasts or between 0730 & 1930 hrs (local time) daily on demand.
Ch 82 - the Maatsuyker Is. VHF Repeater	Monitored 0730 - 1930 hrs (local time). Weather broadcasts and skeds at 0833 & 1803 hrs (local time). Weather warnings broadcast on receipt
MF/HF	
Weather forecasts	0745, 1345 & 1903 hrs (local time) on 2524 & 4620 kHz and on demand.
Weather warnings	Broadcast on receipt on 2524 & 4620 kHz
Sked	Following weather on 2524 and 4620 kHz
MSI	1557 hrs EST on 8176kHz

Limited Coast Stations

Limited Coast Stations includes predominantly the volunteer services of the Coast Guard and Coastal Patrol, but some other organisations also come under the banner. They include other SAR, Ports, Clubs and private stations.

A list of useful Limited Coast Stations from Broken Bay to Hobart appears later in this guide.

Equipment

The EPIRB

The older EPIRB transmits an analogue signal on 121.5 MHz and basic information is detectable by aircraft & satellites, but this EPIRB is now being phased out. The modern EPIRB transmits digitally on 406 MHz and higher quality information, including an identity code, is detected by satellites with the signal being picked up by AMSA in Canberra as part of the GMDSS.

Karadi should carry a 406 MHz EPIRB. It should be registered with AMSA.

27MHz Marine Radio

Background

27 MHz is used by inshore and near-shore recreational boaters and volunteer services. It has a range of 10 -15 nautical miles which is usually limited to line of sight. Sound quality is average/variable, as the system uses AM transmission.

27 MHz radios allow close range ship to ship communication and close range ship to shore communication with the volunteer services. The "Coast Radio" stations do not monitor 27 MHz.

27MHz radios are capable of transmitting distress alerts, receiving weather forecasts and MSI provided that the vessel is operating within the coverage area and times of the volunteer services. Note that the volunteer services are usually not 24 hr operations.

No ship station licence is required for a stand alone 27 MHz installation, and no operator's licence is required for transmission (it shows, try listening in!).

Frequencies

With 27MHz the frequency defines the channel, eg 27.860 MHz is Channel 86.

Channel	Allocated Use
68	Commercial organisations - calling & working ship-ship, ship-shore
72	Professional fishing - calling & working ship-ship, ship-shore
82	Professional fishing - calling & working ship-ship, ship-shore
86	Alternate calling & safety working
88	Distress & calling
90	Public use - calling & working ship-shore
91	Public use - calling & working ship-shore
94	Public use; club events - working ship-ship, ship-shore
96	Public use - working ship-ship
98	Rescue organisations

As an example of use, a Balmain Sailing Club event using 27 MHz should involve calling on Ch 88 and going up to Ch 94 on contact. This procedure should be carried out with every new message. I've noticed a tendency of some craft to both call and work on a working

channel, eg Ch 94. This is not a correct or reasonable procedure as other vessels can be expected to monitor Channels 88 and 86 but not other channels unless by agreement. There is no point calling on a channel when your intended audience is not listening.

Distress and Safety

The distress and calling channel is Channel 88, with Channel 86 as a supplementary calling channel and the safety working channel.

All calls should be initiated on Channel 88. Use Channel 86 for calling only when the traffic on Channel 88 is heavy. On making contact direct the other party to an appropriate working frequency. Alternatively, they may suggest a working frequency.

Only use Channel 88 as a working channel during an emergency.

Weather Broadcasts & MSI

It's difficult to get a definitive statement, but broadly weather & MSI is available through the Coast Guard and other limited coast stations. I think getting a 27MHz schedule together is worth a PhD.

UHF Radio

UHF radios are not marine radios. They are primarily used for 4WD activities as the new generation CB (Consumer Band) radios, but pairs of handheld devices are becoming more common in the marine environment as a low cost personal communication option. In the terrestrial environment they are rapidly replacing the older 27 MHz CB radios (different frequencies to the 27MHz marine band). There is no maritime support system for UHF radio.

VHF Marine Radio

Background

VHF normally has a range of 20-30 nautical miles from a shore station, and possibly up to 50 or even 100 nm depending on atmospheric conditions and antenna height. There is a network of repeater stations all along the eastern seaboard, so the actual range is greatly extended. Sound quality is consistently excellent, as the system uses FM for transmission.

VHF allows ship to ship communication and ship to shore communications with the volunteer services, the port corporations and the States' Coast Radio network. A VHF radio is capable of transmitting distress alerts, and receiving weather forecasts and MSI.

VHF marine radios are now covered by a Class Licence, so a ship station licence is no longer required if the radio installation consists only of VHF and/or 27MHz. However, an operator's licence is still required to use VHF radio. A ship station licence for HF radio includes the use of VHF (and 27MHz).

Frequencies

Channel	Allocated Use
Ch 01-05	Seaphone
Ch 06	Search & rescue; port & Commercial operations
Ch 07	Seaphone
Ch 08	Port & commercial operations
Chs 9-14	Port operations (13 is ships?)
Ch 16	Distress & calling
Ch 20	Port operations
Ch 21-22	Repeater
Chs 23-66	Seaphone
Ch 67	Alternate calling & safety working
Ch 68	Port operations
Ch 69	Royal Australian Navy?
Ch 71	Professional fishing
Ch 72	Yachts; port & commercial operations; professional fishing
Ch 73	Yachts; licenced public use; non-commercial
Ch 74	Commercial operations
Ch 77	Yachts; professional fishing
Ch 78	Commercial operations
Ch 79	Port operations
Ch 80-82	Repeater
Ch 83-88	Seaphone

Distress and Safety

VHF Channel 16 is the distress and calling channel, with Channel 67 as a supplementary calling channel and safety working channel.

Weather Broadcasts & MSI

On 31 May 2006 the BoM ceased broadcasting its twice daily coastal weather forecasts through the Telstra Seaphone Service.

Coast Radio Sydney broadcasts weather and navigation warnings on channel 67 at 0733 and 1733 hours. Severe weather warnings are broadcast at hourly intervals upon receipt of such warnings from AMSA and until such time that the severe weather conditions no longer exist.

Coast Radio Melbourne broadcasts weather on VHF channel 67 at 0848, 1448 and 2048.

HF Marine Radio

Background

HF marine radio is used for long range communication.

HF is actually a combination of MF & HF frequencies covering the range from 2-22 MHz. MF frequencies are those below 3 MHz. Most frequencies are in the HF band from 4 MHz upwards. There are two types of HF radios; crystal frequency controlled (add

another crystal to add frequencies), and synthesised frequency controlled (programmable). Modern radios have DSC, which gives access to a range of new services as part of GMDSS. Sound quality is average/variable as the system uses the SSB mode of transmission.

Karadi's radio is a crystal frequency controlled HF without DSC. There is nothing wrong with this radio - you just need to know the services you can access and those you can't.

Frequencies

kHz	Karadi's radio	Allocated Use
2182	yes	Ship-ship distress & safety
2112	yes	Could be removed to accommodate a more useful freq
2201	yes	Weather & MSI from Charleville
2284	no	Yachts; calling & working
2524	yes	Yachts; calling & working; Coast Radio Hobart weather & sked
4125	yes	Distress, safety & calling
4134.3/4428.7	yes	Could be removed to accommodate a more useful freq
4426	no	Weather & MSI from Charleville
4483	new	Yacht race frequency (night); Penta Comstat; TasCoast sked
4620	yes	Coast Radio Hobart weather & sked
6215	yes	Distress, safety & calling
6507	no	Weather & MSI from Charleville
6516	new	Yacht race frequency (day)
8176	new	Weather & MSI from Charleville; Coast Radio MSI
8291	no	Distress, safety & calling
12290	no	Distress, safety & calling
12359	no	routine calling?
12365	no	Weather & MSI from Charleville
16420	no	Distress, safety & calling
16537	no	routine calling?
16546	no	Weather & MSI from Charleville

All the above frequencies are used as simplex channels, i.e. the one frequency is used for both reception and transmission.

HF Duplex Channels		
ITU Channel Number	Ship Transmit	Ship Receive
429	4354	4354
608	6221	6522
802	8198	8722
1203	12236	13083
1602	16363	17245
2243	22126	22822

List of Limited Coast Stations

Broken Bay to Hobart

This is a listing of basic information on stations from Broken Bay to Hobart.

Penta Comstat

Location	Firefly on the NSW Mid-North Coast: 34° 04.3' S 152° 14' E
Call Sign	Penta Comstat VZX
Hours (local time)	0700-1000, 1600-1900
Phone	02 6559 1888
Email	info@pentacomstat.com.au
Frequencies/channels monitored	27MHz: no service VHF: no service MF/HF: 4483 kHz, Chs 429, 608 & 802
Weather (Qld/NSW border to Gabo Is)	0725 & 1625 on HF 4483 kHz, Chs 608 & 802
Sked, warnings & messages	0735 & 1635 on HF Chs 429, 608 & 802 Note that voice services are planned to cease on 30 Sep 06.
Coverage	The eastern half of Australia and the Pacific Ocean

Coastal Patrol Terrigal

Location	Terrigal Haven
Call Sign	VMR253 Coastal Patrol Terrigal
Hours (local time)	0600-1700 Sat & Sun
Phone	02 4384 5577
Frequencies/channels monitored	27MHz: not stated VHF: not stated MF/HF: not stated
Coverage (N to S)	Broken Bay to Norah Head, including Brisbane Water

Coastal Patrol Gosford

Location	Point Clare on Brisbane Water
Call Sign	VMR215 Coastal Patrol Gosford
Hours (local time)	0600-1800 Mon-Thur, 0600 Fri to 1800 Sun & public holidays
Phone	02 4325 7929
Frequencies/channels monitored	27MHz: not stated VHF: not stated MF/HF: not stated

Coastal Patrol Hawkesbury

Location	Mooney Mooney
Call Sign	VMR Coastal Patrol Hawkesbury
Hours (local time)	0600 Fri to 1800 Sun & public holidays
Phone	02 9985 9012
Frequencies/channels	27MHz: Chs 88 & 86

monitored	VHF: Chs 16 & 67 MF/HF: 2182 & 2524 kHz
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Coast Guard Cottage Point

Location	Cottage Point: 33°37' S 151°12' E
Call Sign	VMR 263 Coast Guard Cottage Point
Hours (local time)	0700-sunset weekends and public holidays (close 1900 summer)
Phone	02 9456 3055
Frequencies/channels monitored	27MHz: Ch 88 VHF: Chs 16, 67, 73 and 80 & 81 repeaters MF/HF: 2182 & 2524 kHz
Coverage (N to S)	Cape Three Points to Long Reef, including Broken Bay and environs

Coastal Patrol Broken Bay

Location	Bayview Boat Ramp: 33° 39' 42" S 151° 18' 12" E
Call Sign	Coastal Patrol Broken Bay
Hours (local time)	1900 Fri to sunset Sun plus public holidays
Phone	02 9999 3554
Email	admin@coastalpatrolbrokenbay.com.au
Frequencies/channels monitored	27MHz: Chs 88 & 86 VHF: Chs 16 & 67 MF/HF: 2182 kHz

Coast Guard Sydney

Location	South Head: 33°51' S 151°17' E Birkenhead Point Marina: 33°52' S 151°09' E
Call sign	South Head: VMR261 Birkenhead Pt: VMR262
Hours (local time)	South Head: 0600-1800 M-F, 0500 Sat to 2100 Sun, 0500-2100 public holidays Birkenhead Pt: 0700-sunset weekends and public holidays (close 1900 summer)
Phone	South Head: 02 9337 5033 Birkenhead Pt: 02 9719 8609
Frequencies/channels monitored	27MHz: Chs 88 & 86 VHF: Chs 16, 67, & 73 MF/HF: 2182, 2524, 4125, 6215 kHz
Weather	10 minutes to the odd hours on 27MHz 88/86 and VHF 16/67
Area (N to S)	Long Reef to Coogee, including Port Jackson

Coastal Patrol Botany Bay

Location	Brighton Le Sands
Call Sign	Coastal Patrol Botany Bay
Hours (local time)	0700-1800 weekends and public holidays
Phone	02 9567 7113
Frequencies/channels monitored	27MHz: Ch 88 VHF: Ch 16

	MF/HF: 2524 kHz
Coverage (N to S)	Bondi to Port Hacking

Coast Guard Solander (Kurnell)

Location	Sutherland Shire Sailing Club, Kurnell: 34°01' S 151°08' E
Call Sign	VMR275 Coast Guard Solander
Hours (local time)	0700 to Sunset weekends and public holidays
Phone	02 9668 9888
Frequencies/channels monitored	27MHz: Chs 88 & 86 VHF: Chs 16, 67, 73 and 81 repeater MF/HF: 2182, 2524 kHz
Coverage (N to S)	Maroubra to Stanwell Park including Botany Bay, Georges River and Port Hacking

Coast Guard Botany Bay

Patrols only, no shore radio monitoring - see Coast Guard Solander.

Coast Guard Port Hacking

Patrols only, no shore radio monitoring - see Coast Guard Solander.

Coast Guard Port Kembla

Location	Red Point: 34°29' S 150°55' E
Call Sign	VMR 267 Coast Guard Port Kembla
Hours	24 hours, 7 days
Phone	02 4274 4455
Frequencies/channels monitored	27MHz: Chs 88, 86, 90 & 94 VHF: Chs 16 & 67 MF/HF: 2182, 4125 & 6215 kHz
Coverage (N to S)	Stanwell Park to Kiama

Coast Guard Bellambi

Location	34°22' S 150°56' E
Call Sign	VMR276 Coast Guard Bellambi
Hours	0700 to 1700, weekends and public holidays
Phone	02 4284 8822
Frequencies/channels monitored	27MHz: Ch 88 VHF: Ch 16 MF/HF: no service
Coverage (N to S)	Stanwell Park to Red Point (Port Kembla)

Coast Guard Shellharbour

Location	Boat Ramp, Towns Street 34°34' S 150°53' E
Call Sign	VMR 266 Coast Guard Shellharbour
Hours (local time)	0700-1700 weekends and public holidays
Phone	02 4297 3999
Frequencies/channels	27MHz: Ch 88

monitored	VHF: Ch 16 MF/HF: no service
Coverage (N to S)	Red Point (Port Kembla) to Kiama

Coast Guard Lake Illawarra

Location	Mobile van, Windang Boat Ramp: 34°33' S 150°52' E
Call Sign	(call sign?) Coast Guard Lake Illawarra
Hours (local time)	0700-1700 weekends and public holidays
Phone	02 4274 4455
Frequencies/channels monitored	27MHz: Ch 88 VHF: Ch 16 MF/HF: no service
Coverage	Lake Illawarra

Coastal Patrol Sussex Inlet (near Jervis Bay)

No details as yet.

Coastal Patrol Narooma (near Montague Is)

No details as yet.

Coast Guard Bermagui

Location	Boat Harbour: 36°36' S 150°04' E
Call Sign	VMR 269 Coast Guard Bermagui
Hours (local time)	0800- 1700 daily. Stand by bases operate after hours.
Phone	02 6493 4506
Frequencies/channels monitored	27MHz: Ch 88 VHF: Ch 16 MF/HF: 2182 & 2524 kHz
Coverage (N to S)	Montague Island to Tathra

Tathra to the border: Merimbula/Eden?

Coast Guard Mallacoota (near Gabo Is)

Ph 03 5158 0488. Monitor 27MHz, VHF & HF.

Coast Guard Marlo (near Orbost)

Ph 03 5154 2004. Monitor 27MHz & VHF.

Coast Guard Lakes Entrance

Ph 03 5155 1601. Monitor 27MHz, VHF & HF.

Coast Guard Loch Sport (Gippsland Lakes)

Location	37°55' S Long 147°43' E
Call Sign	VMR 363 Coast Guard Loch Sport

Hours (local time)	0800-sunset, 7 days
Phone	03 5146-0460
Frequencies/channels monitored	27MHz: Ch 88 VHF: Ch 16 MF/HF: 2182 & 2524 kHz
Coverage (N to S)	Gippsland Lakes / Loch Sport

St Helens Coastal Patrol

call sign	VMR 707
27 MHz services	
Ch 88 monitoring	0810 - 1710 hrs (local time)
Weather forecasts	0810 hrs (local time) and on request. Announced on Ch 88 and provided on a working frequency
Weather warnings	broadcast on receipt Announced on Ch 88 and provided on a working frequency
Sked	0810 hrs (local time) Announced on Ch 88 and provided on working frequency
Ch 94 monitoring	0810 - 1710 hrs (local time)
VHF Services.	
Ch 16 monitoring	0810 - 1710 hrs (local time)
Weather forecasts	0810 hrs (local time) and on demand. Announced on 16 and provided on a working frequency
Weather warnings	Broadcast on receipt. Announced on Ch 16 and provided on a working frequency.
Sked	0810 hrs and then on the odd hour until 1710 (local times). Announced on Channel 16 and provided on a working frequency.
Ch 82 (Mt Horror VHF Repeater) monitoring	0810 - 1710 hrs (local time)
MF/HF	
Weather forecasts	On demand on 2524 kHz when station operating.
Weather warnings	Broadcast on receipt on 2524 kHz when station operating.

Coast Guard Swansea (near Wineglass Bay)

call sign	VMR 726
27 MHz services	
Ch 88 monitoring	0830 - 1730 hrs (local time), breaks in service may occur
VHF Services.	
Ch 16 monitoring	0830 - 1730 hrs (local time), breaks in service may occur
Ch 80 (Cape Tourville VHF repeater) monitoring	0830 - 1730 hrs (local time), breaks in service may occur

Coast Guard Orford (near Triabunna)

call sign	VMR 721
27 MHz services	
Ch 88 monitoring	0800 - 1800 hrs (local time)
VHF Services.	
Ch 16 monitoring	0800 - 1800 hrs (local time)

Alternatively, Coast Guard Triabunna/Orford/Swansea

Location	Rebham: 42°30' S 147°54'E
Call Sign	VMR 721 Coast Guard Triabunna
Hours (local time)	
Phone	03 6257 1468
Frequencies/channels monitored	27MHz: Chs 88, 86, 67 & 96 VHF: Chs 16, 73 & 81 MF/HF: no service
Coverage (N to S)	Cape Tourville to Tasman Island

TasCoast Radio (Royal Yacht Club of Tasmania)

call sign	VIT 319 TasCoast Radio, Sandy Bay VIT 320 TasCoast Radio, Midway Point
Hours (local time)	0800-0830 and 1800-1830
Phone	03 6224 1441, ah 0418 127 897
Email	Radio Manager tascoast@ryct.org.au
VHF Services.	
Ch 16 monitoring	0800-0830 & 1800-1830 (local time)
Weather & Sked (free)	0810 & 1810 (local time) on Ch 81
Ch 81 (Mt Raoul VHF Repeater) monitoring	0800-0830 & 1800-1830 (local time)
MH/HF	
Weather & Sked (free)	0820 & 1820 (local time) on 4483 kHz

TasPorts Hobart Port Control

Hobart Port Control	
call sign	VHMBH
VHF Services.	
Ch 16 monitoring	24 hours, 7 days
Ch 12 monitoring	24 hours, 7 days

Coast Guard Derwent

Location	Hobart: 42°52' S 147°20'E
Call Sign	VMR 723 Coast Guard Hobart
Hours (local time)	

Phone	03 6234 1404
Frequencies/channels monitored	27MHz: Ch 88 VHF: no service MF/HF: no service
Coverage	Derwent River

Coast Guard Kettering - D'Entrecasteaux

call sign	VMR 722
27 MHz services	
Ch 88 monitoring	0830 - 1730 hrs (local time) Sat, Sun and Public Holidays.
Sked	0905 & 1305 hrs (local time) - announce on Ch 88 - provide on working frequency
VHF Services.	
Ch 16 monitoring	0830 - 1730 hrs (local time) Sat, Sun and Public Holidays.
Ch 81 (Mt Raoul VHF Repeater) monitoring	0830 - 1730 hrs (local time) Sat, Sun and Public Holidays.

alternatively

Location	Little Oyster Cove, Kettering: 43°27' 83S 147° 24' 74E
Call Sign	VMR 722 Coast Guard Kettering
Hours (local time)	0830-1800 1 Oct to 31 Mar weekends and public holidays 0900-1700 1 Apr to 30 Sep weekends and public holidays
Phone	03 6267 5016
Frequencies/channels monitored	27MHz: Ch 88 VHF: Ch 16 MF/HF: no service
Coverage	D'Entrecasteaux channel and adjacent waterways

Phonetic alphabet

A	Alpha	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Fox-trot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whisky
K	Kilo	X	X-Ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu