

# **ANNUAL AUSTRALIAN NOTICES TO MARINERS**

**IN FORCE ON 1 JANUARY 2012**

(Former Annual Australian Notices to Mariners dated 1 January 2011  
is cancelled and should be destroyed)

Containing Notices Numbers 1-27  
and  
Temporary and Preliminary Notices in force

The last Australian Notice to Mariners issued in 2011 was No 1347

## **IMPORTANT NOTICE**

This publication includes all significant and relevant information obtained by the Australian Hydrographic Service (AHS) at date of publication. Significant information is updated by fortnightly Australian Notices to Mariners. All reasonable efforts have been made to ensure the accuracy and completeness of the information, including third party information, incorporated in this product. The AHS regards third parties from which it receives information as reliable, however the AHS cannot verify all such information and errors may therefore exist. The AHS does not accept liability for errors in third party information or the inappropriate use of this publication.

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## 1. AUSTRALIAN CHARTING AND NOTICES TO MARINERS

### General Information

1. In accordance with agreements between Australia (Aus), the British Admiralty (BA) and New Zealand (NZ) for reducing duplication in charting activities Australia has a Charting Area (the Australian Area). The extent of the Australian Area and the New Zealand Area are shown on the accompanying diagram.

2. *Australian Notices to Mariners*, which are originated by the Australian Hydrographic Service (AHS), are numbered from 1 onward and are published as an Annual document together with 25 fortnightly editions each year. For more detail on the content of this service see *About Australian Notices to Mariners* section on the AHS website [www.hydro.gov.au](http://www.hydro.gov.au).

3. *Australian Notices to Mariners* are published on the AHS website and can be emailed direct to customers via the eNotices service. For more information see *View Australian Notices to Mariners* and *eNotices* sections on the AHS website.

4. Paper copies of *Australian Notices to Mariners* may be obtained from Chart Agents listed on the AHS website as providing a "Paper Notices to Mariners" service. For more information see the Chart Agents section on the AHS website. At the time of publishing this Notice, ChartCo ([www.chartco.co.uk](http://www.chartco.co.uk)) and Marine Press of Canada (Digitrace – [www.marinepress.com](http://www.marinepress.com)) offer electronic subscription services which include Australian Notices to Mariners.

5. Mariners are particularly requested to notify the AHS (Fax 61 (0)2 4221 8599) or AusSAR (Fax 61 (0)2 6230 6868) immediately on the discovery of new dangers or suspected dangers to navigation, and of changes or defects in aids to navigation.

### International Chart Series

6. National Hydrographic Services publish International Charts at scales of 1:1 500 000, 1:3 500 000 and 1:10 000 000. These international charts provide mariners with world wide coverage to a uniform specification. As part of this series Australia has twenty-two charts covering its adjacent oceans and seas.

7. Charts in these series are available for reprinting by member States of the International Hydrographic Organisation (IHO), with a minimum of modification. Each chart has an international number with the prefix INT, but may also bear a national number allocated by the producer or printer nation to facilitate identification in the national series.

8. International charts are maintained by *Notices to Mariners* and IHO Member States have undertaken to repeat notices affecting their international charts. Mariners can therefore correct charts from the *Notices to Mariners* of the producer or printer nation concerned.

### Index of Australian Charts

9. The index of Australian and International charts of the Australian Area is contained in two sheets as follows:  
*Aus 5000 - Australia - Index of Nautical Charts and Publications Northern Portion, 2012.*  
*Aus 5001 - Australia - Index of Nautical Charts and Publications Southern Portion, 2012.*

10. An interactive chart catalogue (*Australian Chart Index*) is also available on the AHS website [www.hydro.gov.au](http://www.hydro.gov.au) (see *para 27*) and supplied with the AusRNC update disk.

### Australian Nautical Publications

11. **The Australian National Tide Tables (ANTT)** contains information for over 500 ports in Australia, Papua New Guinea, Solomon Islands, Antarctica and East Timor. This information includes but is not limited to:

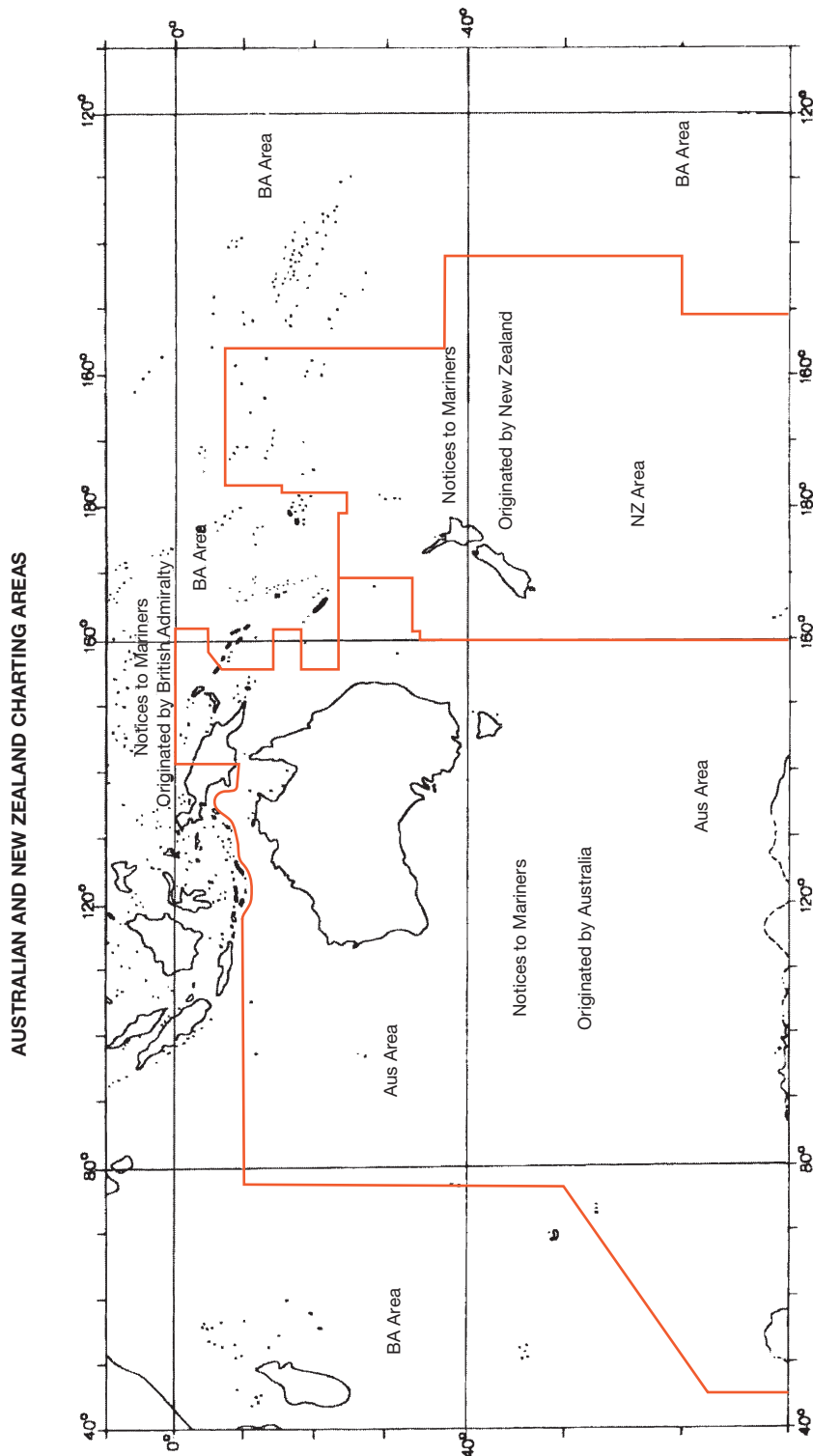
- a) Predications for high and low water for each day of the year for over 80 Standard Ports referenced to Lowest Astronomical Tide (LAT).
- b) Predications of maximum rates of tidal streams for Torres Strait and Port Phillip Heads.
- c) Tidal stream diagrams for Sydney, Broome and Darwin.
- d) Harmonic constituents for all Standard and Secondary Ports.
- e) Tidal levels and time difference for all Secondary Ports in relation to the relevant Standard Port.
- f) Correction from LAT to Chart Datum where required.

12. The ANTT is released annually in October and provides tidal predications for the following calendar year. It is maintained by *Notices to Mariners*, including *eNotices*.

13. **The Australian Seafarers Handbook**, helps mariners to navigate with confidence through Australia's maritime rules and regulations.

14. It is a publication combining information from various government agencies under the cover of one official nautical publication maintained by *Notices to Mariners*, including *eNotices*.

15. It contains textual information which cannot be shown on navigational charts including but not limited to:
- Maritime safety information, Meteorological broadcasts, Warnings, Search and Rescue
  - Marine protected areas and responsible agencies
  - Major Australian maritime legislation and regulations and responsible agencies,
  - AUSREP and REEFREP ship reporting systems and requirements,
  - Coastal pilotage, Torres Strait and GBR shipping routes, Accident and incident reporting
  - Maritime security, Customs, Quarantine, Immigration and Military information,
  - Contact details for:
    - Australian Maritime Safety Authority
    - Key Commonwealth agencies
    - Commercial ports and Harbour masters



### Official Electronic Product Status

16. When used in an International Maritime Organization (IMO) compliant Electronic Chart Display and Information Systems (ECDIS), Australian *ENCs* (Electronic Navigational Chart), *AusRNCs* (Raster Navigational Chart) (for those areas not yet covered by Australian *ENCs*) and *AusTides* will allow vessels navigating in Australia to meet the strict electronic chart carriage requirements of *SOLAS Chapter V* as ratified under *AMSA Marine Notice 01/2002*. Australian *ENCs*, *AusRNCs* and *AusTides* also meet carriage requirements under Australia's National Standards for Commercial Vessels.

17. The Australian Hydrographic Service is progressively changing to new branding for electronic products. Products formerly known under the banner of 'Seafarer' will be branded 'Aus'.

### Australian *ENC*

18. Australian *ENCs* are official Electronic Charts produced in International Hydrographic Organization (IHO) S57 Edition 3.1 vector format and protected using the IHO S63 data protection standard. They are authorised for use in IMO compliant ECDIS and can also be used in compatible Electronic Chart Systems (ECS). Australian *ENCs* are available through the International Centre for ENC (IC-ENC) and PRIMAR global distribution network. For more information see the AHS website, the IC-ENC website [www.ic-enc.org](http://www.ic-enc.org) or PRIMAR website [www.primar.org](http://www.primar.org).

19. Limited local distribution of Australian *ENCs* is available direct from the AHS to maritime safety authorities, port authorities and pilot authorities operating within the Australian Charting Area. Australian *ENCs* supplied direct from the AHS, are released under the banner of *AusENCs*. Port authorities (and maritime safety authorities) may acquire *AusENCs* within their port limits, or areas of vessel management responsibility, whichever is the greater, at nil cost in exchange for feedback. Pilots may purchase Australian *ENCs* of their area of operation. Beyond these limits, it is considered the IC-ENC and PRIMAR networks should be used. For more information contact [hydro.licensing@defence.gov.au](mailto:hydro.licensing@defence.gov.au).

### *AusRNC*

20. *AusRNC* is a digital coloured facsimile of Australian navigational charts on a single CDROM for use with ECDIS and certain compatible ECS. *AusRNC* digital charts maintain the same standards of accuracy, reliability and clarity as the paper versions.

### Product Compatibility

21. The *AusRNC* format is Hydrographic Chart Raster Format (HCRF) and is the same as that employed in the Admiralty Raster Chart Service (ARCS). This compatibility enables the mariner with *AusRNC* and ARCS compatible systems to take full advantage of the global service offered by ARCS outside Australian waters.

### *AusRNC* Packaging

22. *AusRNC* is packaged specifically to support the needs of the Australian mariner and is sold as follows:

- (a) **Australia Pack:** this pack includes all Australian navigational charts.  
 (b) **Regional Packs:** these packs (approximately 60 charts) will enable mariners to traverse major regional areas such as the Queensland coast. There are ten packs:

REG001	Southport to Booby Island	REG002	Brisbane to Melbourne
REG003	Sydney to Hobart	REG004	Spencer Gulf to Hobart
REG005	Perth to Melbourne	REG006	Broome to Esperance
REG007	Broome to Torres Strait	REG008	Papua New Guinea
REG009	Gulf of Carpentaria to Gladstone	REG010	Sydney to Whitsundays

- (c) **Day Mariner Packs:** these packs (approximately 10 charts) have been designed to cater for the *day mariner* and provide coverage for specific areas of interest. There are 29 packs:

DAY001	Sydney	DAY002	Whitsundays
DAY003	Brisbane	DAY004	Melbourne East
DAY005	Melbourne West	DAY006	South West Coast
DAY007	Darwin	DAY008	Gulf of Carpentaria
DAY009	Gladstone/Rockhampton	DAY010	Townsville
DAY011	Cairns	DAY012	Tasmania South
DAY013	Spencer/Thevenard	DAY014	Hedland/Dampier
DAY015	Tasmania North	DAY016	Newcastle
DAY017	South East Coast	DAY018	Albany/Esperance
DAY019	Geraldton	DAY020	Hervey Bay
DAY021	Gippsland	DAY022	St Vincent/Spencer
DAY023	Broome/King Island	DAY024	Coffs Harbour
DAY025	Torres Strait	DAY026	North West Cape
DAY027	Shark Bay	DAY028	Arnhem Land
DAY029	Joseph Bonaparte		

23. *AusChartviewer* is a desktop software package suitable for viewing a range of international chart formats including:
- IHO S63 Protected ENC (including Australian ENC)
  - S57 ENC
  - HCRF Raster (AusRNC, Admiralty ARCS and New Zealand Mariner)
  - Australian HCRF Aligned Products (WA DPI RNC and GBRMPA RNC)
24. *AusChartviewer* is designed for anyone who needs to store and view nautical charts but does not need to navigate with them.
25. *AusTides* is an official electronic product that is equivalent to the ANTT. It has the benefit of producing a graphical representation of the tidal curves and predictions at 10, 20, 30 and 60 minute intervals for each location represented in ANTT. *AusTides* is released annually in October and provides tidal predictions for the following calendar year. As required update patches are available from the AHS website ([/www.hydro.gov.au/seafarer/tides/tides-patches.htm](http://www.hydro.gov.au/seafarer/tides/tides-patches.htm)).
26. *AusGeoTIFF* provides electronic images of Australia's official paper charts in a geo-referenced Tagged Image File Format (TIFF) for use in geographical information systems (GIS) and similar image viewing platforms. *AusGeoTIFF* is not intended to be used for navigation. This product is only available under licence from the AHS. For more information see the AHS website or contact [hydro.licensing@defence.gov.au](mailto:hydro.licensing@defence.gov.au).
27. ® Seafarer is a registered trademark of the Commonwealth of Australia.

### Web Services

28. A comprehensive range of information and services are also available from the AHS website at [www.hydro.gov.au](http://www.hydro.gov.au) and include:
- Australian Notices to Mariners**, including block corrections and tracings.
  - eNotices** a free electronic service that allows the customer to receive Notices to Mariners, by email, customised for their chart and publication holdings.
  - Australian Maritime Gazetteer** a searchable database containing all of the place names published on Australian navigation charts. This database can be searched by name, feature code or chart number and provides details of the charted position and the chart on which it appears.
  - Australian Chart Index (ACI)** an interactive catalogue of official electronic (ENC and RNC) and paper charts produced by the Australian Hydrographic Service. It enables mariners to find a wealth of information about each chart in a few easy steps, including all the information required to update each paper chart to the latest edition of Australian Notices to Mariners.
29. The ACI is available in two graphic versions (Advanced and GoogleEarth™). The Advanced ACI displays paper chart, RNC and ENC limits on a zoom-in/zoom-out map. The GoogleEarth™ ACI displays chart images and ENC limits overlaid on GoogleEarth™ satellite maps.
30. The standard ACI is a text based list and provides a fast reference tool when the ENC cell or paper chart number is known.

Australian Hydrographic Service.

(AA375255, AA375264)

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## 2. DISTRIBUTORS FOR THE SALE OF AUSTRALIAN NAVIGATIONAL PRODUCTS

This list is correct at the time of publication. Further updates can be found on the AHS web site [www.hydro.gov.au](http://www.hydro.gov.au).

### Legend

- |            |                                                                                                                                                                                                                                                 |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>C</b>   | <b>Correcting Agent</b> - indicates agents who supply Australian nautical publications and supply Australian nautical charts that have been corrected for the latest <i>Australian Notices to Mariners</i> .                                    |
| <b>N</b>   | <b>Non-Correcting Agent</b> - indicates agents who supply Australian nautical publications and supply uncorrected Australian nautical charts <u>but</u> provide information concerning the <i>Notices to Mariners</i> in force at time of sale. |
| <b>NtM</b> | <b>Paper Notices to Mariners Service</b> - indicates agents who reproduce paper Notices to Mariners for supply to customers on a cost recovery basis.                                                                                           |
| <b>S</b>   | <b>Seafarer Product Distributors</b> - indicates distributors of Seafarer electronic products.<br>(Note: <i>AusTides</i> is also distributed through both Correcting and Non-Correcting Agencies)                                               |

*Australian ENCs* are distributed through the IC-ENC and PRIMAR global distribution network. For more information see the AHS website, the IC-ENC [www.ic-enc.org](http://www.ic-enc.org) or the PRIMAR website [www.primar.org](http://www.primar.org).

## NEW SOUTH WALES

### BALLINA

**Ballina Marineland Boat Sales**  
Airport Industrial Estate  
22 Endeavour Close  
Ballina 2478

Telephone +61 (0)2 6686 2669  
Fax +61 (0)2 6686 3296  
Email [marinelandboats@bigpond.com.au](mailto:marinelandboats@bigpond.com.au)

N

### BATEMANS BAY

**Batemans Bay Power and Sail**  
1/61 Kylie Crescent  
Batemans Bay 2536

Telephone +61 (0)2 4472 7263  
Fax +61 (0)2 4472 7816  
Email [powerandsail@hotmail.com](mailto:powerandsail@hotmail.com)

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### EDEN

**Eden Slipway Sevices Pty Ltd**  
249 Imlay Street  
Eden 2551

Telephone +61 (0)2 6496 1711  
Fax +61 (0)2 6496 3528

N

### SYDNEY

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31 Albany Street  
Crows Nest 2065

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Fax +61 (0)2 9439 8517  
Email [boatbooks@boatbooks-aust.com.au](mailto:boatbooks@boatbooks-aust.com.au)  
Website [www.boatbooks-aust.com.au](http://www.boatbooks-aust.com.au)

C, S,  
NtM

**L-3 Nautronix**  
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North Sydney 2060

Telephone +61 (0)2 9957 3549  
Fax +61 (0)2 9959 3594  
Email [spatial.nautronix@l-3com.com](mailto:spatial.nautronix@l-3com.com)  
Website [www.l-3com.com/nautronix](http://www.l-3com.com/nautronix)

S

**Hunt's Marine Pty Ltd**  
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Email [info@huntsmarine.com.au](mailto:info@huntsmarine.com.au)  
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N

**Map Centre - Parramatta**  
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Telephone +61 (0)2 9890 2080  
Fax +61 (0)2 9890 2080  
Email [mapcentre@bigpond.com](mailto:mapcentre@bigpond.com)  
Website [www.mapcentre.com.au](http://www.mapcentre.com.au)

N

**Mapworld (Sydney)**  
280 Pitt Street  
Sydney 2000

Telephone +61 (0)2 9261 3601  
Fax +61 (0)2 9261 2640  
Email [sydney@mapworld.com.au](mailto:sydney@mapworld.com.au)  
Website [www.mapworld.com.au](http://www.mapworld.com.au)

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**The Chart Room**  
Unit 31/9 Powells Road  
Brookvale 2100

Telephone +61 (0)2 9939 1966  
Fax +61 (0)2 9938 6210  
Email [headland@no1.com.au](mailto:headland@no1.com.au)

C

**Whitworth's Supermarket**  
283A The Kingsway  
Caringbah 2229

Telephone +61 (0)2 9525 5777  
Fax +61 (0)2 9525 0366  
Email [sales@whitworths.com.au](mailto:sales@whitworths.com.au)  
Website [www.whitworths.com.au](http://www.whitworths.com.au)

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### WOLLONGONG

**Bushcraft Equipment**  
29 Stewart Street  
Wollongong 2500

Telephone +61 (0)2 4229 6748  
Fax +61 (0)2 4228 6638  
Email [sales@bushcraftequipment.com](mailto:sales@bushcraftequipment.com)  
Website [www.bushcraftequipment.com](http://www.bushcraftequipment.com)

N

**L-3 Nautronix (Wollongong)**  
PO Box 5452  
Wollongong 2500

Telephone +61 (0)2 4226 6899  
Fax +61 (0)2 4226 5253  
Email [spatial.nautronix@l-3com.com](mailto:spatial.nautronix@l-3com.com)  
Website [www.l-3com.com/nautronix](http://www.l-3com.com/nautronix)

S

### YAMBA

**Yamba Marina Pty Ltd**  
3 Yamba Road  
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Fax +61 (0)2 6646 1744  
Email [yambamarina@hotmail.net.au](mailto:yambamarina@hotmail.net.au)

N

## QUEENSLAND

### AIRLIE BEACH

<b>Airlie Bait &amp; Tackle</b> 400 Shute Harbour Road Airlie Beach 4802	Telephone Fax Email	+61 (0)7 4946 6632 +61 (0)7 4946 6632 geoffphilp@westnet.com.au	<b>N</b>
<b>Marlin Marine</b> Shute Harbour Road Airlie Beach 4802	Telephone Fax Email Website	+61 (0)7 4946 6453 +61 (0)7 4946 6726 marlinma@tpg.com.au www.marlinmarine.com.au	<b>N</b>
<b>Quadrant Marine</b> Abel Point Marina Airlie Beach 4802	Telephone Fax Email Website	+61 (0)7 4946 4033 +61 (0)7 4946 4379 quadrant@whitsunday.net.au www.quadrantmarine.com.au	<b>N</b>

### BOWEN

<b>Bowen Independent</b> 28 George Street Bowen 4805	Telephone Fax	+61 (0)7 4786 1888 +61 (0)7 4786 2273	<b>N</b>
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<b>TMQ Electronics</b> 1/18 Alexandra Place Murarie 4172	Telephone Fax Freecall (Aust) Email Website	+61 (0)7 3890 7788 +61 (0)7 3890 7799 1800 777 835 tmq@tmq.com.au www.tmq.com.au	<b>S</b>
<b>Whitworth's Supermarket</b> 55 Balaclava Street Woollongabba 4102	Telephone Fax Email Website	+61 (0)7 3895 8300 +61 (0)7 3895 8028 sales@whitworths.com.au www.whitworths.com.au	<b>N</b>

### BUNDABERG

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<b>Tackle World Bundaberg</b> 22 Quay Street Bundaberg 4670	Telephone Fax Freecall (Aust) Email Website	+61 (0)7 4153 4747 +61 (0)7 4152 6707 1800 822 553 info@saltys.net www.saltys.com.au	<b>C</b>

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<b>Absells Chart &amp; Map Centre</b> Main Street Arcade, 85 Lake Street Cairns 4870	Telephone Fax Email	+61 (0)7 4041 2699 +61 (0)7 4051 2699 absells@iig.com.au	<b>N</b>
<b>Cairns Navigation Centre Markwell Marine</b> Cnr Mulgrave Road & Draper Street Cairns 4870	Telephone Fax Email Website	+61 (0)7 4030 0100 +61 (0)7 4031 4114 charts@markwellmarine.com.au www.markwellmarine.com.au	<b>N, S</b>
<b>Cairns Chart Correcting Agency</b> Unit E1, C/- The Big Boat Shed 35-37 Tingira Street, Cairns 4870	Telephone Fax Email Website	+61 (0)7 4035 2100 +61 (0)7 4035 2133 info@cairncharts.com.au www.cairncharts.com.au	<b>C, NtM</b>

### GLADSTONE

<b>Compleat Angler Gladstone</b> Bryan Jordan Drive or PO Box 1679 Gladstone 4680	Telephone Fax email Website	+61 (0)7 4972 7283 +61 (0)7 4972 7883 gladstone@completeangler.com.au www.completeangler.com.au	<b>N</b>
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## GOLD COAST

**Bosun's Locker**

Southport Yacht Club Marina  
MacArthur Parade  
Main Beach 4217

Telephone +61 (0)7 5591 1911  
Fax +61 (0)7 5591 6147  
Email boats@bosuns.com.au  
Website www.bosuns.com.au

N

**Coast Maps & Charts**

Shop A56  
Harbour Town Shopping Centre  
Gold Coast Highway  
Biggera Waters 4216

Telephone +61 (0)7 5537 2287  
Fax +61 (0)7 5537 2288  
Email info@coastmaps.com.au  
Website www.coastmaps.com.au

N

## MOOLOOLABA

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**C**

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**C, NtM**

Australian Hydrographic Service.

(AA302908)

### 3. LASER AIRBORNE DEPTH SOUNDER

1. The Australian Hydrographic Service operates a Hawker de Havilland Dash 8 aircraft fitted with a laser bathymetry system over Australia's coastal waters, predominantly in the Great Barrier Reef region.
2. The aircraft operates between an altitude of 400 to 700 metres; using green and infra red laser beams to measure sea depth down to 70 metres.
3. The laser meets the requirement of the Australian Laser Safety Standard AS 2211(1991) and is eye safe to the unaided eye at the normal operating altitude. System interlocks automatically inhibit the laser if the aircraft flies below a safe altitude.
4. Mariners are advised that under certain conditions a green light may be seen under the aircraft.

Australian Hydrographic Service.

(AA374264)

### 4. SEARCH AND RESCUE

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#### **General Arrangements for Search and Rescue (SAR)**

1. RCC Australia is a part of the Australian Maritime Safety Authority and has assumed responsibility for both aviation and maritime search and rescue.
2. When a ship or an aircraft is in distress in the Australian Search and Rescue Region (SRR) (*see page 24*, the SRR covers the same area as the AUSREP area depicted), assistance may be given by ships in the vicinity and/or the following authorities:
  - (a) *Australian Maritime Safety Authority (AMSA)* specifically the Rescue Co-ordination Centre Australia (RCC Australia), is responsible for SAR for all civil aircraft, for merchant ships outside port limits and small craft beyond the capacity of local SAR resources. RCC Australia is located in Canberra and co-ordinates aircraft and surface vessels involved in SAR operations within the Australian SRR. RCC Australia is also the Australian Mission Control Centre (AUMCC) for the Cospas-Sarsat International Satellite System used for the detection of distress beacons. RCC Australia, which is manned continuously, may be contacted via the AMSA HF DSC network or Inmarsat.
  - (b) *The AMSA HF DSC Network* which has stations located at Wiluna (Western Australia) and Charleville (Queensland) is controlled from RCC Australia. This network will respond to initial calls on HF DSC. Vessels wishing to communicate with the HF DSC network (Station Identifier *RCC Australia*, callsign VIC, – MMSI Number 005030001) will be required to initiate a DSC call on the International Distress alerting frequencies 4207.5, 6312.0, 8414.5, 12577.0 -or 16804.5 kHz. The Inmarsat Land Earth Stations (LES) at Perth (Western Australia) and Burum (Netherlands) provide communications through both the Indian Ocean Region (IOR) and Pacific Ocean Region (POR) satellites. Details of Australian Maritime Communications Stations (MCS) can be found in relevant Admiralty List of Radio Signals and International Telecommunication Union publications.
  - (c) The *Royal Australian Air Force (RAAF)* is responsible for SAR operations involving Australian and foreign military land-based aircraft; but, may provide assistance to other SAR authorities.
  - (d) The *Royal Australian Navy (RAN)* is responsible for SAR in respect of naval ships and ship borne aircraft, but may provide assistance to other SAR authorities.
  - (e) The *Australian Army* is the SAR authority for Australian Defence Force (ADF) and visiting military forces in a land environment but may provide assistance to other SAR authorities.
  - (f) *State and Territory Police Forces* are responsible for SAR operations involving fishing vessels, pleasure craft and commercial vessels administered by their jurisdiction within the limitations of their SAR resources.

3. Communications is the very heart of search and rescue co-ordination activities and RCC Australia is well equipped with systems enabling access to communications worldwide including:

- (a) Telephone,
- (b) X.400 data communications,
- (c) Facsimile,
- (d) Aeronautical fixed telecommunications network (AFTN),
- (e) Inmarsat B/C/M/F77/F55/F33 and
- (f) Email.

4. In addition to RCC Australia's functions in the SAR role it is also responsible for:

- (a) Co-ordination and promulgation of Maritime Safety Information (MSI) in the form of Navarea X warnings, Australian Coastal Navigation warnings (Auscoast) and Sea Safety Messages (SSM).
- (b) Operation of the Australian component of the Cospas-Sarsat International Satellite System for Search and Rescue. This system is equipped to receive and evaluate information transmitted by Emergency Position Indicating Radio Beacons (EPIRBs).
- (c) Acting as AMSA's 24 hour point of contact for matters relating to AMSA's other areas of responsibility.
- (d) Operation of the Australian Ship Reporting System (AUSREP).

#### **RCC AUSTRALIA contact details**

Telephone AusSAR Maritime +61 (0)2 6230 6811

AusSAR Aviation +61 (0)2 6230 6899

Freecall 1800-641 792 (Maritime)

Freecall 1800-815 257 (Aviation)

Facsimile +61 (0)2 6230 6868

Email [rccaus@amsa.gov.au](mailto:rccaus@amsa.gov.au)

Radio via AMSA HF DSC network

Telex ceased to be used in Australia in March 2008. In addition to the normal two digit codes used for Inmarsat messaging, SAC 1250 can be used via LES 212 and 312 to send routine traffic to RCC Australia.

5. Ships fitted with suitable radio equipment can make a significant contribution to safety by guarding an appropriate International distress frequency for as long as practicable, whether or not required to do so by regulations.

#### **Merchant Ship Search and Rescue**

6. Guidance for Masters involved in SAR operations is contained in the International Aeronautical and Maritime Search and Rescue Manual (*IAMSAR*) *Volume III*, which is published jointly by the International Maritime Organization (IMO) and International Civil Aviation Organization (ICAO). It is a SOLAS requirement that mariners carry a copy of *IAMSAR Vol III* which has replaced the MERSAR Manual.

#### **Obligation to Render Assistance**

7. Under the *International Convention for the Safety of Life at Sea, 1974* and *Sections 265 and 317A of the Australian Navigation Act*, the Master of a ship at sea is bound to render assistance in distress situations unless in the special circumstances of the case, he considers it unreasonable or unnecessary to do so. In such cases the Master must enter in the ship's log the reason and advise the appropriate SAR authority, accordingly.

#### **Assistance by SAR Aircraft** (see also *IAMSAR Vol III page 2-18*)

8. Aircraft (other than helicopters) employed on search and rescue duties may carry droppable survival equipment and marine markers. These aircraft may be able to assist a ship in distress by confirming location, marking position, dropping survival equipment or directing rescue vessels to the area.

9. Droppable equipment may consist of liferafts with bright yellow or orange buoyant rope attached or heliboxes or other marine containers containing survival equipment, radios, water etc.

10. Australia maintains dedicated SAR aircraft at five locations (Darwin, Cairns, Brisbane, Melbourne and Perth) and a mixture of semi-dedicated aircraft and helicopters around the Australian coast that may be available at short notice. Where possible, aircraft will be equipped with VHF DF equipment for the location of EPIRB transmissions.

11. To assist in recognition by aircraft, the position of the vessel should be given as accurately as possible. When time permits, a description of the vessel, including any unusual features, colour of hull, funnel and superstructure should be given.

#### **Use of Helicopters** (see also *IAMSAR Vol III page 2-19*)

12. Helicopter assistance in the Australian SRR is generally limited by relatively short ranges (out to 120NM from land) and low operating speeds. Helicopters may be used to supply equipment and/or rescue or evacuate personnel. Advice concerning helicopter-ship operations is contained in *IAMSAR* or may be sought from RCC Australia.

13. On no account should the stop or winch wire, when lowered to the vessel, be secured to any part of the vessel or allowed to become entangled with any rigging or fixtures.

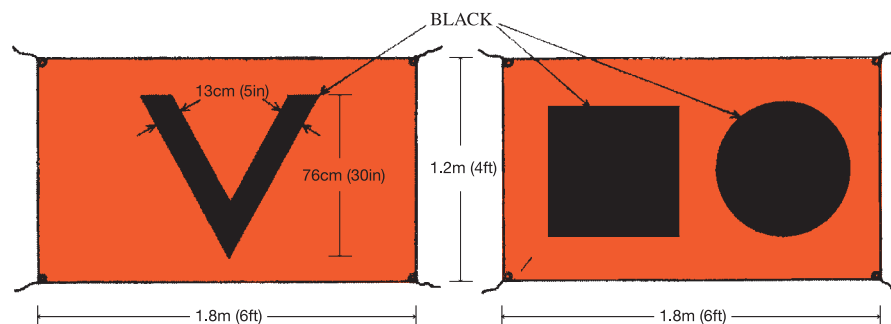
14. Where a helicopter is unable to safely operate over the deck of a vessel, the helicopter may be able to lift a man from a boat or raft towed astern on a long painter. In bad weather, survivors are sometimes more easily recovered from the sea than the vessel itself, particularly if it is a yacht.

15. If a ship wishes to contact a helicopter during a SAR operation it may do so by visual signals, direct radio communication (if the correct type of radio is carried), or through RCC Australia.

### Distress Signals for SAR

16. Searching aircraft frequently experience difficulty in identification of a distressed vessel especially when close to a number of other small vessels. To help overcome this problem in the Australian SRR either of the two signals illustrated (see *below*) may be used to indicate a vessel in distress requiring assistance. These signals are not meant to replace pyrotechnic signals already carried by small craft, but should be carried in addition to those signals.

17. These signals are supplementary to the international distress signals and if possible, the international signal NC (ie flag N over flag C) should be hoisted.



### Use of Ships in Assisting Aircraft

18. Aircraft that ditch in the sea generally remain afloat for only a short time. In view of this, Masters of vessels proceeding to assist should do so with the greatest possible speed.

19. Merchant ships may receive information of distress on any of the internationally recognized distress frequencies for DSC, radiotelephony or Inmarsat. Additionally, information may be received by visual signals from a distress aircraft, by an aircraft directing a ship to the location of a distress or by signals emanating from survivors. Further advice concerning action to be taken in any of these eventualities can be found in *IAMSAR*.

20. All information concerning an aircraft in distress at sea is to be passed to RCC Australia by the most expedient method; further action will then be initiated by shore authorities. Where possible, if DF equipment is fitted, bearings of any radio signal should be obtained.

### Communications with Aircraft Searching for Survivors

21. An aircraft engaged on SAR operations will be briefed to listen on a specified marine frequency and merchant ships will be advised by RCC Australia of the frequency adopted.

22. In the absence of specific advice, the primary air/sea communications frequency is 156.8 MHz (Ch 16). If aircraft are not fitted with Ch 16, the secondary frequency 4125 kHz may be used.

23. When it is necessary for an aircraft to direct a surface craft to the place of distress the aircraft may do so by transmitting precise instructions by any means at its disposal. If such instructions cannot be transmitted, or if considered desirable for any other reasons the following manoeuvres performed in sequence mean that the aircraft wishes to direct a surface craft towards a distress position:

- (a) Circling the surface craft at least once.
- (b) Crossing the projected course of the surface craft close ahead at low altitude and:
  - (i) rocking the wings or
  - (ii) opening and closing the throttle, or
  - (iii) changing the propeller pitch.

*Note:* Due to high noise level on board surface craft, the sound signals in (ii) and (iii) may be less effective than the visual signal in (i) and are regarded as alternative means of attracting attention. Repetition of such manoeuvres has the same meaning.

- (c) Heading in the direction in which the surface craft is to be directed.

24. A ship receiving the above signals should reply in the following manner:

- (a) When acknowledging receipt of the signals:
  - (i) hoist the "ANSWERING" pennant close up, or
  - (ii) flash the Morse Code procedure signal "T" by light, or
  - (iii) change heading onto the indicated direction
- (b) When indicating inability to comply:
  - (i) hoist the international flag "N" (NOVEMBER), or
  - (ii) flash the Morse Code procedure signal "N" by light.

25. The following manoeuvre by an aircraft means that the assistance of the surface craft to which the signal is directed is no longer required, crossing the wake of the surface craft close astern at low altitude, and:

- (a) rocking the wings or
- (b) opening and closing the throttle, or
- (c) changing the propeller pitch.

### Night Search by Aircraft

26. An aircraft searching at night for pyrotechnic equipped survivors or small craft will either fire a green flare or, in the case of non military aircraft, switch on landing lights at three to five minute intervals and at each turning point in the search pattern (see page 20). Survivors in the area should see at least two successive signals. Aircraft crew will acknowledge the sighting of distress flares by firing a succession of green flares and/or switching on the aircraft's landing lights.

### Response Action by Survivors

27. Survivors can assist in their detection by a searching aircraft if optimum use is made of what ever pyrotechnics they have available. A flare should not be fired until after the aircraft's signal has ended. A second flare should not be fired until a full minute after the first flare. When the aircraft is about a mile away a further flare should be fired.

28. To increase the chances of being located, survivors should always attempt to maintain a continuous all-round visual lookout at night, as well as by day.

### Use of Emergency Position Indicating Radio Beacons (EPIRBs)

29. The AUMCC is the regional Nodal Mission Control Centre for the Cospas-Sarsat International Satellite System for Search and Rescue.

30. The Cospas-Sarsat system detects EPIRBs operating on 406 MHz:

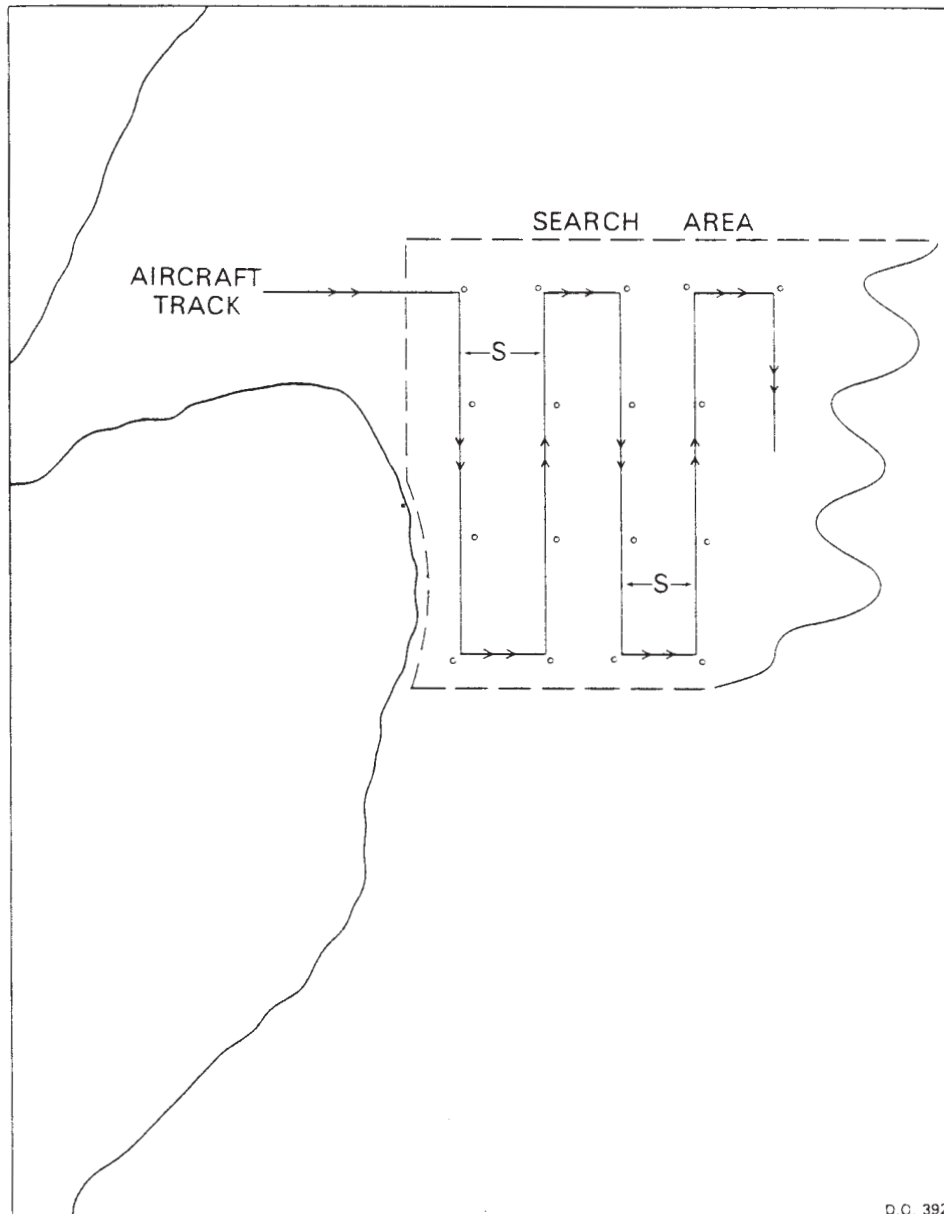
- (a) EPIRBs operating on 406 MHz are detectable throughout the whole of the Australian SRR with a high degree of accuracy. These EPIRBs can also be detected almost instantaneously via the geostationary satellite system. GPS capable EPIRBs are recommended.
- (b) 406 MHz beacons have global coverage because the satellites have a store and save capability that stores information from a 406 MHz beacon and sends the information to a ground station when it comes into view. Ground antennas are at Albany (Western Australia), Bundaberg (Queensland) and Wellington (New Zealand) giving excellent coverage around the coast of Australia and in the Coral and Tasman Seas. The average detection time increases towards the mid-Indian Ocean region. **Mariners should note that Cospas-Sarsat ceased to process the 121.5/243.0 MHz frequencies on 1 February 2009. All mariners now require 406 MHz beacons.** All Australian coded 406 MHz beacons must be registered with AMSA. Beacons can be registered on-line at <https://www.beacons.amsa.gov.au/>.
- (c) The coverage area of the COSPAS-SARSAT GEOSAR satellites and the location of the GEOSAR Local User Terminals (GEOLUTs) are shown in Figure 1 (see page 21).

31. EPIRBs should be switched on as soon as a distress situation occurs and **MUST REMAIN SWITCHED ON** until the rescue is concluded or until otherwise instructed by the rescue unit or rescue authority.

32. Should inadvertent or accidental operation of an EPIRB occur, the beacon must be switched off and every effort made immediately to inform RCC Australia through the HF DSC network, a limited coast radio station, Inmarsat, relay via another vessel or by any other means of communication. The report should include the position, and if known, the time of activation.

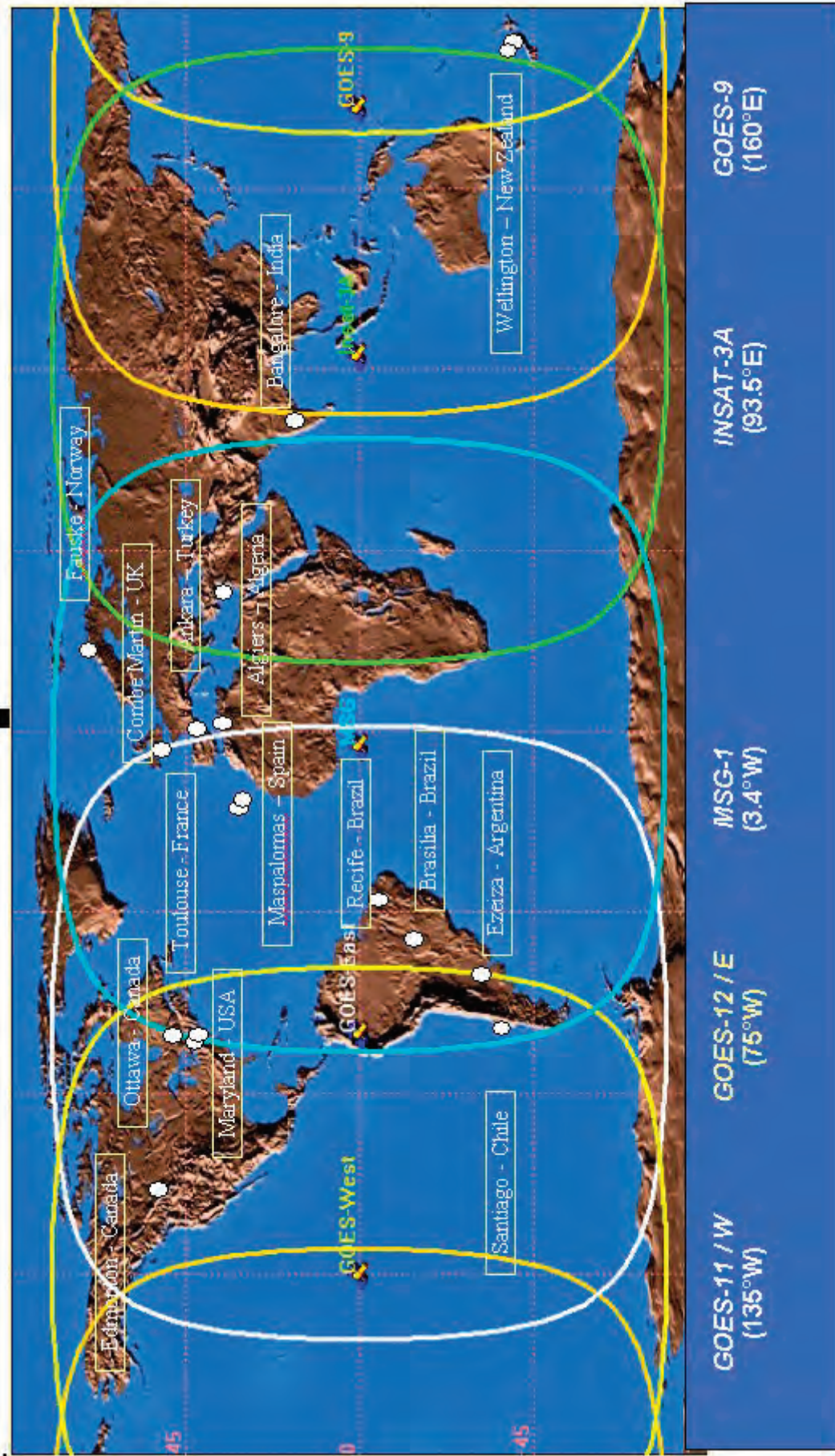
*No action will be taken against any person reporting the inadvertent or accidental operation of an EPIRB.*

## DIAGRAM SHOWING NIGHT SEARCH TECHNIQUE



1. The aircraft will fly through the search area between three and five thousand feet, or below cloud if the base is lower, and fire a green Very cartridge every 3 to 5 minutes and at each turning point, as indicated by small circles.
2. The spacing (S) between adjacent tracks depends upon the visibility from the aircraft.

Figure 1. Cospas-Sarsat GEOSTATIONARY SATELLITES



### Medical Advice

33. Vessels at sea can request medical advice via HF DSC radio or Inmarsat satellite services. The service has been put into place for SOLAS vessels but other craft may use the service in emergencies. This service is free and is available via Inmarsat-C fitted vessels using Special Access Code (SAC 32), HF DSC fitted vessels through RCC Australia/VIC using the Urgency priority DSC Call or, for non-SOLAS vessels, by contacting RCC Australia on +61 (0)2-62306811 (phone), +61 (0)2 6230 6868 (fax) who will put the vessel in contact with the Duty Medical Officer at Australia's Telemedical Advice Service (TMAS) provider, Careflight Group Queensland..

### Medical Assistance

34. Requests for medical assistance by vessels using Inmarsat-C (Special Access Code 38) (medical assistance) will be delivered directly to an RCC.

35. When possible, pleasure craft and fishing vessels should seek medical assistance from the relevant State police.

36. Search and rescue services will normally only consider a medical evacuation after advice has been received from medical authorities recommending medical evacuation. Medical advice is required to determine the best course of action. A vessel may need to divert to port, conduct a boat transfer or make ground towards the coast to permit a helicopter transfer.

### Medical Evacuations

37. Responsibility for the final decision on a medical evacuation lies with the master of the vessel, however, it should be based on medical advice from either the TMAS or other recognized medical authority. RCC Australia will seek medical advice concerning the evacuation method from the TMAS if not already provided to the master. Not all patients can be evacuated by helicopter. RCC Australia will advise the master of the evacuation method and other requirements. Medical complications resulting from diving operations may be exacerbated during any medical evacuation by air. For diving emergencies special medical advice will be sought before an evacuation by air is conducted. For a helicopter evacuation the following information is normally sought.

#### 38. Questions for Masters requesting helicopter MEDEVAC

- (a) Description, colour and distinguishing features of vessel.
- (b) Position of landing area and dimension of clear zone or position of winching area and dimension of manoeuvring zone.
- (c) Maximum load deck can support at landing area.
- (d) Weather report including sea state, barometric pressure and cloud base.
- (e) Accuracy of your position and how obtained.
- (f) Is crew experienced in helo operations, date of last helicopter transfer.
- (g) Is a copy of IAMSAR Manual Vol III carried.
- (h) Agents name, postal address and contact number.
- (i) Personal details of patient (ensure personal papers carried)
  - (i) Name
  - (ii) Age
  - (iii) Sex
  - (iv) Nationality
  - (v) Passport or Seaman's book number
  - (vi) Vessel's last port of call
- (j) Air to Ground frequency for communications with helicopter, VHF CH 6 and/or 16

*Note:* Once assistance has been requested by a vessel's Master, RCC Australia will request the vessel to commence regular position reporting to RCC Australia. The Master of the vessel is required to ensure position reports, regular contact with RCC Australia and serviceability of the vessel's communications system is maintained.

#### 4A. THE AUSTRALIAN SHIP REPORTING SYSTEM (AUSREP)

**AUSREP** (see AUSREP ship reporting instructions for the Australian Area dated 2009)

1. Masters should note that:
  - (a) The preferred mode of communication for all reports (Sailing Plans, Position Reports, Deviation Reports and Final Reports) is Inmarsat-C. A master must make their ship available to be polled by AMSA using Inmarsat-C to obtain position reports. When Inmarsat-C polling cannot be used or when RCC Australia directs a Master, the Master must report positions using Inmarsat-C or HF DSC.
  - (b) When reporting via Inmarsat-C, terminals should be logged into LES 212 for Pacific Ocean Region and LES 312 for Indian Ocean Region using Special Access Code (SAC) 1243.

*Note:* If AUSREP reports are sent through other LES using (SAC) 1243 there is no guarantee that the message will be received by AMSA.

- (c) If required to report manually, Masters are requested to send a Position Report each day at a convenient time nominated by the ship between 2200 UTC and 0800 UTC. The maximum time between any two reports is not to exceed 24 hours.

For information on REEFREP see *Notice to Mariners No 22*.

##### **Purpose of the AUSREP System**

2. AUSREP is an integral part of the Maritime Search and Rescue (SAR) system in Australia. AUSREP is operated by the Australian Maritime Safety Authority through the Rescue Coordination Centre (RCC Australia). For further details on RCC Australia see *Notice to Mariners No 4*.

3. The objective of the AUSREP system is to contribute to safety of life at sea by:
  - (a) Limiting the time between the loss of a ship and the initiation of search and rescue action, in cases where no distress signal is sent out.
  - (b) Limiting the search area for a rescue action.
  - (c) Providing up-to-date information on shipping resources available in the area, in the event of a search and rescue incident.

##### **Which ships should report to AUSREP**

4. *The Commonwealth of Australia Navigation Act 1912 (Division 14 Part IV)* makes participation in AUSREP mandatory for certain ships. Under this *Act*, the following ships must report:

- (a) All Australian registered ships engaged in interstate or overseas trade and commerce, while in the AUSREP area.
- (b) Ships not registered in Australia, but engaged in the coasting trade between Australia and an external territory, or between external territories, while in the AUSREP area.
- (c) Ships not registered in Australia, but demised under charter parties to charterers whose residences or principal places of business are in Australia, while in the AUSREP area.
- (d) Foreign ships, other than the above mentioned ships, from their arrival at their first Australian port until their departure from their final Australian port. However, they are encouraged to participate from their entry into and final departure from the AUSREP area.
- (e) Australian fishing ships proceeding on overseas voyages, while in the AUSREP area, but not including those ships operating from Queensland ports, which may call at ports in Papua New Guinea as an incidental part of their fishing operations. A definition of 'overseas voyage' is given in *Section 6(1) of the Navigation Act 1912*.

##### **Offences**

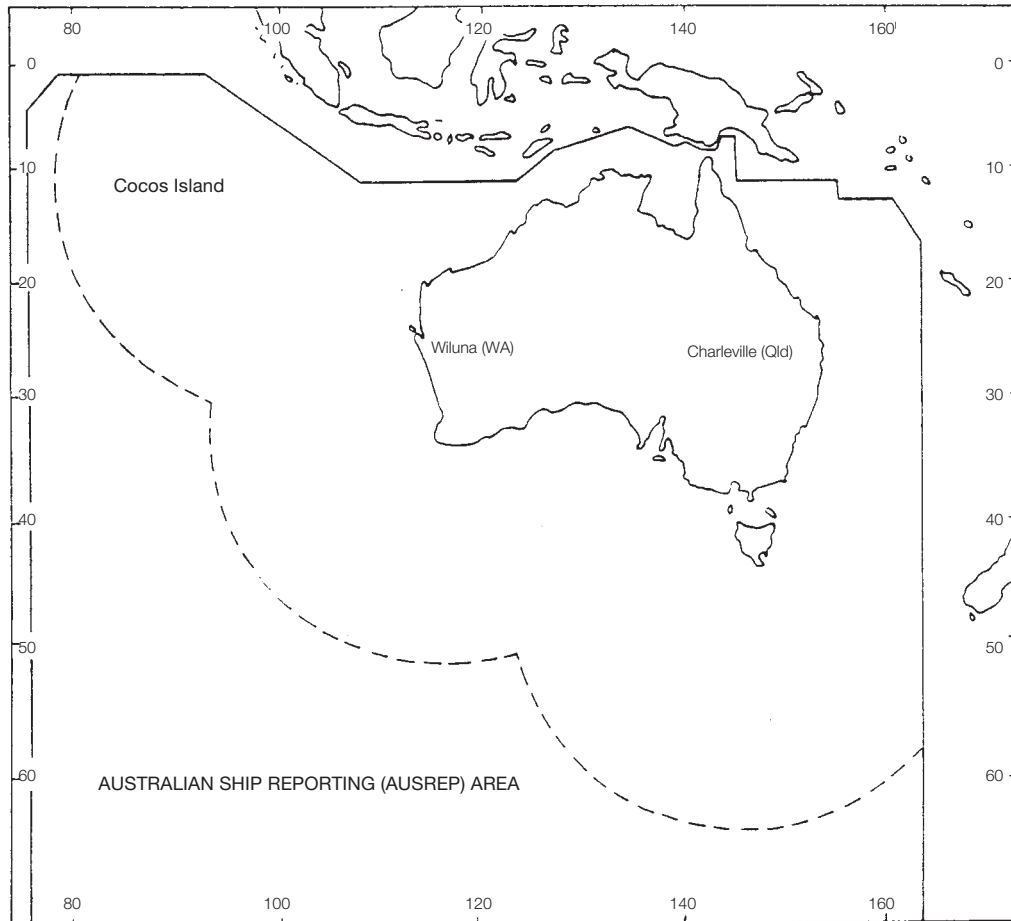
5. Regulations under the *Navigation Act 1912* provides for penalties involving fines not exceeding \$5 500 for infringements of reporting provisions.

##### **Concept of the AUSREP System**

6. On departure from an Australian port or on entering the AUSREP area from overseas:

- (a) Masters are to send a Sailing Plan (SP) to RCC Australia.
  - (b) A computerised plot will be maintained of the ships position.
  - (c) Masters are to agree to their ship being polled via Inmarsat-C which will automatically send a PR, when requested.
- or
- If Inmarsat-C polling is unavailable, Masters are to send a Position Report (PR) each day at a convenient time nominated by the ship between 2200 UTC and 0800 UTC, the maximum time between any two reports is not to exceed 24 hours. Dates and times contained in AUSREP reports are to be in Co-ordinated Universal Time (UTC)
- (d) A Final Report (FR) is to be sent on arrival at the destination or on departure from the AUSREP area.

7. Should a ship at any time be in a position more than two hours steaming from the position that would have been predicted from the last SP or PR, then a Deviation Report (DR) must be sent. Masters should also refer to *Sections 7.9 (Overdue AUSREP reports) of the AUSREP Booklet*.



— — Depicts approximate radius of action for Australian based long range search aircraft

### Types of AUSREP reports

#### 8. Main Report Types

- (a) SP Sailing Plan
- (b) PR Position Report
- (c) DR Deviation Report
- (d) FR Final Report

9. These reports are sent using the IMO message format (see *para 37* for numbering and description of fields).

#### 10. Special Report Types

- (a) DG Dangerous Goods report
- (b) HS Harmful Substances report
- (c) MP Marine Pollutants report

See *Appendix A of AUSREP Booklet* for format of special reports.

11. Masters should advise RCC Australia, or the REEF CENTRE (if in the REEFVTS area) when:

- (a) damage, defects, deficiencies, or other limitations to the ship or its equipment will affect its operation and or seaworthiness; or
- (b) damage, defects, deficiencies, or other limitations to the ship or its equipment means that a loss of cargo or pollution from the ship is about to or likely to happen.

*(Examples of such incidents include but are not limited to the following: failure or breakdown of steering gear, propulsion plant, electrical generating system, essential shipboard navigational aids, collision, grounding, fire, explosion, structural failure, flooding, cargo shifting.)*

12. When making reports about the likelihood of a discharge Masters should take into account the sea and wind state and also traffic density in the area at the time and place of the incident.

### 13. How to send AUSREP reports

#### (a) In an Australian port.

It is advisable to communicate all reports direct from the ship to RCC Australia to avoid delays associated with intermediate agencies. An Inmarsat-C message, a reverse charge telephone call, or facsimile may be used when sending a Sail Plan or Final Report when in port.

#### (b) Via INMARSAT

Reports must be addressed *RCC AUSTRALIA* and sent via the Pacific or Indian Ocean Region satellites via LES codes 212 and 312 respectively. These procedures apply only to AUSREP messages.

#### **Calls free of charge when reporting within the AUSREP area**

Inmarsat-C fitted Ship Earth Stations (SES)

Ships will not be charged for messages sent via Inmarsat-C if these procedures are followed:

Select Special Access Code (SAC) 1243 on their SES and log into LES 212 for POR and LES 312 for IOR. Refer to the user's handbook for instructions, or see the latest AUSREP Handbook or the AMSA web site.

*Note:* If sent through a different LES the SAC message may be misdirected and not be received by RCC Australia.

#### **Charged Calls**

INMARSAT B, M or Fleet 77 fitted Ship Earth Stations (SES)

Ships will be charged for messages sent via Inmarsat B, M, Fleet 77 or Broadband to RCC AUSTRALIA.

*Note:* ensure ship's antennas are directed at the appropriate Indian or Pacific Ocean satellite.

While reporting to AUSREP, you should ensure that your Inmarsat equipment remains active in the "LOGIN" mode at all times.

#### (c) Via the AMSA HF DSC Network

The preferred method of lodging AUSREP reports, including Sail Plans, Position Reports, Deviation Reports and Final Reports, is via Inmarsat-C using the polling option in lieu of manually sending position reports. However, reports may also be lodged via radio through the AMSA HF DSC network. Initial contact to the network is via a DSC safety message addressed to MMSI 005030001. Vessels will be shifted to a working channel and the AUSREP traffic passed via HF voice communications or NBDP depending upon the follow-on communications specified by the vessel. The Maritime Communications Station RCC Australia's radio callsign is VIC. Calls received by stations at Wiluna and Charleville are answered from the network control centre at RCC Australia.

#### (d) REEFVTS Interaction

The following applies to ships transiting through the Great Barrier Reef and the Torres Strait:

- (i) Ships must report to the REEFVTS.
- (ii) Where the ship advises it is an AUSREP reporter then regular position reports are automatically forwarded to RCC Australia. When the vessel departs the REEFVTS area, then the Master should revert to reporting directly to RCC Australia. Ships participating in AUSREP will continue to be polled whilst transiting the REEFVTS area.
- (iii) When a ship departs a port within the REEFVTS area and intends to report to AUSREP upon exiting the REEFVTS area, a Sailing Plan should be sent to RCC Australia within two hours of departure from the port.
- (iv) If the vessel is an AUSREP reporter and arriving at a port the REEFVTS FR will be automatically transmitted to AUSREP.
- (v) Procedures for reporting to REEFVTS are provided in the Great Barrier Reef and Torres Strait Vessel Traffic Service User manual available from AMSA and Maritime Safety Queensland offices. An electronic copy of the user manual is also located on the AMSA and MSQ websites.

#### **Non Reporting to AUSREP (NOREP)**

14. If the Master of a foreign ship departing on an overseas voyage from an Australian port does not intend sending AUSREP position reports, he must send a SP to RCC Australia and include the word NOREP in place of the "Date/Time of next report" in format field "N". Amplifying remarks may be included in field "X" if required.

15. Under this option RCC Australia will not undertake any "positive checks" regarding the ships safety. A NOREP ship must comply with the mandatory requirement to report to REEFREP when the ship enters the REEFREP area.

#### **AUSREP Sailing Plan (SP)**

##### 16. When to send an AUSREP SP

You may send your AUSREP SP up to 24 hours prior to joining the system; but:

- (a) at ports within the REEFREP area the SP must be sent prior to departure; and at other Australian ports the SP may be sent up to 2 hours after departure,
- (b) when joining AUSREP at the ocean boundary the SP may be sent 24 hours prior to entering the area or up to 2 hours after crossing the boundary.

The SP contains information necessary to initiate a plot and gives an outline of the intended passage. If you do not sail within two hours of the time stated in the SP then you must cancel the SP and send a new SP within 2 hours of the revised sailing time.

### 17. Format fields for your AUSREP SP

Mandatory fields: A, F, H, K, L, M, N, U, V

\*

\* Where polling is selected as the method of position reporting, Masters should include the word "POLL" in section N.

Additional fields: G, I, Q, R, X, Y (include if appropriate)

### Polling

18. AMSA has introduced the use of Inmarsat-C polling. A Master must make his ship available for RCC Australia to poll his ship using Inmarsat-C by inserting the word "POLL" in field N of the Sailing Plan instead of nominating a date time group. Polling involves RCC Australia sending a signal to the ship's Inmarsat-C terminal to prompt an automatic position report, which includes the ship's position. This process alleviates the need for the transmission of a manual position report. Masters are still required to send Sailing Plans, Deviation Reports and Final Reports. For further information refer to the *AUSREP Booklet*. Ships Masters are encouraged to use polling where possible.

### AUSREP Position Report (PR)

#### 19. When to send an AUSREP PR

If Inmarsat-C Polling is unavailable or RCC Australia directs, Masters are to send a Position Report each day at a convenient time nominated by the ship between 2200 UTC and 0800 UTC. The maximum time between any two reports is not to exceed 24 hours. If for any reason communications are not possible via Inmarsat-C or via the AMSA HF DSC station, the required information must be passed by alternative means to RCC Australia. These means may include phone or fax. Where Masters have nominated polling as the method of reporting, AUSREP PRs are sent automatically and regularly when the terminal is polled by RCC Australia.

#### 20. Format fields for your AUSREP PR

Mandatory fields: A, B, C, E, F, N

Additional fields: X and Y (if appropriate)

### How the information is used

21. The information contained in the PR will be used by RCC Australia to update the plot. The PR must reflect the position of the ship at the time of the report. Masters should always ensure that the Date/Time of next report is appropriate for ship's time and location on the following day. **Speed must be the anticipated speed until the next report time.** Advice on how to describe the course is contained in *Appendix C* of the *AUSREP Booklet*.

22. AUSREP Position Reports are normally processed automatically by RCC Australia. Automatic processing is efficient but messages are not always seen by an operator. If a Master has additional important safety information that requires the immediate attention of an operator, the word "ALERT" in field X of a PR will send the message to an operator for action.

Please only use 'ALERT' to identify important safety information for immediate action.

#### Note:

(a) Masters must make sure that their PRs are sent at the time they nominated.

(b) The ETA at the Australian destination, or AUSREP area boundary, must be confirmed in the last PR of a voyage. It should also be amended in any report whenever the Master is aware of a revised ETA. Interval between reports must not exceed 24 hours.

### AUSREP Deviation Report (DR)

#### 23. When to send an AUSREP DR

You must send a DR when you realise that your ship is more than two hours steaming from the position that would be predicted from your last SP or PR. A DR can also be sent when any other voyage details are altered (see additional fields in the *AUSREP Booklet*).

#### 24. Mandatory format fields for your AUSREP DR

Mandatory fields: A, B, C, N, X

Additional fields: should be included where applicable. The reason for deviation should be included in Field X.

### Why RCC AUSTRALIA needs to know where you are.

25. If your ship is in distress and if you have not been able to send a Mayday message the AUSREP positive checking system operated by RCC Australia may result in an air search to locate your ship. The search aircraft will start looking in the area related to your ship's predicted route and speed. If you have failed to report a deviation from your planned route and speed the search aircraft may not be able to find any survivors. It is in your best interest to keep RCC Australia up to date on all your voyage details. **Send a DR if you are more than two hours from a position which would be predicted from your last report.**

### AUSREP Final report (FR)

#### 26. When to send an AUSREP FR

(a) For ships enroute overseas and **departing the AUSREP area** send your AUSREP FR **at the AUSREP boundary.**

(b) Ships **ending a voyage at an Australian port within the REEFREP SRS area** must report their FR **at the last REEFREP reporting point.**

27. For ships **ending a voyage at any other Australian ports** send your AUSREP FR when your ship is within two hours steaming of the port or pilot station (see *Note* below).

*Note:* When the ship approaches the Australian destination and arrives at a position where VHF contact is made with the local harbour authority or pilot station, which under normal conditions is within two hours steaming of the pilotage, an FR is to be sent to RCC Australia. Under no circumstances should an FR be sent more than two hours before arrival. Alternatively the FR may be phoned to RCC Australia immediately after berthing, but no later than two hours after arrival. If it is known that the ship is to anchor or berth where telephone facilities are not available, then the FR should be passed via Inmarsat-C or if not available via HF with an initial call on HF DSC.

**28. Format fields for your AUSREP FR.**

Mandatory fields: A, K.

**Masters must ensure that an FR is always sent to RCC Australia to prevent unnecessary SAR action and a waste of valuable resources.**

**Overdue AUSREP reports**

**29. Why you must send your PR and FR.**

As AUSREP is a positive reporting system; if a PR (where polling not being used) or FR is not received by RCC Australia within two hours of the expected time, action is taken to ascertain the ship's whereabouts and confirm the safety of its crew. Masters should note that in some parts of the AUSREP area the ability to conduct an air search may be restricted by aircraft range limitations.

**30. What if you cannot send your report?**

If for any reason a Master is unable to pass their PR or FR they should attempt to pass a message through another ship, or harbour or other shore authority as appropriate. Methods to do this could include VHF, signaling lamp, or use of an emergency transmitter. Masters are requested to ensure that these procedures are followed.

**31. Action taken by RCC Australia**

The action taken by RCC Australia if your report is not received as expected will depend on prevailing circumstances, but will generally include:

- (a) Internal checks to establish if your report has been received by RCC Australia.
- (b) For Inmarsat equipped ships, attempts to contact the ship directly.
- (c) Attempts to contact ship directly by calling on HF DSC to ship's MMSI.
- (d) Extensive communication checks with Australian and overseas CRS, owners, agents and other ships are carried out to trace the last sighting or contact with the ship.

32. By the time twenty-one hours has elapsed, search planning will be in progress and details included in NAVAREA X and facsimile weather broadcasts. By the time the report is twenty-four hours overdue, positive SAR action will have been started to locate the ship. This action may include the launching of search aircraft where possible.

*Note:* the resources available for an air search decrease with distance from an Australian base.

**Reports to AMVER**

33. Whilst participating in AUSREP (see note below), Masters may also wish their reports to be forwarded for inclusion in the AMVER system operated by the United States Coast Guard. You should indicate this in each report in format field "Y". This may be particularly important to you when you send your FR at the AUSREP boundary. You must ensure that the letters in the word AMVER are not separated by spaces as this may disrupt the computer processing.

34. For vessels participating in Inmarsat-C polling, if field Y in a SP indicates that reports are to be passed to AMVER, the AUSREP system will automatically forward PR's to AMVER.

*Note:* RCC Australia will only forward AMVER reports to the US Coast Guard while your ship is in the AUSREP area and while you are reporting to the AUSREP system.

**Reports to Other Reporting Systems**

35. Reports from ships to other reporting systems (JASREP, etc) are not forwarded by RCC Australia. Ships are requested to pass these reports direct.

**Further Information or Advice on AUSREP Procedures**

36. Further information or advice on AUSREP procedures is available in the AUSREP (Ship reporting instructions for the Australian Region) handbook and copies of these instructions may be obtained free of charge from:

**AMSA – RCC Australia**

Telephone +61 (0)2 6230 6880

Facsimile +61 (0)2 6230 6868

Postal Address GPO Box 2181

Canberra ACT 2601

Australia

Web site <http://www.amsa.gov.au/>

**AMSA Offices in major ports**

**Regional Harbour Master Offices in Queensland Ports**

**IMO Message Format Field for AUSREP Reports**

37. The message format fields listed below comply with *IMO Resolution A648(16)* of 19 October 1989 and are described in a manner suitable for them to be used by AUSREP ship reporting systems.

<b>A</b>	(1) Ship name; (2) callsign; and (3) IMO number.
<b>B</b>	Date/Time of event (UTC).
<b>C</b>	Position (latitude and longitude in degrees and minutes) or when within a 2nm radius of a REEFREP reporting point, the name of that reporting point.
<b>D</b>	(Not to be used in AUSREP messages).
<b>E</b>	Course.
<b>F</b>	Speed (ship's anticipated average speed until next report in knots & tenths of knots).
<b>G</b>	Name of last non-Australian port of call.
<b>H</b>	Date/Time (UTC) and point of joining the AUSREP system. The point of joining must be either the Australian port the ship is departing from, or if joining from overseas, the latitude/longitude of crossing the AUSREP boundary.
<b>I</b>	Next non-Australian port of destination and estimated time of arrival at that port.
<b>J</b>	Coastal pilotage details: (1) Yes/No; (2) last name of Pilot; and (3) license number of pilot.
<b>K</b>	Date/Time (UTC) and point of exit from the AUSREP system (point of exit is either the latitude/longitude of crossing the AUSREP boundary or the Australian port to which the ship is bound).
<b>L</b>	Route information.
<b>M</b>	Radio communications arrangements. State in full: names of stations/frequencies guarded including MMSI and Inmarsat numbers (B,C,F77 etc.).
<b>N</b>	Use word "POLL" if the ship is to be polled by Inmarsat-C. If not, enter nominated Date/Time of next report
<b>O</b>	Draught (fore and aft in metres and tenths of metres).
<b>P*</b>	Cargo information may be passed by non-voice means if required. (1) Normal name of the Cargo; and (2) indicate Yes or No if cargo is classified as hazardous.
<b>Q*</b>	Defects or other limitations such as damage, failure or breakdown affecting the safety of the ship.
<b>R*</b>	Brief details of type of pollution lost overboard (oil, chemicals, etc) and also report if any pollution sighted.
<b>S</b>	Weather conditions in area.
<b>T</b>	Ship's agents.
<b>U</b>	(1) Ship type; (2) ship length (metres); and (3) gross tonnage.
<b>V</b>	Medical personnel carried.
<b>W</b>	Number of persons on board.
<b>X</b>	Remarks. If polling, report type and make of Inmarsat-C terminal.
<b>Y</b>	Request to relay a report to another system, eg AMVER.

Note: *RCC Australia will only on-pass reports to AMVER whilst ship is reporting to AUSREP.*

Australian Maritime Safety Authority, Canberra.

(AA439709)

#### **4B. SMALL CRAFT PARTICIPATION IN THE AUSTRALIAN SHIP REPORTING SYSTEM (AUSREP)**

1. Following the success of AUSREP for commercial ships and noting the system's significant contribution to safety of life at sea, the system has been further developed for small craft.

2. These instructions generally follow the same principles as those for commercial ships as described in *Notice to Mariners No 4A*.

**Eligibility**

3. Small craft may use AUSREP provided:

- (a) The voyage is 200NM or more.
- (b) The voyage will take longer than 24 hours.
- (c) The appropriate communications equipment is carried ie, Inmarsat-C or HF DSC.

**Operating Authority**

4. RCC Australia is the operating authority for the small craft AUSREP. See *Notice to Mariners No 4* for contact details.

**Identification of Small Craft Report.**

5. The vessel's name and callsign (*component A*) must be preceded by the words SMALLCRAFT AUSREP:

A. SMALL CRAFT AUSREP SP BLUEBOTTLE VL9191  
(Remainder of report)

Note: See *Notice to Mariners No 4A, para 6* for remainder of the components.

**Action taken when a report becomes overdue.**

6. The success of any ship reporting system depends upon the participants observing the rules. If an expected report is not received within six (6) hours after their nominated report time, then an overdue report situation is deemed to exist by RCC Australia. The actions taken in these circumstances will depend on the assessment made by SAR authorities but may include:

- (a) Communications check with AMSA HF DSC network, Limited Coast Radio Stations and shipping in the area.
- (b) Port checks (checks of ports, anchorages and shelters).
- (c) Requests for sighting reports from aircraft and other vessels.

7. If after these checks are completed, a vessel remains overdue, a further assessment will be made by the Duty Senior Search and Rescue Officer at RCC Australia as to the appropriate course of action. More rapid action to confirm the vessel's safety may be initiated if warranted by the circumstances.

Australian Maritime Safety Authority, Canberra.

(AA439709)

**4C. HF AND VHF MARINE RADIO SERVICES FOR SMALL CRAFT**

1. HF distress and safety services are provided for non-SOLAS vessels through Limited Coast Radio Stations (LCRS) and Maritime Rescue Stations (MRS) in the Inshore Boating Radio Service. Navigation warnings will be broadcast twice daily and at other times if of an urgent nature. For broadcast areas see Auscoast Sea Area (ASA) Map (see page 31).

**LIMITED COAST RADIO STATION FACILITIES AND FREQUENCIES**

<i>Coast Radio Station</i>	<i>Callsign</i>	<i>Radiotelephone frequencies monitored</i>	<i>Navigation Warnings</i>	<i>Broadcast Times</i>	<i>AUSCOAST Sea Area</i>
<b>Charleville</b> <sup>1</sup>	Charleville Radio	4125, 6215, 8291 kHz and VHF Ch.16	8176 kHz and VHF Ch.67	1057 2357 EST (0057 1357 UTC)	B, C, D
<b>Gladstone</b>	Coast Radio Gladstone	4125, 6215, 8291 kHz and VHF Ch.16	8176 kHz and VHF Ch.67	0857 2157 EST (2257 1157 UTC)	A, B, C
<b>Cairns</b>	Coast Radio Cairns	4125, 6215, 8291 kHz and VHF Ch.16	8176 kHz and VHF Ch.67	0957 2257 EST (2357 1257 UTC)	H, A, B
<b>Darwin</b>	Coast Radio Darwin	4125, 6215, 8291 kHz and VHF Ch.16	8176 kHz and VHF Ch.67	1127 1927 CST (0157 0957 UTC)	G, H, A
<b>Port Hedland</b>	Coast Radio Port Hedland	4125, 6215, 8291 kHz and VHF Ch.16	8176 kHz and VHF Ch.67	1257 1657 WST (0457 0857 UTC)	F, G, H
<b>Perth</b>	Coast Radio Perth	4125, 6215, 8291 kHz and VHF Ch.16	8176 kHz and VHF Ch.67	1457 1857 WST (0657 1057 UTC)	E, F, G
<b>Adelaide</b> <sup>3</sup>	Coast Radio Adelaide	4125, 6215, 8291 kHz and VHF Ch.16	8176 kHz and VHF Ch.67	1327 1727 CST (0357 1257 UTC)	D, E, F
<b>Charleville</b> <sup>2</sup>	Charleville Radio	4125, 6215, 8291 kHz and VHF Ch.16	8176 kHz and VHF Ch.67	0757 1257 EST (0257 2157 UTC)	C, D, E
<b>Hobart</b> <sup>3</sup>	Coast Radio Hobart	4125, 6215, 8291 kHz and VHF Ch.16	8176 kHz and VHF Ch.67	1557 EST (0557 UTC)	C, D, E

- <sup>1</sup> Formerly Coast Radio Sydney HF services for New South Wales waters now provided from Charleville, Queensland, using callsign 'Charleville Radio'.
- <sup>2</sup> Formerly Coast Radio Melbourne HF services for Victorian waters now provided from Charleville, Queensland, using callsign 'Charleville Radio'.
- <sup>3</sup> It is possible that changes may occur during 2012 regarding the provision of services for these stations, which will be notified via Notices to Mariners as they occur.

2. Certain areas will be monitored for VHF Ch 16 from 0600 to 1800 LT by AVCG/VMR/RVCP groups. In Queensland, Brisbane Harbour Control and Hay Point Reef Centre will monitor this frequency from 1800 to 0600. This night time service is an emergency watch only.

Australian Maritime Safety Authority, Canberra.

(AA571459, AA571460)

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#### **5. THE AMVER ORGANIZATION (Automated Mutual-Assistance Vessel Rescue System)**

1. As an aid to SAR efforts in offshore areas of the world, vessels of all nations are encouraged to send movement reports to the United States Coast Guard ship reporting system (AMVER). Appropriate positional information is made available to recognized SAR agencies of any nation for the assistance of persons in distress.

2. In the Australian SAR Area, AMVER does not supersede the AUSREP system; but, vessels can indicate in their AUSREP message that they would like their AUSREP report passed on to AMVER. The passing of AMVER messages by AMSA will only occur where a vessel is operating in the AUSREP system. Other AMVER communications stations and message formats are described in *ALRS Vol 1 (Ship Reporting Systems)* and these should be used when outside the AUSREP area.

3. Further information may be obtained direct from:

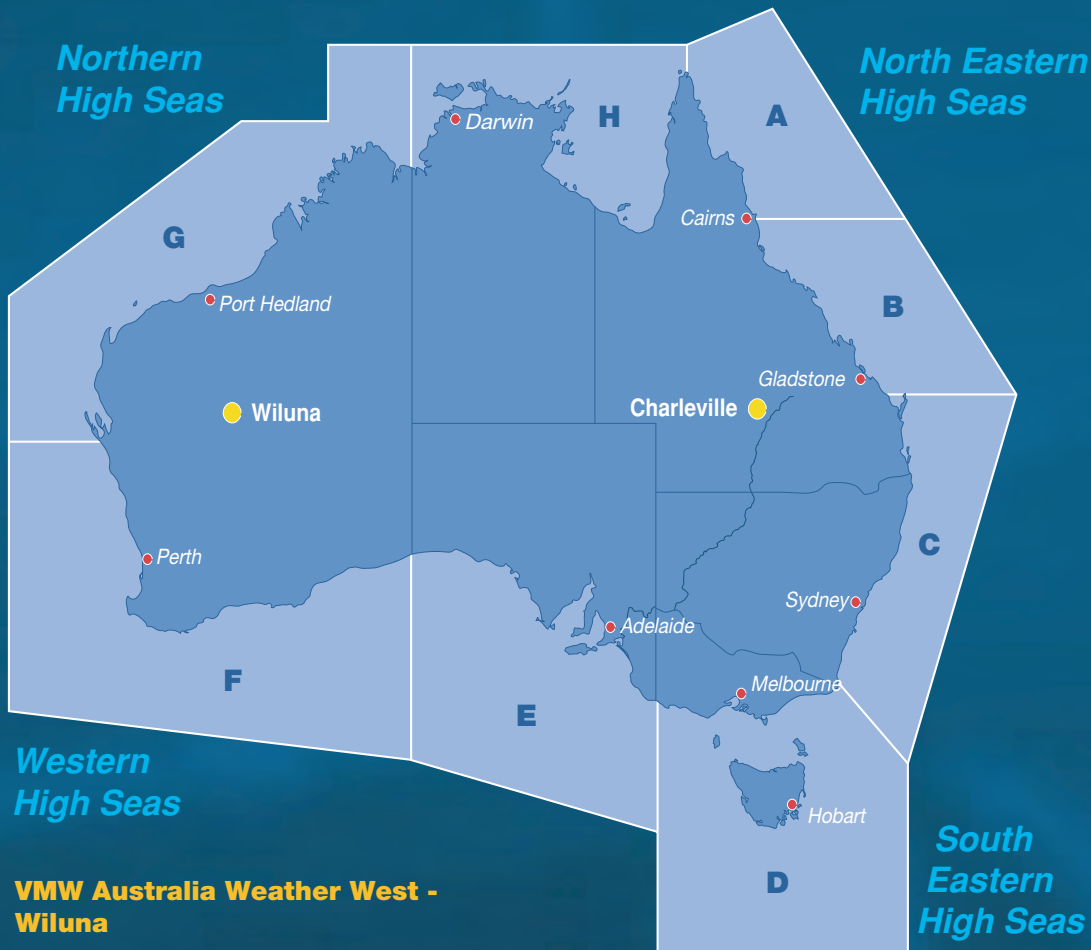
AMVER Maritime Relations  
Commandant (G-OPR)  
USCG Battery Park Building  
New York  
New York 10004 - 1499  
Telephone +1 212 6887764  
Facsimile +1 212 6687684

Australian Maritime Safety Authority, Canberra.

(AA571460)

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# Austcoast Sea Areas



## VMW Australia Weather West - Wiluna

### Coastal Waters:

VMW Broadcasts coastal weather services for Australian coastal areas between the South Australia – Victoria border and Torres Strait in Queensland including all South Australia, Western Australia and Northern Territory zones

### High Seas:

VMW broadcasts services for the Northern, Western and South Eastern high seas areas

### VMW broadcasts on frequencies (kHz)

- 2056
- 4149
- 6230
- 8113
- 12356
- 16528

## VMC Australia Weather East - Charleville

### Coastal Waters:

VMC Broadcasts coastal weather services for Australian coastal areas between Cape Don in the Northern Territory and Eucla in Western Australia, including all Queensland, New South Wales, Victoria, Tasmania and South Australia zones

### High Seas:

VMC broadcasts services for the Northern, North Eastern and South Eastern high seas areas

### VMC broadcasts on frequencies (kHz)

- 2201
- 4426
- 6507
- 8176
- 12365
- 16546

## 6. GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS).

1. Australia's maritime area (search and rescue region, and Navarea X) has been declared GMDSS Sea Area A3, that is for distress and safety purposes, the area will be supported by both satellite and HF terrestrial radio services. The AMSA GMDSS HF DSC network employing stations at Wiluna and Charleville, and a network control site at RCC Australia provides HF DSC and follow-on communications for distress and safety communications.

2. Non-SOLAS vessels may choose to use safety services through Limited Coast Radio Stations (LCRS) and Maritime Rescue Stations (MRS) in the Inshore Boating Radio Service.

### Overview of GMDSS Services in Australia

3. Australia operates an Inmarsat Land Earth Station (LES), located in Perth and linked to both the Pacific Ocean Region (POR) and Indian Ocean Region (IOR) satellites. Associated with the Perth LES, is the Burum LES in the Netherlands. Communications via these satellites include distress priority channels and a SafetyNET service for Maritime Safety Information (MSI) using enhanced group calling (EGC). The SafetyNET service enables vessels to automatically receive MSI appropriate to their area of operation. Details of MSI promulgation are specified in the next section. Further information on GMDSS can be obtained from the Australian GMDSS Handbook.

4. Australia is associated with the Cospas-Sarsat system as a Ground Segment Provider. This satellite system is designed to assist search and rescue operations using EPIRBs operating on 406 MHz, and providing alert and location data to rescue co-ordination centres (RCCs). The regional ground segment includes satellite data receiving antennas and processing equipment located at Albany (Western Australia), Bundaberg (Queensland) and Wellington (New Zealand). These provide data to the Mission Control Centre located at the RCC in Canberra.

5. HF DSC distress and safety services are provided by the AMSA network with stations at Wiluna (WA) 26° 20'.45 S 120° 33'.40 E and Charleville (QLD) 26° 19'.83 S 146° 15'.85 E. The station/network identifier is *RCC Australia* using the callsign VIC and MMSI number 005030001. See the AUSREP Map *page 24* for station locations.

6. The network provides continuous watch on HF Digital Selective Calling (DSC). The following HF DSC distress and safety channels are guarded: 4207.5, 6312.0, 8414.5, 12577.0 and 16804.5 kHz.

7. It should be noted that the AMSA HF DSC network can only be accessed by a DSC call. HF voice and NBDP are available in the 4, 6, 8, 12 and 16 MHz bands for follow-on communications after an initial DSC call. **No aural watch** is kept on HF radio telephony distress and safety frequencies. Broadcast of MSI for SOLAS vessels is via Inmarsat SafetyNET.

8. RCC Australia will continue to make HF radiotelephone distress and safety broadcasts for search and rescue coordination purposes. Vessels fitted with MF/HF DSC watchkeeping receivers are required to continually maintain a DSC watch whilst at sea on 2187.5 kHz for ship to ship alerting and 8414.5 kHz as well as at least one of the distress and safety DSC frequencies 4207.5, 6312, 12577 and 16804.5 kHz appropriate to the time of day and the geographic position of the ship. This watch may be kept by means of a scanning receiver. Broadcasts on radiotelephone frequencies will be preceded by a DSC announcement.

9. Queries on any aspect of GMDSS may be addressed to:  
 General Manager  
 Emergency Response Division, AMSA  
 GPO Box 2181  
 Canberra  
 ACT 2601.

Australian Maritime Safety Authority, Canberra.

(AA571460)

## 7. MARITIME SAFETY INFORMATION

1. Maritime Safety Information (MSI) such as navigational warnings are issued by the Rescue Coordination Centre Australia (RCC Australia), part of the Australian Maritime Safety Authority (AMSA). Warnings are broadcast on the Inmarsat-C Enhanced Group Call (EGC) system. State Limited Coast Radio Stations may broadcast navigation warnings for their areas on 8176 kHz (check with local State/Territory authorities for schedules [http://www.dpi.wa.gov.au/mediaFiles/mar\\_changes\\_to\\_radios.pdf](http://www.dpi.wa.gov.au/mediaFiles/mar_changes_to_radios.pdf)). Current MSI can also be obtained from the AMSA Internet web site located at [www.amsa.gov.au](http://www.amsa.gov.au). Warnings are designed to give the mariner information relating to dangers and aids to navigation. Many warnings are of a temporary nature, but others may remain in force for several weeks and may be superseded by *Notices to Mariners*.

2. Information contained in radio warnings is primarily to assist mariners up to the entrance of ports. Information of a less urgent nature, and matters within harbour limits will be promulgated initially as VHF broadcasts from port authorities and/or *Notices to Mariners*. Local warnings of a more important nature, such as port closures, leading light failures or warnings which are considered by a port authority as requiring wider promulgation than the port broadcast, may be issued by RCC Australia as an AUSCOAST warning through the Inmarsat-C EGC system.

3. Vessels reporting malfunctions of navigational aids to RCC Australia are requested to provide the following information, where applicable:
- Distance from aid and time.
  - Visibility at time and general weather.
  - Radar band in use (for reports concerning RACONS).

4. RCC Australia issues two main types of warnings, coastal warnings and long range warnings, within a system intended to align, as closely as possible with World Wide Navigational Warning Service and Inmarsat recommendations.

#### **Coastal Warnings**

5. Two types of coastal warnings are issued by RCC Australia:

- Coastal Navigational Warnings (AUSCOAST series).
- Sea Safety Messages (SSM series).

6. Warnings on the Inmarsat-C EGC system are broadcast to defined geographical areas as indicated in *Notice to Mariners No 8*.

7. Inmarsat-C equipped vessels are advised to ensure that they log into either the Pacific Ocean Region (POR) or the Indian Ocean Region (IOR) satellite and that positional information is regularly updated to ensure warnings are received in good time. For further EGC information and guidance see *Notice to Mariners No 8*. Warnings will be broadcast in English and where possible will use terminology based on the standard marine vocabulary. International abbreviations are used when necessary.

#### **Auscoast Warnings**

8. These are important navigational warnings, prefixed AUSCOAST and numbered consecutively on an annual basis. They are broadcast for as long as the information is valid, or until it is made available by other means, such as a *Notice to Mariners*. Warnings concerning navigational aids inside the area depicted in the accompanying diagram, except Global Navigation Satellite Systems (GNSS), will be issued as AUSCOAST warnings. AUSCOAST warnings transmitted via Inmarsat-C EGC are available via the POR and IOR satellites.

9. Cancellations of AUSCOAST warnings will be broadcast once only on voice frequencies at the first scheduled broadcast time. Cancellation under the Inmarsat-C system will be once only on receipt.

#### **Sea Safety Messages**

10. These are issued to cover dangers such as floating objects etc, and are normally broadcast for a defined period (unless updated positions are received). Messages are prefixed SSM with an annual sequential number. Sea Safety Messages transmitted via Inmarsat-C EGC are available via the POR satellite for Auscoast Areas A-D and via POR and IOR for Auscoast Areas E-H as indicated in *Notice to Mariners No 8*.

#### **Weapons Practice Warnings**

11. As clear range procedures are followed no broadcast warnings will be issued in respect of weapons firing practices in those areas depicted in *Notice to Mariners No 9*. Major exercises will be the subject of special warnings. Vessels approaching weapons practice areas are requested to maintain a radio listening watch.

#### **Long Range Navigational Warnings (NAVAREA X)**

12. Under the World Wide Navigational Warnings Service, Australia is the area Coordinator for NAVAREA X. NAVAREA X warnings are promulgated on Inmarsat-C on both the POR and IOR satellites.

13. NAVAREA X is depicted on the chartlet (see *page 35*) titled Areas Covered by Long Range Navigational Warnings.

#### **Subject matter for NAVAREA X warnings**

14. NAVAREA X warnings will only be issued in respect of navigational aids or dangers outside the Australian coastal areas depicted in the diagram; except that aids such as GNSS are also issued as NAVAREA X warnings.

15. NAVAREA X warnings are broadcast on the POR and IOR Inmarsat-C EGC satellite systems. NAVAREA X warnings transmitted under the Inmarsat-C EGC system will continue to be broadcast in brief text form for as long as the information is valid (or promulgated by other means).

16. Cancellations of warnings on the Inmarsat-C EGC system will be broadcast once only on receipt.

#### **Definitions of Terms Used in Navigation Warnings**

- Station** - The authorised and exact location of a navigational aid.
- Established in position** - Any type of aid placed in operation for the first time at a given station.
- Re-established in position** - Any type of aid placed in operation at a station at which a similar type of aid with identical characteristics had been previously established, but subsequently destroyed, withdrawn or discontinued.
- Unlit** - When a light is out because of defective equipment, or any other unintentional or deliberate occurrence, and it is intended to restore it to normal as soon as practicable.
- Unreliable** - When an aid of any type is not exhibiting its correct characteristic and it is intended to restore it to normal as soon as practicable.
- Reduced power** - When an aid of any type is not operating at its correct power, but is exhibiting its correct characteristic, and it is intended to restore it to normal as soon as practicable.

- (g) **Off station** - When a floating aid is adrift, missing or out of position and it is intended to replace it as soon as practicable.
- (h) **Altered** - When the characteristics or structure of any aid have been altered, without changing the type of aid or its station.
- (i) **Altered in position** - When a change is made to the station of an aid, ie. its location, without changing the type of aid, character or structure.
- (j) **Destroyed** - Any type of aid damaged so as to no longer be of use as a navigational aid, but remnants of the structure may remain.
- (k) **Restored to normal** - Any type of aid which had been previously "unlit", "irregular", "reduced power" or "temporarily discontinued" which has been serviced and now exhibits its correct characteristic or power.
- (l) **Replaced in position** - A floating aid previously described as "off station" or "temporarily withdrawn" is returned to its correct station.
- (m) **Temporarily replaced by** - When any aid is discontinued, withdrawn or off station and another aid of a different type or characteristic is immediately established at the same station.
- (n) **Temporarily withdrawn** - When a floating aid has been entirely removed from its station and no similar aid left in its place, but intended to re-establish the aid in the near future.
- (o) **Temporarily discontinued** - When a sound signal or radio beacon service is silent because of defective equipment or maintenance or any other unintentional or deliberate occurrence, and it is intended to restore it to normal as soon as practicable.
- (p) **Permanently withdrawn** - When a floating aid has been entirely removed from its station, with no similar aid left in its place and it is not intended to re-establish that aid at that station in the future.
- (q) **Permanently discontinued** - When any aid, including a sound signal or radio beacon service, but excluding a floating aid, is removed from a station because it is no longer required.

#### Reprints of Radio Navigational Warnings

17. AUSCOAST and NAVAREA X are published in *Section III of Notices to Mariners* and those warnings which may remain in force for more than four weeks are promulgated in *Section I of Notices to Mariners*.

18. NAVAREA XIV warnings are also included in *Section III of Notices to Mariners*.

19. Warnings on the positions of mobile drilling rigs are summarised in *Section III of Notices to Mariners*. This summary is updated weekly by RCC Australia but mariners are reminded that drill rig positions given in this summary may have been superseded by an updated warning. Rigs in transit are not subject to radio navigation warnings.

20. If the information is still valid, AUSCOAST and NAVAREA X warnings are cancelled on receipt of *Notices to Mariners*.

21. For mariners who have access to e-mail or the Internet, a list of current navigation warnings is available from the following address:

ausmsi@amsa.gov.au

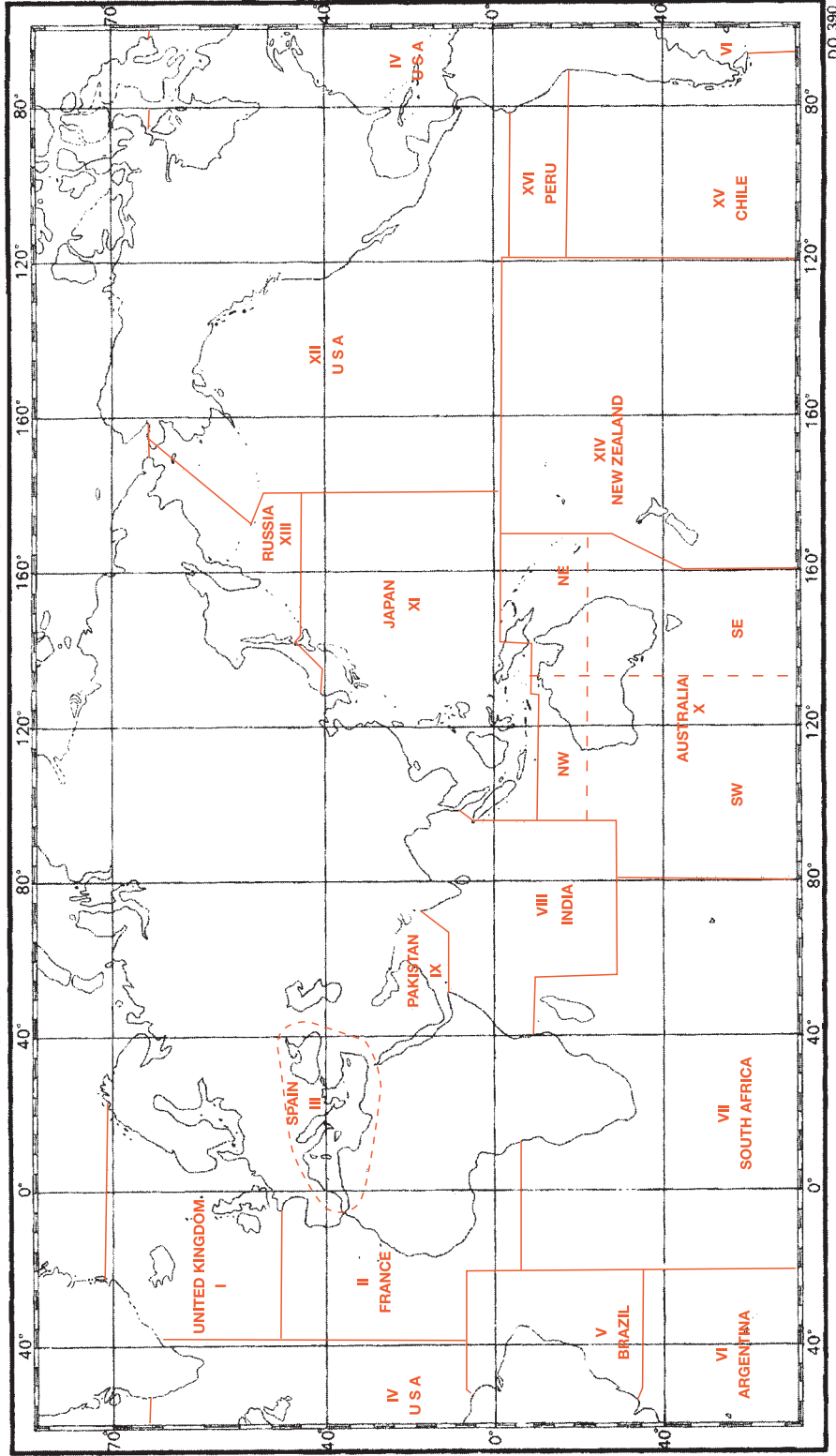
and over the Internet from the AMSA web site at:

[http://www.amsa.gov.au/Search\\_and\\_Rescue/Distress\\_and\\_Safety\\_Communications/Maritime\\_Safety\\_Information.asp](http://www.amsa.gov.au/Search_and_Rescue/Distress_and_Safety_Communications/Maritime_Safety_Information.asp)

Australian Maritime Safety Authority, Canberra.

(AA571460)

AREAS COVERED BY LONG RANGE RADIO NAVIGATIONAL WARNINGS



## 8. INMARSAT-C EGC SYSTEM

1. Navigational Warnings and MSI issued by RCC Australia and the Bureau of Meteorology are promulgated using the Inmarsat-C SafetyNET system. To ensure reception of MSI Inmarsat-C Ship Earth Stations (SES) must be correctly set-up and it is recommended that SES remain in operation whilst in port. It is also recommended that the latest version of SES software is installed. All users are invited to provide feedback on any aspect of the system with a view to improving the MSI services.
2. All Australian coastal navigation warnings will be promulgated via the POR and IOR satellites. Positional information should be regularly updated if the SES is not provided with automatic position information by an interface with navigational equipment. When a position has not been updated for more than 12 hours the SES will print all messages with priorities higher than routine for the entire ocean region.
3. Under the SafetyNET EGC system warnings are directed to specific geographical areas. Mariners must ensure that their SES is correctly configured to receive Navarea X and the alphabetical Coastal Warning Areas which are depicted in the accompanying diagram (see *page 37*).
4. NAVAREA X and AUSCOAST warnings are issued by RCC Australia immediately on receipt of the information, and then repeated at the scheduled times of 0700 and 1900 UTC. A scheduled broadcast may not occur at precisely 0700 UTC or 1900 UTC, so it is recommended that the SES remains correctly configured until at least 40 minutes after the scheduled time. An SES will not display a navigation warning again, if it was previously received error free. However, if RCC Australia has to resubmit a message to the LES for any reason, the SES will treat it as a new message and display it on receipt.
5. When configuring the SES it should be noted that RCC Australia and the Bureau of Meteorology will utilise the following:
  - (a) Coastal Warning Areas as per the figure.
  - (b) Navigational Warnings for Coastal (AUSCOAST) Warnings.
  - (c) Additional Navigational Warnings for local (SSM) warnings.
  - (d) SAR for search and rescue messages.
  - (e) Meteorology Forecasts for Bass Strait weather.

Australian Maritime Safety Authority, Canberra.

(AA571460)

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## 9. FIRING PRACTICE AND EXERCISE AREAS

### General

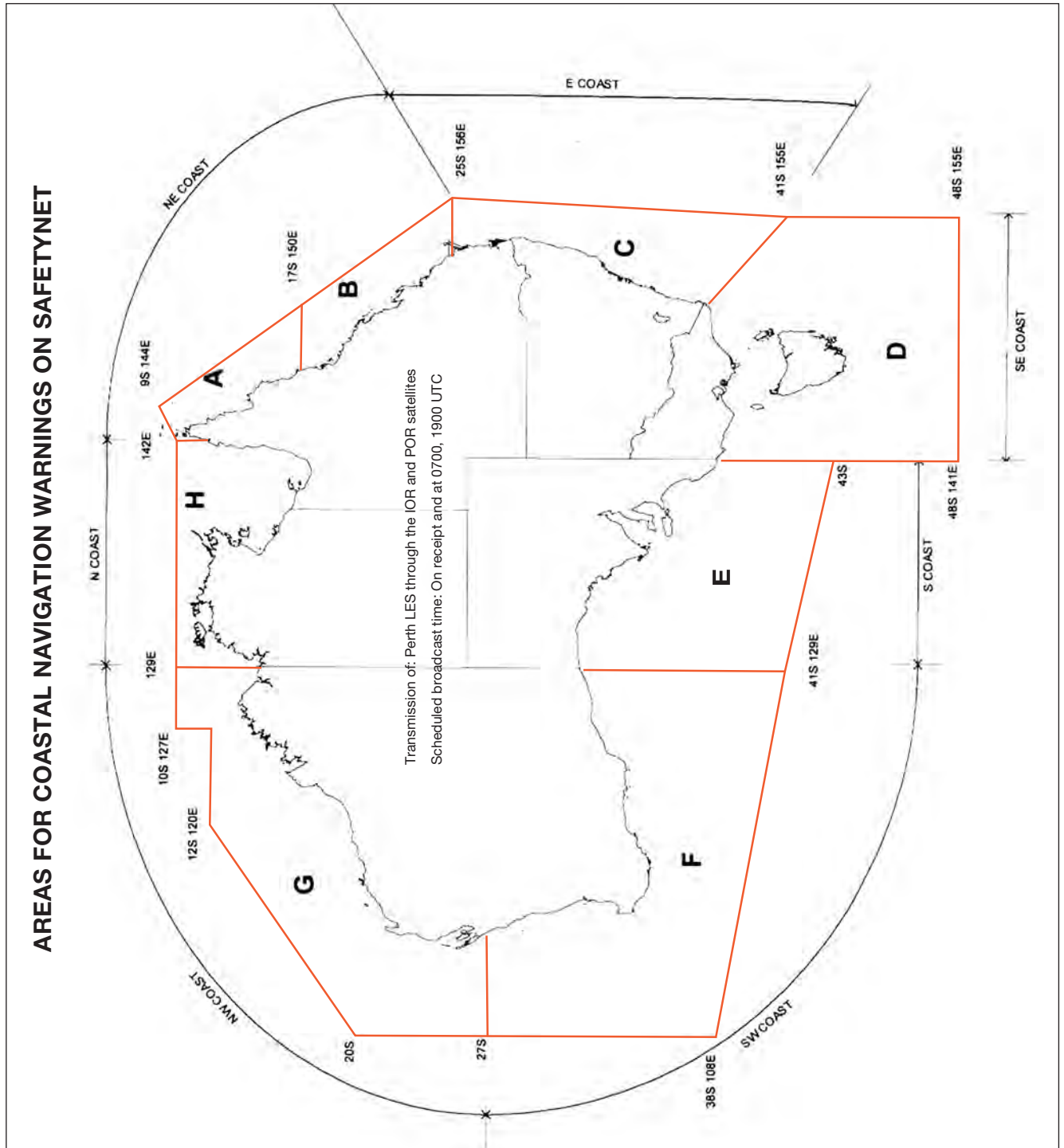
1. This *Notice* contains the firing practice areas controlled by the Royal Australian Navy and declared under *Sub-Regulation 49(1) of Defence Force Regulations*, together with the appropriate Army and Air Force firing practice areas over the sea.
2. Firing practice areas may be selected anywhere and details are published in the *Australian Government Gazette* and the *Designated Airspace Handbook*.
3. The areas are listed in numerical order by States using standard reference numbers.
4. In view of the responsibility of range authorities to avoid accidents, limits of practice areas are not shown on charts and descriptions of areas will not appear in the *Sailing Directions*. However, beacons, lights and marking buoys, which may be of assistance to the mariner or targets which might be a danger to navigation, will appear on charts and, when appropriate, will be mentioned in the *Sailing Directions*.
5. Lights will be mentioned in the *Admiralty List of Lights and Fog Signals Vol K*.

### Definitions

6. **Restricted Area (R-).** An area of defined dimensions within which certain restrictions are applied to aircraft operations. When shown as an *R area* in *Notices to Mariners*, the air activity extends to sea level and the nature of the activity is such that dangers to maritime traffic may exist at specified times within the area defined in *Notices to Mariners*.
7. **Prohibited Area (P-).** An area of defined dimensions within which ships are not permitted at any time under any circumstances.
8. **Surface Restricted Area (SR-).** A surface area of defined dimensions within which activities dangerous to maritime traffic may exist at specified times. The restriction is applicable to maritime traffic only.

### Areas

9. The limits of all areas in this *Notice* are laid down in writing, numerically and graphically on chartlets by States.
10. Naval firings outside the areas listed in this publication are approved by the Department of Defence (Navy Office) from time to time.



### Notification of Warnings

11. Warnings are promulgated as *Notices to Airmen (NOTAM)* originated by the RAN and RAAF.
12. Visual warnings will be used as follows:
- (a) *Ships* - ships engaged in firing practice fly a red flag by day.
- (b) *Range Craft* - all safety craft, target towers or control launches for radio controlled targets will display for identification the following:
- A large red flag at the masthead.
  - A painted canvas strip 1.8m x 0.9m (6 x 3 feet) with red and white or red and yellow checks in 0.3m (1 ft) squares on the foredeck or cabin roof.
  - Vessels should comply with requests made by Range Safety Craft.
13. Ships and aircraft carrying out night exercises may illuminate with bright white flares.

### Vertical limits and Hours of Operations.

14. Lower and upper vertical limits are promulgated as above mean sea level when at or below the transition altitude or as a flight level when above the transition altitude. SFC means the surface of the ground or water. NOTAM indicates that the vertical limits will be notified by NOTAM. The following code applies for hours of operation:

D	Daily
H24	Continuously
W	Monday to Friday
Mo,Tu,We,Th,Fr,Sa,Su	Days of the week
JO	Monday to Friday (except public holidays)
HJ	During daylight hours
Z	Universal co-ordinated time
L	Local time.

### Types of Firing Practices.

15. The principal types of practices carried out are:
- (a) *Bombing practice from aircraft* - warning signals usually shown.
- (b) *Air to air, and air to sea or ground firing* - the former is carried out by aircraft at a large white or red sleeve, a winged target, or flag towed by another aircraft moving on a steady course. The latter is carried out from aircraft at towed or stationary targets on sea or land, the firing taking place to seaward in the case of those on land.
- (c) *Anti-aircraft firing* - this may be from AA guns or machine guns at a target towed by an aircraft as in *para 15(b)*, a pilotless target aircraft or, at balloons or kites. Practice may take place from shore batteries or ships
- (d) *Firing from shore batteries or ships* - at fixed or floating targets.
- (e) *Remote controlled craft* - these are 6.4 metre surface craft, orange in colour and carry no distinctive shapes or lights. They are however, fitted with navigation lights appropriate to their size in accordance with the *Regulations for Preventing Collisions at Sea, 1972*. Such craft are remotely controlled from helicopters, ships and occasionally from the shore.
- (f) *Rocket and guided weapons firing* - these may take the form of *paras 15 (b), (c) or (d)*. All such firings are conducted under Clear (*Air and Sea*) *Range Procedure*. Devices are generally incorporated whereby the missiles may be destroyed should their flight be erratic.

### Cautions

16. The absence of warning signals cannot be accepted as evidence that a practice does not exist.
17. The range authorities are responsible for ensuring that there should be no risk of damage from falling shell-splinters, bullets, etc, to any vessel which may be in the practice area.
18. If, however, a vessel finds herself in an area where practice is in progress she should maintain her course and speed, but, if she is prevented from doing this by the exigencies of navigation, it would assist the range authority if she would endeavour to clear the area at the earliest possible moment. Furthermore, if projectiles or splinters are observed to be falling near the vessel, all persons on board should take cover.
19. Fishermen operating in the vicinity of firing practice and exercise areas may occasionally bring unexploded missiles or portions of them to the surface in their nets or trawls. These objects may be dangerous and should be treated with great circumspection and jettisoned immediately, no attempt being made to tamper with them or bring them back for inspection by Navy authorities.

### RESTRICTED AND DANGER AREAS WITH ASSOCIATED AIRSPACE

(Note: positions are referred to WGS84)

#### NEW SOUTH WALES

##### SR050 Broken Bay

*Nature of Activity* Naval mine laying and sweeping

*Vertical Limits* Nil

*Chart* Aus 197

- (a) 33° 34' 38" S 151° 18' 30" E  
 (d) 33° 31' 44" S 151° 24' 14" E  
 (g) 33° 37' 35" S 151° 28' 00" E  
 (j) 33° 34' 45" S 151° 19' 44" E.

*Controlling Authority* Navy Fleet HQ Potts Point

*Times of Use* H24

*Chartlet* 2

- (b) 33° 32' 54" S 151° 18' 39" E  
 (e) 33° 31' 09" S 151° 25' 15" E  
 (h) 33° 37' 35" S 151° 20' 30" E
- (c) 33° 32' 52" S 151° 20' 45" E  
 (f) 33° 31' 09" S 151° 32' 24" E  
 (i) 33° 35' 04" S 151° 20' 03" E

**SR051 Jervis Bay***Nature of Activity* Naval mine laying and sweeping*Controlling Authority* Navy Fleet HQ Potts Point*Vertical Limits* Nil*Times of Use* H24*Chart* Aus 193*Chartlet* 1

(a) 35° 04' 24" S 150° 41' 50" E

(b) 35° 00' 32" S 150° 43' 27" E

(c) 35° 01' 05" S 150° 46' 00" E

(d) 35° 04' 52" S 150° 46' 26" E

(e) 35° 05' 38" S 150° 48' 00" E

(f) 35° 05' 45" S 150° 48' 26" E

(g) 35° 05' 45" S 150° 55' 09" E

(h) 35° 10' 02" S 150° 51' 32" E.

**YMMM/R452 Beecroft Head***Nature of Activity* Firing*Controlling Authority* Navy Fleet HQ Potts Point*Vertical Limits* NOTAM*Times of Use* NOTAM*Chart* Aus 808*Chartlet* 1

(a) 34° 59' 00" S 151° 07' 00" E

(b) 35° 08' 54" S 151° 07' 00" E

(c) 35° 05' 27" S 150° 48' 56" E

(d) 35° 05' 27" S 150° 47' 12" E

(e) 35° 06' 06" S 150° 42' 48" E

(f) 35° 04' 20" S 150° 42' 15" E

(g) 35° 02' 18" S 150° 42' 09" E

(h) 35° 00' 00" S 150° 44' 00" E

(i) 35° 01' 24" S 150° 47' 15" E

(j) 35° 01' 24" S 150° 50' 24" E.

**YMMM/R453A Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Controlling Authority* Navy Fleet HQ Potts Point*Vertical Limits* NOTAM*Times of Use* NOTAM*Chart* Aus 4643*Chartlet* 1

34° 59' 59" S 150° 49' 53" E, thence the minor arc of a circle of 15NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 34° 57' 30" S 150° 50' 14" E, 34° 57' 24" S 150° 59' 58" E, thence the minor arc of a circle of 23NM radius centred on Nowra Tacan, to 35° 12' 02" S 150° 53' 14" E 35° 03' 04" S 150° 40' 06" E, thence the minor arc of a circle of 9NM radius centred on Nowra Tacan, to 34° 59' 11" S 150° 42' 37" E.

**YMMM/R453B Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Controlling Authority* Navy Fleet HQ Potts Point*Vertical Limits* NOTAM*Times of Use* NOTAM*Chart* Aus 4643*Chartlet* 1

35° 05' 59" S 150° 33' 00" E, thence the minor arc of a circle of 9NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 35° 03' 04" S 150° 40' 06" E, 35° 12' 02" S 150° 53' 14" E, thence the minor arc of a circle of 23NM radius centred on Nowra Tacan, to 35° 19' 57" S 150° 34' 29" E.

**YMMM/R453C Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Controlling Authority* Navy Fleet HQ Potts Point*Vertical Limits* NOTAM*Times of Use* NOTAM*Chart* Aus 4643*Chartlet* 1

34° 57' 02" S 151° 30' 23" E, thence the minor arc of a circle of 48NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 35° 13' 27" S 151° 26' 58" E, 35° 05' 04" S 150° 58' 14" E, thence the minor arc of a circle of 23NM radius centred on Nowra Tacan, to 34° 57' 24" S 150° 59' 58" E.

**YMMM/R453D Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Controlling Authority* Navy Fleet HQ Potts Point*Vertical Limits* NOTAM*Times of Use* NOTAM*Chart* Aus 4643*Chartlet* 1

35° 13' 27" S 151° 26' 58" E, thence the minor arc of a circle of 48NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 35° 28' 00" S 151° 16' 47" E, 35° 12' 02" S 150° 53' 14" E, thence the minor arc of a circle of 23NM radius centred on Nowra Tacan, to 35° 05' 04" S 150° 58' 14" E.

**YMMM/R453E Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Controlling Authority* Navy Fleet HQ Potts Point*Vertical Limits* NOTAM*Times of Use* NOTAM*Chart* Aus 4643*Chartlet* 1

35° 28' 00" S 151° 16' 47" E, thence the minor arc of a circle of 48NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 35° 38' 38" S 151° 01' 20" E. 35° 16' 58" S 150° 45' 59" E, thence the minor arc of a circle of 23NM radius centred on Nowra Tacan, to 35° 12' 02" S 150° 53' 14" E.

**YMMM/R453F Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Controlling Authority* Navy Fleet HQ Potts Point*Vertical Limits* NOTAM*Times of Use* NOTAM*Chart* Aus 4643*Chartlet* 1

35° 38' 38" S 151° 01' 20" E, thence the minor arc of a circle of 48NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 35° 44' 53" S 150° 37' 10" E, 35° 19' 57" S 150° 34' 29" E, thence the minor arc of a circle of 23NM radius centred on Nowra Tacan, to 35° 16' 58" S 150° 45' 59" E.

**YMMM/R453G Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Controlling Authority* Navy Fleet HQ Potts Point*Vertical Limits* NOTAM*Times of Use* NOTAM*Chart* Aus 4643*Chartlet* 1

34° 56' 32" S 151° 59' 35" E, thence the minor arc of a circle of 72NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 35° 21' 23" S 151° 54' 38" E, 35° 13' 27" S 151° 26' 58" E, thence the minor arc of a circle of 48NM radius centred on Nowra Tacan, to 34° 57' 02" S 151° 30' 23" E.

**YMMM/R453H Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Vertical Limits* NOTAM*Chart* Aus 4643

35° 21' 23" S 151° 54' 38" E, thence the minor arc of a circle of 72NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 35° 43' 14" S 151° 39' 32" E, 35° 28' 00" S 151° 16' 47" E, thence the minor arc of a circle of 48NM radius centred on Nowra Tacan, to 35° 13' 27" S 151° 26' 58" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YMMM/R453J Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Vertical Limits* NOTAM*Chart* Aus 4643

35° 43' 14" S 151° 39' 32" E, thence the minor arc of a circle of 72NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 35° 59' 23" S 151° 16' 13" E, 35° 38' 38" S 151° 01' 20" E, thence the minor arc of a circle of 48NM radius centred on Nowra Tacan, to 35° 28' 00" S 151° 16' 47" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YMMM/R453K Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Vertical Limits* NOTAM*Chart* Aus 4643

35° 59' 23" S 151° 16' 13" E., thence the minor arc of a circle of 72NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 36° 08' 50" S 150° 39' 46" E, 35° 44' 53" S 150° 37' 10" E, thence the minor arc of a circle of 48NM radius centred on Nowra Tacan, to 35° 38' 38" S 151° 01' 20" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YBBBB-YMMM/R453L Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Vertical Limits* NOTAM*Chart* Aus 4643

34° 56' 01" S 152° 25' 27" E, 35° 18' 59" S 152° 55' 50" E, thence the minor arc of a circle of 120NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 35° 36' 56" S 152° 50' 15" E, 35° 21' 23" S 151° 54' 38" E, thence the minor arc of a circle of 72NM radius centred on Nowra Tacan, to 34° 56' 32" S 151° 59' 35" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YBBBB-YMMM/R453M Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Vertical Limits* NOTAM*Chart* Aus 4643

35° 36' 56" S 152° 50' 15" E, thence the minor arc of a circle of 120NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 36° 13' 30" S 152° 25' 29" E, 35° 43' 14" S 151° 39' 32" E, thence the minor arc of a circle of 72NM radius centred on Nowra Tacan, to 35° 21' 23" S 151° 54' 38" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YBBBB-YMMM/R453N Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Vertical Limits* NOTAM*Chart* Aus 4643

36° 13' 30" S 152° 25' 29" E, thence the minor arc of a circle of 120NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 36° 40' 48" S 151° 46' 21" E, 35° 59' 23" S 151° 16' 13" E, thence the minor arc of a circle of 72NM radius centred on Nowra Tacan, to 35° 43' 14" S 151° 39' 32" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YBBBB-YMMM/R453P Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Vertical Limits* NOTAM*Chart* Aus 4643

36° 40' 48" S 151° 46' 21" E, thence the minor arc of a circle of 120NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 36° 56' 43" S 150° 45' 03" E, 36° 08' 50" S 150° 39' 46" E, thence the minor arc of a circle of 72NM radius centred on Nowra Tacan, to 35° 59' 23" S 151° 16' 13" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YMMM/R485A Tasman Sea***Nature of Activity* Military flying training*Vertical Limits* SFC-1 500*Chart* Aus 4643

(a) 34° 26' 37" S 151° 09' 46" E                      (b) 34° 06' 00" S 151° 19' 43" E                      (c) 34° 06' 00" S 151° 45' 06" E  
thence the minor arc of a circle of 30NM radius centred on Sydney DME (33° 56' 34" S 151° 10' 51" E) to (a).

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YBBBB-YMMM/R485B Tasman Sea***Nature of Activity* Military flying training*Vertical Limits* SFC-7 500*Chart* Aus 4643

(a) 34° 30' 00" S 151° 51' 35" E                      (b) 34° 30' 00" S 151° 08' 07" E                      (c) 34° 26' 37" S 151° 09' 46" E  
thence the minor arc of a circle of 30NM radius centred on Sydney DME (33° 56' 34" S 151° 10' 51" E) to  
(d) 34° 06' 00" S 151° 45' 06" E                      (e) 34° 06' 00" S 152° 03' 16" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1

**YBBBB-YMMM/R485C Tasman Sea***Nature of Activity* Military flying training*Vertical Limits* SFC-8 500*Chart* Aus 4643

(a) 34° 20' 29" S 151° 56' 14" E

(b) 34° 06' 00" S 152° 03' 16" E

(c) 34° 06' 00" S 152° 34' 17" E

thence the minor arc of a circle of 70NM radius centred on Sydney DME (33° 56' 34" S 151° 10' 51" E) to

(d) 34° 30' 53" S 152° 24' 28" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YBBBB/R485D Tasman Sea***Nature of Activity* Military flying training*Vertical Limits* SFC-FL125*Chart* Aus 4643

(a) 34° 30' 53" S 152° 24' 28" E,

(b) 34° 06' 00" S 152° 34' 17" E

(c) 34° 06' 00" S 153° 34' 46" E

thence the minor arc of a circle of 120NM radius centred on Sydney DME to

34° 50' 59" S 153° 20' 09" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YBBBB-YMMM/R485E Tasman Sea***Nature of Activity* Military flying training*Vertical Limits* SFC-FL205*Chart* Aus 4643

(a) 34° 30' 00" S 151° 51' 35" E

(b) 34° 20' 29" S 151° 56' 14" E

(c) 34° 50' 59" S 153° 20' 09" E

thence the minor arc of a circle of 120NM radius centred on Sydney DME (33° 56' 34" S 151° 10' 51" E) to

(d) 35° 19' 20" S 152° 56' 18" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YBBB-YMMM/R489 Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Vertical Limits* NOTAM*Chart* Aus 489

(a) 33° 38' 02" S 151° 51' 02" E

(b) 33° 26' 06" S 152° 00' 27" E

(c) 33° 25' 47" S 152° 22' 03" E

(d) 33° 44' 42" S 152° 22' 04" E

(e) 33° 47' 23" S 151° 51' 02" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 2**YMMM/R495A Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Vertical Limits* NOTAM*Chart* Aus 4643

(a) 34° 43' 56" S 151° 00' 00" E

(b) 34° 40' 30" S 151° 03' 00" E

(c) 34° 30' 00" S 151° 08' 07" E

(d) 34° 30' 00" S 151° 30' 00" E

(e) 34° 57' 02" S 151° 30' 18" E

(f) 34° 57' 24" S 150° 59' 58" E,

thence the minor arc of a circle of 23NM radius centred on Nowra Tacan (34° 57' 00" S 150° 32' 00" E), to 34° 56' 07" S 150° 59' 57" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YMMM/R495B Tasman Sea***Nature of Activity* Firing, bombing, radar tracking*Vertical Limits* NOTAM*Chart* Aus 4643

(a) 34° 30' 00" S 151° 30' 00" E

(b) 34° 30' 00" S 151° 51' 35" E

(c) 34° 36' 30" S 151° 59' 59" E

(d) 34° 56' 32" S 151° 59' 35" E

(e) 34° 57' 02" S 151° 30' 18" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YMMM/R495C Tasman Sea***Nature of Activity* Firing, bombing, tracking*Vertical Limits* NOTAM*Chart* Aus 4643

(a) 34° 56' 32" S 151° 59' 35" E

(b) 34° 36' 30" S 151° 59' 59" E

(c) 34° 56' 01" S 152° 25' 27" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 1**YBBB/R574 Williamstown***Nature of Activity* Military flying training*Vertical Limits* SFC-FL600*Chart* Aus 209

(a) 31° 00' 21" S 153° 16' 04" E

(b) 30° 43' 33" S 153° 24' 27" E

(c) 31° 01' 44" S 155° 18' 14" E

(d) 32° 33' 37" S 154° 47' 57" E

(e) 33° 51' 30" S 154° 01' 56" E

(f) 33° 51' 30" S 152° 07' 57" E

(g) 33° 32' 50" S 151° 58' 52" E

(h) 33° 12' 21" S 151° 56' 02" E,

thence the minor arc of a circle of 25NM radius centred on 32° 47' 49" S 151° 50' 00" E (WLM/TAC) to

(i) 32° 44' 36" S 152° 19' 24" E

(j) 32° 25' 00" S 152° 33' 00" E

(k) 32° 00' 00" S 152° 45' 52" E

*Controlling Authority* FLTCDR 453SQN Williamstown Flt*Times of Use* NOTAM*Chartlet* 2**YBBB/R596 Williamstown***Nature of Activity* Firing*Vertical Limits* SFC-FL120*Chart* Aus 209

(a) 32° 42' 00" S 152° 04' 00" E

(b) 32° 46' 30" S 152° 04' 00" E

(c) 32° 49' 00" S 151° 55' 00" E

(d) 32° 46' 00" S 151° 51' 00" E

(e) 32° 39' 30" S 151° 51' 00" E

(f) 32° 39' 30" S 151° 57' 45" E.

*Controlling Authority* FLTCDR 453SQN Williamstown Flt*Times of Use* NOTAM*Chartlet* 2

**YBBB/R609 Evans Head***Nature of Activity* Firing*Vertical Limits* NOTAM*Chart* Aus 813

29° 14' 00" S 153° 24' 00" E, thence the major arc of a circle of 3 NM radius centred on 29° 11' 00" S 153° 24' 00" E, to 29° 10' 13" S 153° 27' 19" E.

*Controlling Authority* FLTCDR 452SQN Amberley Flt*Times of Use* NOTAM*Chartlet* 2**YBBB/R638A Evans Head***Nature of Activity* Firing*Vertical Limits* 1 000-8 000*Chart* Aus 813

(a) 28° 57' 00" S 153° 27' 30" E (b) 28° 56' 21" S 153° 31' 28" E, thence along the coast to 29° 06' 55" S 153° 26' 11" E, thence along the N bank of the Evans and Richmond Rivers to 29° 01' 20" S 153° 17' 00" E.

*Note:* NOTAM may be requested to change activation hours with 2 hours notification

*Controlling Authority* FLTCDR 452SQN Amberley Flt*Times of Use* NOTAM*Chartlet* 2**YBBB/R638B Evans Head***Nature of Activity* Firing*Vertical Limits* SFC-8 000*Chart* Aus 813

(a) 29° 15' 00" S 153° 03' 30" E (b) 29° 06' 00" S 153° 05' 40" E (c) 29° 01' 20" S 153° 17' 00" E, thence along the N bank of the Evans and Richmond Rivers to 29° 06' 55" S 153° 26' 11" E, thence along the coast to 29° 26' 28" S 153° 22' 12" E.

*Note:* NOTAM may be requested to change activation hours with 2 hours notification

*Controlling Authority* FLTCDR 452SQN Amberley Flt*Times of Use* NOTAM*Chartlet* 2**YBBB/R638C Evans Head***Nature of Activity* Firing*Vertical Limits* 8 000-NOTAM*Chart* Aus 813

(a) 29° 15' 00" S 153° 03' 30" E (b) 29° 06' 00" S 153° 05' 40" E (c) 28° 57' 00" S 153° 27' 30" E (d) 28° 56' 21" S 153° 31' 28" E, thence along the coast to 29° 26' 28" S 153° 22' 12" E.

*Note:* NOTAM may be requested to change activation hours with 2 hours notification

*Controlling Authority* FLTCDR 452SQN Amberley Flt*Times of Use* NOTAM*Chartlet* 2**YBBB/R638D Evans Head***Nature of Activity* Firing*Vertical Limits* SFC-NOTAM*Chart* Aus 813

28° 52' 13" S 153° 49' 39" E, thence the minor arc of a circle of 30 NM radius centred on 29° 11' 51" S 153° 23' 44" E, to 29° 41' 39" S 153° 19' 07" E, thence along the coast to 28° 56' 21" S 153° 31' 28" E.

*Note:* NOTAM may be requested to change activation hours with 2 hours notification

*Controlling Authority* FLTCDR 452SQN Amberley Flt*Times of Use* NOTAM*Chartlet* 2**YBBB/R662A AMBERLEY***Nature of Activity* Military flying*Vertical Limits* 5000-NOTAM*Chart* Aus 812

(a) 28° 52' 13" S 153° 49' 39" E (b) 28° 32' 15" S 153° 56' 36" E (c) 28° 33' 12" S 154° 07' 49" E (d) 28° 33' 47" S 154° 09' 20" E (e) 29° 13' 21" S 155° 07' 10" E (f) 30° 28' 10" S 154° 25' 53" E (g) 29° 39' 23" S 153° 37' 34" E, thence the minor arc of a circle of 30 NM radius centred on 29° 11' 51" S 153° 23' 44" E.

*Controlling Authority* FLTCDR 452SQN Amberley Flt*Times of Use* NOTAM*Chartlet* 2**YBBB/R662B AMBERLEY***Nature of Activity* Military flying*Vertical Limits* 5000-NOTAM*Chart* Aus 812

(a) 30° 28' 10" S 154° 25' 53" E (b) 29° 13' 21" S 155° 07' 10" E (c) 29° 48' 16" S 155° 59' 22" E (d) 30° 38' 25" S 155° 31' 25" E

*Controlling Authority* FLTCDR 452SQN Amberley Flt*Times of Use* NOTAM*Chartlet* 2**YBBB/R671A AMBERLEY***Nature of Activity* Military flying*Vertical Limits* FL125-FL245*Chart* Aus 812

(a) 30° 43' 33" S 153° 24' 27" E (b) 30° 18' 53" S 153° 29' 32" E (c) 30° 28' 10" S 154° 25' 53" E (d) 30° 38' 25" S 155° 31' 25" E (e) 31° 01' 44" S 155° 18' 14" E

*Controlling Authority* FLTCDR 452SQN Amberley Flt*Times of Use* NOTAM*Chartlet* 2**YBBB/R671B AMBERLEY***Nature of Activity* Military flying*Vertical Limits* FL245 -NOTAM*Chart* Aus 812

(a) 30° 43' 33" S 153° 24' 27" E (b) 30° 18' 53" S 153° 29' 32" E (c) 30° 28' 10" S 154° 25' 53" E (d) 30° 38' 25" S 155° 31' 25" E (e) 31° 01' 44" S 155° 18' 14" E

*Controlling Authority* FLTCDR 452SQN Amberley Flt*Times of Use* NOTAM*Chartlet* 2

## QUEENSLAND

**YBBB/R637A Amberley**

*Nature of Activity* Military flying  
*Vertical Limits* 5000-NOTAM  
*Chart* Aus 4635

(a) 25° 27' 41" S 153° 15' 56" E  
 (d) 26° 15' 42" S 153° 29' 56" E.

*Controlling Authority* FLTCDR 452SQN Amberley Flt  
*Times of Use* NOTAM

*Chartlet* 3

(b) 24° 50' 56" S 153° 38' 38" E (c) 25° 31' 53" S 154° 17' 17" E  
 (e) 26° 10' 07" S 153° 25' 43" E (f) 25° 44' 29" S 153° 16' 51" E

**YBBB/R637B Amberley**

*Nature of Activity* Military flying  
*Vertical Limits* 5000-NOTAM  
*Chart* Aus 4635

(a) 24° 50' 56" S 153° 38' 38" E  
 (d) 25° 31' 53" S 154° 17' 17" E

*Controlling Authority* FLTCDR 452SQN Amberley Flt  
*Times of Use* NOTAM

*Chartlet* 3

(b) 23° 59' 01" S 154° 10' 14" E (c) 24° 49' 42" S 155° 02' 03" E

**YBBB/R637C Amberley**

*Nature of Activity* Military flying  
*Vertical Limits* 5000-NOTAM  
*Chart* Aus 4635

(a) 25° 31' 53" S 154° 17' 17" E  
 (d) 26° 12' 15" S 154° 55' 58" E

*Controlling Authority* FLTCDR 452SQN Amberley Flt  
*Times of Use* NOTAM

*Chartlet* 3

(b) 24° 49' 42" S 155° 02' 03" E (c) 25° 39' 32" S 155° 54' 00" E

**YBBB/R637D Amberley**

*Nature of Activity* Military flying  
*Vertical Limits* 5000-NOTAM  
*Chart* Aus 4635

(a) 26° 15' 42" S 153° 29' 56" E  
 (d) 26° 46' 43" S 153° 53' 29" E

*Controlling Authority* FLTCDR 452SQN Amberley Flt  
*Times of Use* NOTAM

*Chartlet* 3

(b) 25° 31' 53" S 154° 17' 17" E (c) 26° 12' 15" S 154° 55' 58" E

**YBBB/R644 Amberley**

*Nature of Activity* Military flying  
*Vertical Limits* 5000-NOTAM  
*Chart* Aus 4635

(a) 26° 46' 43" S 153° 53' 29" E  
 (d) 26° 15' 50" S 156° 30' 28" E  
 (f) 27° 23' 00" S 154° 28' 52" E

*Controlling Authority* FLTCDR 452SQN Amberley Flt  
*Times of Use* NOTAM

*Chartlet* 3

(b) 26° 12' 15" S 154° 55' 58" E (c) 25° 39' 32" S 155° 54' 00" E  
 (e) 26° 33' 23" S 155° 46' 55" E (e) 27° 13' 12" S 154° 44' 29" E

**YBBB/R650A Amberley**

*Nature of Activity* Military flying  
*Vertical Limits* 5000-NOTAM  
*Chart* Aus 4635

(a) 27° 23' 00" S 154° 28' 52" E

*Controlling Authority* FLTCDR 452SQN Amberley Flt  
*Times of Use* NOTAM

*Chartlet* 3

(b) 27° 13' 12" S 154° 44' 29" E (c) 27° 46' 28" S 154° 44' 29" E

**YBBB/R650B Amberley**

*Nature of Activity* Military flying  
*Vertical Limits* 5000-NOTAM  
*Chart* Aus 4635

(a) 27° 13' 12" S 154° 44' 29" E  
 (d) 27° 16' 34" S 157° 31' 03" E

*Controlling Authority* FLTCDR 452SQN Amberley Flt  
*Times of Use* NOTAM

*Chartlet* 3

(b) 26° 33' 23" S 155° 46' 55" E (c) 26° 15' 50" S 156° 30' 28" E  
 (e) 28° 50' 10" S 156° 37' 53" E (e) 27° 46' 28" S 154° 44' 29" E

**YBBB/R680 Akens Island**

*Nature of Activity* Firing  
*Vertical Limits* NOTAM  
*Chart* Aus 822

(a) 22° 17' 00" S 150° 12' 00" E  
 (d) 22° 15' 06" S 150° 23' 42" E  
 (g) 22° 30' 30" S 150° 27' 00" E thence N along the coast to 22° 19' 00" S 150° 10' 46" E.

*Controlling Authority* Army RCO Shoalwater Bay  
*Times of Use* NOTAM

*Chartlet* 4

(b) 22° 15' 00" S 150° 20' 00" E (c) 22° 12' 34" S 150° 25' 27" E  
 (e) 22° 17' 54" S 150° 23' 12" E (f) 22° 23' 42" S 150° 26' 12" E

**YBBB/R681A Wide Bay**

*Nature of Activity* Unmanned aerial vehicle operations and firing  
*Vertical Limits* SFC-NOTAM  
*Chart* Aus 817

(a) 25° 55' 39" S 152° 55' 12" E  
 thence along Maryborough Cooloola Road to 25° 55' 39" S 152° 51' 33" E.

*Controlling Authority* Army RCO Wide Bay  
*Times of Use* NOTAM

*Chartlet* 3

(b) 25° 48' 39" S 152° 55' 13" E (c) 25° 49' 26" S 152° 51' 46" E

**YBBB/R681B Wide Bay**

*Nature of Activity* Firing  
*Vertical Limits* SFC-NOTAM  
*Chart* Aus 817

(a) 25° 48' 23" S 152° 56' 21" E  
 (d) 25° 54' 58" S 152° 58' 51" E  
 thence along N side of Teebar Creek to  
 (f) 25° 49' 40" S 153° 01' 12" E  
 thence along S side of Red Bank to 25° 48' 40" S 152° 58' 03" E.

*Controlling Authority* Army RCO Wide Bay  
*Times of Use* NOTAM

*Chartlet* 3

(b) 25° 48' 39" S 152° 55' 13" E (c) 25° 55' 39" S 152° 55' 12" E  
 (b) 25° 52' 57" S 152° 59' 20" E (c) 25° 52' 32" S 153° 00' 01" E  
 (e) 25° 50' 43" S 153° 01' 23" E thence along Tin Can Bay Inlet to  
 (g) 25° 47' 51" S 152° 58' 59" E

**YBBB/R682 Townshend Island***Nature of Activity* Firing*Vertical Limits* NOTAM*Chart* Aus 822

(a) 22° 17' 54" S 150° 23' 12" E  
 (d) 22° 06' 00" S 150° 45' 00" E  
 (g) 22° 25' 56" S 150° 26' 28" E

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* NOTAM*Chartlet* 4

(b) 22° 15' 06" S 150° 23' 42" E (c) 22° 06' 00" S 150° 30' 00" E  
 (e) 22° 19' 00" S 150° 49' 00" E (f) 22° 19' 00" S 150° 33' 00" E  
 (h) 22° 23' 42" S 150° 26' 12" E.

**YBBB/R683 Cape Clinton***Nature of Activity* Firing*Vertical Limits* NOTAM*Chart* Aus 822

(a) 22° 30' 30" S 150° 27' 00" E  
 (d) 22° 19' 00" S 150° 49' 00" E

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* NOTAM*Chartlet* 4

(b) 22° 25' 56" S 150° 26' 28" E (c) 22° 19' 00" S 150° 33' 00" E  
 (e) 22° 41' 19" S 150° 50' 31" E.

**YBBB/R684A Mount Hummock***Nature of Activity* Firing*Vertical Limits* SFC-2 000*Chart* Aus 822

(a) 22° 55' 00" S 150° 27' 00" E  
 (d) 22° 49' 22" S 150° 47' 07" E

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* H24*Chartlet* 4

(b) 22° 30' 30" S 150° 27' 00" E (c) 22° 41' 19" S 150° 50' 31" E  
 (e) 22° 47' 57" S 150° 37' 21" E (f) 22° 54' 00" S 150° 36' 00" E.

**YBBB/R684B Mount Hummock***Nature of Activity* Firing*Vertical Limits* 2 000-NOTAM*Chart* Aus 822

(a) 22° 55' 00" S 150° 27' 00" E  
 (d) 22° 49' 22" S 150° 47' 07" E

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* NOTAM*Chartlet* 4

(b) 22° 30' 30" S 150° 27' 00" E (c) 22° 41' 19" S 150° 50' 31" E  
 (e) 22° 47' 57" S 150° 37' 21" E (f) 22° 54' 00" S 150° 36' 00" E.

**YBBB/R686 Triangular Island***Nature of Activity* Explosives Demolition*Vertical Limits* SFC-10 000*Chart* Aus 822

A circle of 3NM radius centred on 22° 23' 00" S 150° 30' 30" E.

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* NOTAM*Chartlet* 4**YBBB/R687A Raspberry Creek***Nature of Activity* Firing*Vertical Limits* SFC-2 000*Chart* Aus 822

(a) 22° 52' 05" S 150° 16' 31" E  
 thence SE along the coast to

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* H24*Chartlet* 4

(b) 22° 27' 04" S 150° 05' 46" E (c) 22° 19' 00" S 150° 10' 46" E  
 (d) 22° 30' 30" S 150° 27' 00" E (d) 22° 55' 00" S 150° 27' 00" E.

**YBBB/R687B Raspberry Creek***Nature of Activity* Firing*Vertical Limits* 2 000-NOTAM*Chart* Aus 822

(a) 22° 52' 05" S 150° 16' 31" E  
 thence SE along the coast to

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* NOTAM*Chartlet* 4

(b) 22° 27' 04" S 150° 05' 46" E (c) 22° 19' 00" S 150° 10' 46" E  
 (d) 22° 30' 30" S 150° 27' 00" E (d) 22° 55' 00" S 150° 27' 00" E.

**YBBB/R689 Shoalwater Bay***Nature of Activity* Firing*Vertical Limits* NOTAM*Chart* Aus 367

(a) 22° 27' 04" S 150° 05' 46" E  
 radius centred on 22° 16' 00" S 150° 33' 00" E to  
 (d) 22° 19' 00" S 150° 49' 00" E  
 (g) 22° 12' 34" S 150° 25' 27" E

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* NOTAM*Chartlet* 4

(b) 22° 15' 09" S 150° 00' 40" E, thence the major arc of a circle of 30 NM  
 (c) 22° 41' 19" S 150° 50' 31" E  
 (e) 22° 06' 00" S 150° 45' 00" E (f) 22° 06' 00" S 150° 30' 00" E  
 (h) 22° 15' 00" S 150° 20' 00" E (i) 22° 17' 00" S 150° 12' 00" E.

**YBBB/R693 Elliott***Nature of Activity* Firing*Vertical Limits* NOTAM*Chart* Aus 490

(a) 24° 24' 00" S 152° 08' 00" E  
 (d) 24° 41' 00" S 152° 34' 00" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 3

(b) 24° 11' 00" S 152° 31' 00" E (c) 24° 28' 00" S 152° 58' 00" E

**YBBB/R695A Herbert Creek***Nature of Activity* Firing*Vertical Limits* SFC-2 000*Chart* Aus 367

(a) 22° 38' 00" S 150° 05' 30" E  
 (d) 22° 52' 05" S 150° 16' 31" E

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* H24*Chartlet* 4

(b) 22° 27' 30" S 150° 05' 30" E (c) 22° 27' 04" S 150° 05' 46" E  
 (e) 22° 51' 30" S 150° 13' 30" E (f) 22° 44' 30" S 150° 08' 30" E.

**YBBB/R695B Herbert Creek***Nature of Activity* Firing*Vertical Limits* 2 000-6 000*Chart* Aus 367

(a) 22° 38' 00" S 150° 05' 30" E

(d) 22° 52' 05" S 150° 16' 31" E

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* NOTAM*Chartlet* 4

(b) 22° 27' 30" S 150° 05' 30" E

(e) 22° 51' 30" S 150° 13' 30" E

(c) 22° 27' 04" S 150° 05' 46" E

(f) 22° 44' 30" S 150° 08' 30" E.

**YBBB/R695C Herbert Creek***Nature of Activity* Firing*Vertical Limits* 6 000-NOTAM*Chart* Aus 367

(a) 22° 38' 00" S 150° 05' 30" E

(d) 22° 52' 05" S 150° 16' 31" E

*Controlling Authority* Army RCO Shoalwater Bay*Times of Use* NOTAM*Chartlet* 4

(b) 22° 27' 30" S 150° 05' 30" E

(e) 22° 51' 30" S 150° 13' 30" E

(c) 22° 27' 04" S 150° 05' 46" E

(f) 22° 44' 30" S 150° 08' 30" E.

**YBBB/R725 Saumarez Reef***Nature of Activity* Firing*Vertical Limits* NOTAM*Chart* Aus 612

A circle of 5 NM radius centred on 21° 51' 18" S 153° 38' 47" E.

*Controlling Authority* FLTCDR 452SQN Amberley Flt*Times of Use* NOTAM*Chartlet* 3**YBBB/R747 Rattlesnake Island***Nature of Activity* Firing*Vertical Limits* SFC-NOTAM*Chart* Aus 827

A circle of 4.8 NM radius centred on 19° 02' 10" S 146° 36' 38" E.

*Controlling Authority* FLTCDR 452SQN Townsville Flt*Times of Use* NOTAM*Chartlet* 5**YBBB/R748 Halifax Bay***Nature of Activity* Firing*Vertical Limits* SFC-FL600*Chart* Aus 827

(a) 19° 04' 56" S 146° 47' 41" E

(d) 19° 01' 30" S 146° 28' 00" E

(g) 18° 46' 00" S 146° 31' 00" E

(b) 19° 08' 23" S 146° 43' 46" E

(e) 18° 55' 33" S 146° 23' 35" E

(h) 18° 49' 12" S 146° 34' 38" E

(c) 19° 09' 00" S 146° 38' 30" E

(f) 18° 49' 00" S 146° 26' 00" E

thence the minor arc of a circle of 29 NM radius centred on Townsville Tacan (19° 16' 44" S 146° 44' 33" E), to 18° 48' 22" S 146° 51' 25" E.

*Controlling Authority* FLTCDR 452SQN Townsville Flt*Times of Use* NOTAM*Chartlet* 5**YBBB/R767 Cairns***Nature of Activity* Firing*Vertical Limits* SFC-NOTAM*Chart* Aus 829 & Aus 830

(a) 17° 19' 00" S 146° 08' 18" E

(d) 17° 22' 00" S 146° 25' 00" E

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 6

(b) 17° 08' 00" S 146° 07' 00" E

(e) 17° 23' 30" S 146° 13' 00" E.

(c) 17° 07' 00" S 146° 23' 00" E

**YBBB/R778 Cairns (Outer Reef)***Nature of Activity* Firing*Vertical Limits* SFC-NOTAM*Chart* Aus 829 & Aus 830

(a) 16° 41' 30" S 146° 15' 00" E

(d) 16° 41' 30" S 146° 33' 00" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 6

(b) 16° 30' 00" S 146° 15' 00" E

(c) 16° 30' 00" S 146° 33' 00" E

**YBBB/R783 Lizard Island***Nature of Activity* Firing*Vertical Limits* SFC-NOTAM*Chart* Aus 832

(a) 14° 33' 00" S 145° 14' 00" E

(d) 14° 40' 00" S 145° 18' 00" E.

*Controlling Authority* Navy Fleet HQ Potts Point*Times of Use* NOTAM*Chartlet* 6

(b) 14° 28' 00" S 145° 22' 00" E

(c) 14° 34' 00" S 145° 26' 00" E

**NORTHERN TERRITORY****YBBB/R230A Darwin***Nature of Activity* Military flying training*Vertical Limits* 5 000-NOTAM*Chart* Aus 4721

11° 05' 02" S 130° 53' 39" E, thence the minor arc of a circle of 80 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 11° 20' 50" S 131° 42' 58" E, 12° 05' 13" S 131° 09' 35" E, thence the minor arc of a circle of 25 NM radius centred on Darwin DME, to 12° 00' 17" S 130° 54' 53" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R230B Darwin***Nature of Activity* All military operations*Vertical Limits* NOTAM*Chart* Aus 4721

10° 24' 52" S 130° 52' 46" E, thence the minor arc of a circle of 120 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 10° 48' 30" S 132° 07' 07" E, 11° 20' 50" S 131° 42' 58" E, thence the minor arc of a circle of 80 NM radius centred on Darwin DME, to 11° 05' 02" S 130° 53' 39" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7

**YBBB/R230C Darwin***Nature of Activity* All military operations*Vertical Limits* NOTAM*Chart* Aus 4721

9° 54' 44" S 130° 52' 07" E, thence the minor arc of a circle of 150 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 10° 24' 14" S 132° 25' 11" E, 10° 48' 30" S 132° 07' 07" E, thence the minor arc of a circle of 120 NM radius centred on Darwin DME, to 10° 24' 52" S 130° 52' 46" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R230D Darwin***Nature of Activity* Military flying training*Vertical Limits* 5 000-NOTAM*Chart* Aus 4721

11° 20' 50" S 131° 42' 58" E, thence the minor arc of a circle of 80 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 12° 02' 20" S 132° 12' 38" E, 12° 18' 53" S 131° 19' 03" E, thence the minor arc of a circle of 25 NM radius centred on Darwin DME, to 12° 05' 13" S 131° 09' 35" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R230E Darwin***Nature of Activity* Military flying training*Vertical Limits* 5 000-NOTAM*Chart* Aus 4721

10° 48' 30" S 132° 07' 07" E, thence the minor arc of a circle of 120 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 11° 50' 11" S 132° 51' 32" E, 12° 02' 20" S 132° 12' 38" E, thence the minor arc of a circle of 80 NM radius centred on Darwin DME, to 11° 20' 50" S 131° 42' 58" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R230F Darwin***Nature of Activity* Military flying training*Vertical Limits* 5 000-NOTAM*Chart* Aus 4721

10° 24' 14" S 132° 25' 11" E, thence the minor arc of a circle of 150 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 11° 41' 01" S 133° 20' 40" E, 11° 50' 11" S 132° 51' 32" E, thence the minor arc of a circle of 120 NM radius centred on Darwin DME, to 10° 48' 30" S 132° 07' 07" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R264A Darwin***Nature of Activity* All military operations*Vertical Limits* NOTAM*Chart* Aus 4721

12° 32' 35" S 130° 29' 53" E, thence the minor arc of a circle of 25 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 12° 18' 12" S 130° 29' 54" E, 12° 12' 26" S 130° 10' 20" E, thence the minor arc of a circle of 45 NM radius centred on Darwin DME, to 12° 38' 16" S 130° 10' 16" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R264B Darwin***Nature of Activity* All military operations*Vertical Limits* NOTAM*Chart* Aus 4721

12° 38' 16" S 130° 10' 16" E, thence the minor arc of a circle of 45 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 12° 12' 26" S 130° 10' 20" E, 12° 02' 16" S 129° 36' 08" E, thence the minor arc of a circle of 80 NM radius centred on Darwin DME, to 12° 48' 09" S 129° 35' 45" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R264C Darwin***Nature of Activity* All military operations*Vertical Limits* NOTAM*Chart* Aus 4721

12° 48' 09" S 129° 35' 54" E, thence the minor arc of a circle of 80 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 12° 02' 16" S 129° 36' 08" E, 11° 50' 34" S 128° 57' 06" E, thence the minor arc of a circle of 120 NM radius centred on Darwin DME, to 12° 59' 22" S 128° 56' 35" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R264D Darwin***Nature of Activity* All military operations*Vertical Limits* NOTAM*Chart* Aus 4721

12° 59' 22" S 128° 56' 35" E, thence the minor arc of a circle of 120 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 11° 50' 34" S 128° 57' 06" E, 11° 35' 48" S 128° 08' 23" E, thence the minor arc of a circle of 170 NM radius centred on Darwin DME, to 13° 13' 15" S 128° 07' 20" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R264E Darwin***Nature of Activity* All military operations*Vertical Limits* NOTAM*Chart* Aus 4721

12° 32' 35" S 130° 29' 53" E, thence the minor arc of a circle of 25 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 12° 44' 26" S 130° 37' 42" E, 13° 26' 16" S 130° 00' 54" E, thence the minor arc of a circle of 80 NM radius centred on Darwin DME, to 12° 48' 09" S 129° 35' 54" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7

**YBBB/R264F Darwin***Nature of Activity* All military operations*Vertical Limits* NOTAM*Chart* Aus 4721

12° 48' 09" S 129° 35' 54" E, thence the minor arc of a circle of 80 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 13° 26' 16" S 130° 00' 54" E, 13° 56' 38" S 129° 34' 00" E, thence the minor arc of a circle of 120 NM radius centred on Darwin DME, to 12° 59' 22" S 128° 56' 35" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R264G Darwin***Nature of Activity* All military operations*Vertical Limits* NOTAM*Chart* Aus 4721

12° 59' 22" S 128° 56' 35" E, thence the minor arc of a circle of 120 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 13° 56' 38" S 129° 34' 00" E, 14° 34' 32" S 129° 00' 13" E, thence the minor arc of a circle of 170 NM radius centred on Darwin DME, to 13° 13' 15" S 128° 07' 20" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R264H Darwin***Nature of Activity* All military operations*Vertical Limits* NOTAM*Chart* Aus 4721

12° 44' 26" S 130° 37' 42" E, thence the minor arc of a circle of 25 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 12° 49' 20" S 130° 46' 39" E, 13° 41' 06" S 130° 26' 55" E, thence the minor arc of a circle of 80 NM radius centred on Darwin DME, to 13° 26' 16" S 130° 00' 54" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R264J Darwin***Nature of Activity* All military operations*Vertical Limits* 5 000-NOTAM*Chart* Aus 4721

13° 26' 16" S 130° 00' 54" E, thence the minor arc of a circle of 80 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 13° 41' 06" S 130° 26' 55" E, 14° 18' 44" S 130° 12' 30" E, thence the minor arc of a circle of 120 NM radius centred on Darwin DME, to 13° 56' 38" S 129° 34' 00" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R264K Darwin***Nature of Activity* All military operations*Vertical Limits* 5 000-NOTAM*Chart* Aus 4721

13° 56' 38" S 129° 34' 00" E, thence the minor arc of a circle of 120 NM radius centred on Darwin DME (12° 25' 24" S 130° 54' 23" E), to 14° 18' 44" S 130° 12' 30" E, 15° 05' 44" S 129° 54' 21" E, thence the minor arc of a circle of 170 NM radius centred on Darwin DME, to 14° 34' 32" S 129° 00' 13" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 7**YBBB/R272 Bathurst Island***Nature of Activity* Radiation hazzard*Vertical Limits* SFC - 1500*Chart* Aus 722

A circle of 1.0 NM radius centred on 11° 45' 34" S 130° 02' 05" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* H24*Chartlet* 7**WESTERN AUSTRALIA****Greenough***Nature of Activity* Firing*Vertical Limits* NOTAM*Chart* Aus 751

(a) 28° 57' 50" S 114° 43' 17" E along the coast to (b) 28° 58' 09" S 114° 43' 38" E  
(c) 28° 58' 28" S 114° 43' 16" E (d) 28° 58' 10" S 114° 42' 55" E.

*Controlling Authority* Army*Times of Use* HJ, NOTAM*Chartlet* 9**Flat Rock***Nature of Activity* Air to surface weapon firing*Vertical Limits* NOTAM*Chart* Aus 753

A circle of 2.4 NM radius centred on 30° 45' 40" S 115° 09' 45" E.

*Controlling Authority* Air Force*Times of Use* NOTAM*Chartlet* 9**YMMM/R119A Stirling***Nature of Activity* Gunnery and military flying*Vertical Limits* SFC-FL950*Chart* Aus 4725

31° 38' 54" S 113° 38' 19" E, thence the minor arc of a circle of 120NM radius centred on Perth DME (31° 56' 42" S 115° 57' 34" E), to 30° 50' 29" S 114° 00' 32" E, 31° 23' 49" S 114° 58' 43" E, thence the minor arc of a circle of 60NM radius centred on Perth DME, to 31° 48' 07" S 114° 47' 50" E.

*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9

**YMMM/R119B Stirling***Nature of Activity* Gunnery and military flying*Vertical Limits* SFC-FL950*Chart* Aus 4725

32° 30' 51" S 113° 41' 55" E, thence the minor arc of a circle of 120NM radius centred on Perth DME (31° 56' 42" S 115° 57' 34" E), to 31° 38' 54" S 113° 38' 19" E 31° 46' 38" S 114° 36' 14" E, thence the minor arc of a circle of 70NM radius centred on Perth DME, to 32° 16' 55" S 114° 38' 39" E.

*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9**YMMM/R119C Stirling***Nature of Activity* Gunnery and military flying*Vertical Limits* SFC-FL950*Chart* Aus 4725

31° 52' 29" S 115° 22' 41" E, thence the minor arc of a circle of 30NM radius centred on Perth DME (31° 56' 42" S 115° 57' 34" E), to 32° 05' 28" S 115° 23' 49" E, 32° 16' 55" S 114° 38' 39" E, thence the minor arc of a circle of 70NM radius centred on Perth DME, to 31° 46' 38" S 114° 36' 14" E.

*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9**YMMM/R119D Stirling***Nature of Activity* Gunnery and military flying*Vertical Limits* SFC-FL950*Chart* Aus 4725

33° 08' 23" S 114° 03' 35" E, thence the minor arc of a circle of 120NM radius centred on Perth DME (31° 56' 42" S 115° 57' 34" E), to 32° 30' 51" S 113° 41' 55" E, 32° 16' 55" S 114° 38' 39" E, thence the minor arc of a circle of 70NM radius centred on Perth DME, to 32° 38' 44" S 114° 51' 27" E.

*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9**YMMM/R119E Stirling***Nature of Activity* Gunnery and military flying*Vertical Limits* SFC-FL950*Chart* Aus 4725

32° 38' 44" S 114° 51' 27" E, thence the minor arc of a circle of 70NM radius centred on Perth DME (31° 56' 42" S 115° 57' 34" E), to 32° 16' 55" S 114° 38' 39" E, 32° 05' 28" S 115° 23' 49" E, thence the minor arc of a circle of 30NM radius centred on Perth DME, to 32° 14' 47" S 115° 29' 22" E.

*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9**YMMM/R119F Stirling***Nature of Activity* Gunnery and military flying*Vertical Limits* SFC-FL950*Chart* Aus 4725

33° 42' 40" S 114° 50' 16" E, thence the minor arc of a circle of 120NM radius centred on Perth DME (31° 56' 42" S 115° 57' 34" E), to 33° 08' 23" S 114° 03' 35" E, 32° 38' 44" S 114° 51' 27" E, thence the minor arc of a circle of 70NM radius centred on Perth DME, to 32° 58' 36" S 115° 18' 38" E.

*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9**YMMM/R119G Stirling***Nature of Activity* Gunnery and military flying*Vertical Limits* SFC-FL950*Chart* Aus 4725

32° 27' 40" S 115° 38' 13" E, 32° 58' 36" S 115° 18' 38" E, thence the minor arc of a circle of 70NM radius centred on Perth DME (31° 56' 42" S 115° 57' 34" E), to 32° 38' 44" S 114° 51' 27" E, 32° 14' 47" S 115° 29' 22" E, thence the minor arc of a circle of 30NM radius centred on Perth DME, to 32° 22' 32" S 115° 39' 30" E.

*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9**YMMM/R119H Stirling***Nature of Activity* Gunnery and military flying*Vertical Limits* SFC-4 500*Chart* Aus 4725

32° 09' 27" S 115° 39' 32" E, thence along W coast Garden Island to 32° 14' 51" S 115° 41' 24" E, 32° 22' 32" S 115° 39' 30" E, thence the minor arc of a circle of 30NM radius centred on Perth DME (31° 56' 42" S 115° 57' 34" E), to 32° 14' 47" S 115° 29' 22" E.

*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9**YMMM/R140A Garden Island***Nature of Activity* Explosive storage*Vertical Limits* SFC-1 500*Chart* Aus 111

A circle of 1.0 NM radius centred on 32° 10' 36" S 115° 40' 18" E.

*Controlling Authority* Navy HMAS Stirling*Times of Use* H24*Chartlet* 9**YMMM/R140B Garden Island***Nature of Activity* Explosive demolition*Vertical Limits* 1 500-4 000*Chart* Aus 111

A circle of 1.0 NM radius centred on 32° 10' 36" S 115° 40' 18" E.

*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9**YMMM/R144 Stirling***Nature of Activity* Gunnery and military flying*Vertical Limits* SFC-2 000*Chart* Aus 4725

31° 52' 46" S 115° 24' 56" E, 31° 48' 07" S 114° 47' 50" E, thence the minor arc of a circle of 60NM radius centred on Perth DME (31° 56' 42" S 115° 57' 34" E), to 31° 19' 34" S 115° 02' 18" E, 31° 38' 11" S 115° 29' 51" E, 31° 50' 01" S 115° 33' 12" E

*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9

**YMMM/R146A Lancelin***Nature of Activity* Firing*Vertical Limits* SFC-FL700*Chart Aus* 753 and Aus 754(a) 30° 54' 00" S 114° 56' 00" E  
(d) 31° 07' 30" S 115° 05' 00" E.*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9

(b) 30° 45' 30" S 115° 17' 30" E (c) 30° 55' 00" S 115° 24' 00" E

**YMMM/R146B Lancelin***Nature of Activity* Firing*Vertical Limits* SFC-FL260*Chart Aus* 753 and Aus 754(a) 30° 45' 30" S 115° 17' 30" E  
(d) 30° 55' 00" S 115° 24' 00" E.*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9

(b) 30° 41' 00" S 115° 27' 00" E (c) 30° 50' 00" S 115° 33' 00" E

**YMMM/R146C Lancelin***Nature of Activity* Firing*Vertical Limits* SFC-FL260*Chart Aus* 753 and Aus 754(a) 30° 41' 00" S 115° 27' 00" E  
thence along the coast to*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9(b) 30° 45' 30" S 115° 17' 30" E (c) 30° 47' 56" S 115° 11' 21" E  
(d) 30° 38' 57" S 115° 07' 36" E.**YMMM/R148 Lancelin***Nature of Activity* Military flying*Vertical Limits* SFC-FL260*Chart Aus* 4725(a) 30° 00' 00" S 114° 30' 00" E  
(c) 30° 47' 56" S 115° 11' 21" E  
(f) 31° 40' 00" S 114° 30' 00" E.*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9(b) 30° 15' 32" S 115° 02' 11" E thence along the coast to  
(d) 30° 54' 00" S 114° 56' 00" E (e) 31° 07' 30" S 115° 05' 00" E**YMMM/R157 Lancelin***Nature of Activity* Military flying*Vertical Limits* SFC-FL260*Chart Aus* 4725(a) 31° 40' 00" S 113° 00' 00" E  
(d) 31° 40' 00" S 114° 30' 00" E.*Controlling Authority* Navy HMAS Stirling*Times of Use* NOTAM*Chartlet* 9

(b) 30° 00' 00" S 113° 00' 00" E (c) 30° 00' 00" S 114° 30' 00" E

**YMMM/D169 Swanbourne***Nature of Activity* Firing*Vertical Limits* SFC-1500*Chart Aus* 112(a) 31° 56' 49" S 115° 46' 00" E  
00" E  
(d) 31° 58' 47" S 115° 46' 00" E*Controlling Authority* Army DOTAM WA*Times of Use* H24*Chartlet* 9

(b) 31° 56' 49" S 115° 43' 00" E (c) 31° 58' 47" S 115° 43'

**YMMM/R184 Lancelin***Nature of Activity* Explosive demolition*Vertical Limits* SFC-4 000*Chart Aus* 105

A circle of radius 1.5 NM centred on 30° 52' 54" S 115° 16' 12" E.

*Controlling Authority* Army DOTAM WA*Times of Use* NOTAM*Chartlet* 9**YBBB/R811 Curtin***Nature of Activity* Air to air firing*Vertical Limits* NOTAM*Chart Aus* 4722(a) 16° 04' 26" S 120° 56' 17" E  
(d) 17° 04' 28" S 121° 56' 18" E.*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 12

(b) 14° 04' 27" S 122° 56' 24" E (c) 15° 04' 57" S 123° 58' 17" E

**YMMM/R850A Learmonth***Nature of Activity* Military flying training*Vertical Limits* NOTAM-FL280*Chart Aus* 4725

22° 54' 26" S 116° 07' 49" E, thence the minor arc of a circle of 120NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 24° 07' 12" S 113° 21' 00" E, 22° 51' 49" S 113° 50' 54" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 22° 27' 47" S 114° 46' 13" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R850B Learmonth***Nature of Activity* Military flying training*Vertical Limits* FL280-FL600*Chart Aus* 4725

22° 54' 26" S 116° 07' 49" E, thence the minor arc of a circle of 120NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 24° 07' 12" S 113° 21' 00" E, 22° 51' 49" S 113° 50' 54" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 22° 27' 47" S 114° 46' 13" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8

**YMMM/R851A Learmonth***Nature of Activity* Military flying training*Vertical Limits* NOTAM-10 000*Chart* Aus 4725

21° 22' 24" S 116° 02' 08" E, thence the minor arc of a circle of 120NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 22° 54' 26" S 116° 07' 49" E, 22° 27' 47" S 114° 46' 13" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 21° 57' 04" S 114° 44' 39" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R851B Learmonth***Nature of Activity* Military flying training*Vertical Limits* 10 000-FL280*Chart* Aus 4725

21° 22' 24" S 116° 02' 08" E, thence the minor arc of a circle of 120NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 22° 54' 26" S 116° 07' 49" E, 22° 27' 47" S 114° 46' 13" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 21° 57' 04" S 114° 44' 39" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R851C Learmonth***Nature of Activity* Military flying training*Vertical Limits* FL280-FL600*Chart* Aus 4725

21° 22' 24" S 116° 02' 08" E, thence the minor arc of a circle of 120NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 22° 54' 26" S 116° 07' 49" E, 22° 27' 47" S 114° 46' 13" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 21° 57' 04" S 114° 44' 39" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R852A Learmonth***Nature of Activity* Military flying training*Vertical Limits* 10 000-FL280*Chart* Aus 4725

20° 24' 43" S 114° 59' 27" E, thence the minor arc of a circle of 120NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 21° 22' 24" S 116° 02' 08" E, 21° 57' 04" S 114° 44' 39" E thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 21° 37' 40" S 114° 23' 44" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R852B Learmonth***Nature of Activity* Military flying training*Vertical Limits* FL280-FL600*Chart* Aus 4725

20° 24' 43" S 114° 59' 27" E, thence the minor arc of a circle of 120NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 21° 22' 24" S 116° 02' 08" E, 21° 57' 04" S 114° 44' 39" E thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 21° 37' 40" S 114° 23' 44" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R853A Learmonth***Nature of Activity* Military flying training*Vertical Limits* NOTAM-FL280*Chart* Aus 4725

19° 52' 35" S 113° 10' 54" E thence the minor arc of a circle of 150NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 19° 57' 19" S 115° 12' 42" E, 20° 52' 05" S 114° 46' 07" E thence the minor arc of a circle of 90NM radius centred on Learmonth DME to 20° 49' 14" S 113° 32' 34" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R853B Learmonth***Nature of Activity* Military flying training*Vertical Limits* FL280-FL600*Chart* Aus 4725

19° 52' 35" S 113° 10' 54" E thence the minor arc of a circle of 150NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 19° 57' 19" S 115° 12' 42" E, 20° 52' 05" S 114° 46' 07" E thence the minor arc of a circle of 90NM radius centred on Learmonth DME to 20° 49' 14" S 113° 32' 34" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R854A Learmonth***Nature of Activity* Military flying training*Vertical Limits* NOTAM-FL280*Chart* Aus 4725

20° 49' 14" S 113° 32' 34" E, thence the minor arc of a circle of 90NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 20° 52' 05" S 114° 46' 07" E, 21° 37' 40" S 114° 23' 44" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 21° 36' 25" S 113° 50' 49" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R854B Learmonth***Nature of Activity* Military flying training*Vertical Limits* FL280-FL600*Chart* Aus 4725

20° 49' 14" S 113° 32' 34" E, thence the minor arc of a circle of 90NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 20° 52' 05" S 114° 46' 07" E, 21° 37' 40" S 114° 23' 44" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 21° 36' 25" S 113° 50' 49" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8

**YMMM/R859A Learmonth***Nature of Activity* Military flying training*Vertical Limits* NOTAM-10 000*Chart* Aus 4725

A circle of 40NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E).

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R859B Learmonth***Nature of Activity* Military flying training*Vertical Limits* 10 000-FL280*Chart* Aus 4725

A circle of 40NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E).

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R859C Learmonth***Nature of Activity* Military flying training*Vertical Limits* FL280-FL600*Chart* Aus 4725

A circle of 40NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E).

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R860A Learmonth***Nature of Activity* Military flying training*Vertical Limits* NOTAM-2 500*Chart* Aus 4725

A circle of 25NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E).

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R860B Learmonth***Nature of Activity* Military flying training*Vertical Limits* 2 500-FL280*Chart* Aus 4725

A circle of 25NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E).

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R860C Learmonth***Nature of Activity* Military flying training*Vertical Limits* FL280-FL600*Chart* Aus 4725

A circle of 25NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E).

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R861A Learmonth***Nature of Activity* Military flying training and firing*Vertical Limits* NOTAM-FL280*Chart* Aus 4725

22° 29' 33" S 112° 29' 59" E, thence the minor arc of a circle of 90NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 20° 49' 14" S 113° 32' 34" E, 21° 36' 25" S 113° 50' 49" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 22° 21' 08" S 113° 23' 11" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R861B Learmonth***Nature of Activity* Military flying training and firing*Vertical Limits* FL280-FL950*Chart* Aus 4725

22° 29' 33" S 112° 29' 59" E, thence the minor arc of a circle of 90NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 20° 49' 14" S 113° 32' 34" E, 21° 36' 25" S 113° 50' 49" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 22° 21' 08" S 113° 23' 11" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R862A Learmonth***Nature of Activity* Military flying training and firing*Vertical Limits* NOTAM-FL280*Chart* Aus 4725

22° 39' 16" S 111° 26' 00" E, thence the minor arc of a circle of 150NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 19° 52' 35" S 113° 10' 54" E, 20° 49' 14" S 113° 32' 34" E, thence the minor arc of a circle of 90NM radius centred on Learmonth DME to 22° 29' 33" S 112° 29' 59" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R862B Learmonth***Nature of Activity* Military flying training and firing*Vertical Limits* FL280-FL950*Chart* Aus 4725

22° 39' 16" S 111° 26' 00" E, thence the minor arc of a circle of 150NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 19° 52' 35" S 113° 10' 54" E, 20° 49' 14" S 113° 32' 34" E, thence the minor arc of a circle of 90NM radius centred on Learmonth DME to 22° 29' 33" S 112° 29' 59" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R863A Learmonth***Nature of Activity* Military flying training and firing*Vertical Limits* NOTAM-FL280*Chart* Aus 4725

22° 29' 33" S 112° 29' 59" E, thence the minor arc of a circle of 90NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 23° 38' 56" S 113° 32' 16" E, 24° 35' 26" S 113° 09' 38" E, thence the minor arc of a circle of 150NM radius centred on Learmonth DME to 22° 39' 16" S 111° 26' 00" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8

**YMMM/R863B Learmonth***Nature of Activity* Military flying training and firing*Vertical Limits* FL280-FL950*Chart* Aus 4725

22° 29' 33" S 112° 29' 59" E, thence the minor arc of a circle of 90NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 23° 38' 56" S 113° 32' 16" E, 24° 35' 26" S 113° 09' 38" E, thence the minor arc of a circle of 150NM radius centred on Learmonth DME to 22° 39' 16" S 111° 26' 00" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R864A Learmonth***Nature of Activity* Military flying training and firing*Vertical Limits* NOTAM-FL280*Chart* Aus 4725

23° 38' 56" S 113° 32' 16" E, thence the minor arc of a circle of 90NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 22° 29' 33" S 112° 29' 59" E, 22° 21' 08" S 113° 23' 11" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 22° 51' 49" S 113° 50' 54" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R864B Learmonth***Nature of Activity* Military flying training and firing*Vertical Limits* FL280-FL950*Chart* Aus 4725

23° 38' 56" S 113° 32' 16" E, thence the minor arc of a circle of 90NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 22° 29' 33" S 112° 29' 59" E, 22° 21' 08" S 113° 23' 11" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME to 22° 51' 49" S 113° 50' 54" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R870A Learmonth***Nature of Activity* Firing*Vertical Limits* NOTAM-FL250*Chart* Aus 4725

22° 10' 43" S 113° 59' 06" E, thence along Line Road to 22° 14' 09" S 113° 58' 01" E, 22° 28' 39" S 114° 01' 32" E thence the minor arc of a circle of 15NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E), to 22° 06' 41" S 113° 51' 35" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**YMMM/R870B Learmonth***Nature of Activity* Firing*Vertical Limits* NOTAM-FL250*Chart* Aus 4725

22° 06' 41" S 113° 51' 35" E, thence the minor arc of a circle of 15NM radius centred on Learmonth DME (22° 14' 05" S 114° 05' 39" E) to 22° 28' 55" S 114° 02' 50" E, 22° 53' 37" S 113° 58' 10" E, thence the minor arc of a circle of 40NM radius centred on Learmonth DME, to 21° 54' 07" S 113° 28' 18" E.

*Controlling Authority* FLTCDR 452SQN Darwin Flt*Times of Use* NOTAM*Chartlet* 8**SOUTH AUSTRALIA****YMMM/R231 Adelaide***Nature of Activity* Military flying*Vertical Limits* SFC-2500*Chart* Aus 781

34° 47' 27" S 138° 24' 26" E, thence the minor arc of a circle of 11 NM radius centred on Adelaide DME (34° 56' 49" S 138° 31' 28" E), to 34° 57' 08" S 138° 18' 06" E, 34° 58' 09" S 137° 47' 42" E, thence the minor arc of a circle of 36 NM radius centred on Adelaide DME, to 34° 26' 08" S 138° 08' 33" E.

*Controlling Authority* FLTCDR 453SQN Edinburgh Flt*Times of Use* NOTAM*Chartlet* 10**YMMM/R245 Dangerous Reef***Nature of Activity* Naval operations*Vertical Limits* NOTAM*Chart* Aus 776

A circle of 1.0NM radius centred on 34° 55' 54" S 136° 14' 30" E.

*Controlling Authority* Navy*Times of Use* NOTAM*Chartlet* 10**YMMM/R246 Thistle Island***Nature of Activity* Naval operations*Vertical Limits* NOTAM*Chart* Aus 776

A circle of 2.0NM radius centred on 34° 59' 42" S 136° 13' 12" E.

*Controlling Authority* Navy*Times of Use* NOTAM*Chartlet* 10**YMMM/R252 Alamein***Nature of Activity* Firing*Vertical Limits* SFC-NOTAM*Chart* Aus 778

(a) 32° 49' 39" S 137° 36' 33" E

(d) 32° 44' 36" S 137° 48' 35" E

(g) 32° 53' 28" S 137° 36' 53" E.

*Controlling Authority* Army DOTAM SA*Times of Use* NOTAM*Chartlet* 10

(b) 32° 40' 46" S 137° 40' 04" E

(e) 32° 54' 06" S 137° 48' 34" E

(c) 32° 40' 49" S 137° 46' 44" E

(f) 32° 58' 24" S 137° 42' 43" E

**YMMM/R254 North East Rock***Nature of Activity* Firing*Vertical Limits* NOTAM-FL200*Chart* Aus 776

35° 07' 00" S 136° 21' 43" E, thence the major arc of a circle of 7 NM radius centred on 35° 04' 30" S 136° 29' 40" E, to 35° 07' 00" S 136° 37' 37" E.

*Controlling Authority* FLTCDR 453SQN Edinburgh Flt*Times of Use* NOTAM*Chartlet* 10**YMMM/R279 Edinburgh***Nature of Activity* Military flying and firing*Vertical Limits* SFC-FL250*Chart* Aus 780 & 781

35° 18' 08" S 136° 52' 48" E, thence N along the coast of Yorke Peninsula, to 34° 58' 12" S 137° 46' 05" E, 34° 57' 38" S 138° 03' 31" E, thence the minor arc of a circle of 23 NM radius centred on Adelaide DME (34° 56' 49" S 138° 31' 28" E), to 35° 05' 02" S 138° 05' 19" E, 35° 35' 27" S 137° 23' 33" E, thence W along the N coast of Kangaroo Island, to 35° 43' 19" S 136° 43' 13" E, thence the minor arc of a circle of 100 NM radius centred on Adelaide DME, to 35° 21' 44" S 136° 33' 21" E.

*Controlling Authority* FLTCDR 452SQN Edinburgh Flt*Times of Use* NOTAM*Chartlet* 10**YMMM/R282 Adelaide***Nature of Activity* Military flying and firing*Vertical Limits* SFC-FL600*Chart* Aus 347

36° 10' 00" S 138° 10' 00" E, 36° 15' 26" S 137° 31' 00" E, 36° 52' 11" S 137° 04' 08" E, thence along the minor arc of a circle of 150 NM radius centred on Edinburgh TCN (34° 42' 17" S 138° 36' 45" E), to 37° 03' 57" S 139° 38' 12" E, 35° 54' 48" S 139° 07' 39" E, 35° 42' 02" S 138° 57' 43" E, thence the minor arc of a circle of 50 NM radius centred on Adelaide DME (34° 56' 49" S 138° 31' 28" E), to 35° 45' 40" S 138° 18' 03" E.

*Controlling Authority* FLTCDR 452SQN Edinburgh Flt*Times of Use* NOTAM*Chartlet* 10**YMMM/R292A Port Wakefield***Nature of Activity* Firing*Vertical Limits* SFC-8 500*Chart* Aus 781(a) 34° 27' 06" S 138° 08' 30" E  
thence SE along Port Wakefield Road to (f) 34° 27' 15" S 138° 13' 29" E.*Controlling Authority* Army RCO Port Wakefield*Times of Use* H24*Chartlet* 10(b) 34° 13' 30" S 138° 08' 30" E  
(c) 34° 13' 30" S 138° 11' 59" E  
(d) 34° 19' 57" S 138° 16' 15" E  
(e) 34° 25' 18" S 138° 16' 06" E**YMMM/R292B Port Wakefield***Nature of Activity* Firing*Vertical Limits* 8 500-NOTAM*Chart* Aus 781(a) 34° 27' 06" S 138° 08' 30" E  
thence SE along Port Wakefield Road to (f) 34° 27' 15" S 138° 13' 29" E.*Controlling Authority* Army RCO Port Wakefield*Times of Use* NOTAM*Chartlet* 10(b) 34° 13' 30" S 138° 08' 30" E  
(c) 34° 13' 30" S 138° 11' 59" E  
(d) 34° 19' 57" S 138° 16' 15" E  
(e) 34° 25' 18" S 138° 16' 06" E**YMMM/R292C Port Wakefield***Nature of Activity* Firing*Vertical Limits* NOTAM*Chart* Aus 781(a) 34° 25' 47" S 138° 15' 27" E  
(d) 34° 27' 06" S 138° 08' 30" E*Controlling Authority* Army RCO Port Wakefield*Times of Use* NOTAM*Chartlet* 10(b) 34° 29' 30" S 138° 16' 30" E  
(c) 34° 29' 30" S 138° 08' 30" E  
(e) 34° 27' 15" S 138° 13' 29" E.**YMMM/R292D Port Wakefield***Nature of Activity* Fring*Vertical Limits* NOTAM*Chart* Aus 781(a) 34° 29' 30" S 138° 16' 30" E  
(d) 34° 29' 30" S 138° 08' 30" E.*Controlling Authority* Army RCO Port Wakefield*Times of Use* NOTAM*Chartlet* 10(b) 34° 34' 00" S 138° 18' 00" E  
(c) 34° 34' 00" S 138° 08' 30" E**YMMM/R292E Port Wakefield***Nature of Activity* Firing*Vertical Limits* SFC-NOTAM*Chart* Aus 781(a) 34° 24' 00" S 138° 03' 30" E  
(d) 34° 24' 00" S 138° 08' 30" E.*Controlling Authority* Army RCO Port Wakefield*Times of Use* NOTAM*Chartlet* 10(b) 34° 13' 30" S 138° 03' 30" E  
(c) 34° 13' 30" S 138° 08' 30" E**YMMM/R292F Port Wakefield***Nature of Activity* Firing*Vertical Limits* SFC-NOTAM*Chart* Aus 781(a) 34° 24' 00" S 138° 03' 30" E  
(d) 34° 34' 00" S 138° 08' 30" E*Controlling Authority* Army RCO Port Wakefield*Times of Use* NOTAM*Chartlet* 10(b) 34° 29' 27" S 138° 03' 30" E  
(c) 34° 34' 00" S 138° 06' 30" E  
(e) 34° 24' 00" S 138° 08' 30" E.

**VICTORIA AND TASMANIA****YMMM/R323A Western Port***Nature of Activity* Firing*Vertical Limits* SFC-9 000*Chart* Aus 788 and Aus 801

38° 30' 00" S 144° 55' 22" E, thence the major arc of a circle of 5NM radius centred on 38° 28' 55" S 145° 01' 35" E, to 38° 32' 52" S 145° 05' 28" E, 38° 35' 30" S 145° 08' 30" E, 38° 43' 58" S 145° 08' 32" E, thence the minor arc of a circle of 16 NM radius centred on 38° 28' 55" S 145° 01' 35" E, to 38° 32' 23" S 144° 41' 41" E.

*Controlling Authority* Navy HMAS Cerberus*Times of Use* NOTAM*Chartlet* 11**YMMM/R323B Western Port***Nature of Activity* Firing*Vertical Limits* SFC-FL550*Chart* Aus 788 and Aus 801

(a) 38° 29' 07" S 145° 02' 00" E (b) 38° 28' 55" S 145° 01' 35" E (c) 38° 32' 23" S 144° 41' 41" E  
thence the minor arc of a circle of 16 NM radius centred on 38° 28' 55" S 145° 01' 35" E, to 38° 44' 55" S 145° 02' 00" E.

*Controlling Authority* Navy HMAS Cerberus*Times of Use* NOTAM*Chartlet* 11**YMMM/R332 Hanns Inlet***Nature of Activity* Radar flares*Vertical Limits* SFC-2 000*Chart* Aus 152

A circle of 1.5 NM radius centred on 38° 22' 48" S 145° 12' 00" E.

*Controlling Authority* Navy HMAS Cerberus*Times of Use* D2200-1300 EXPH (1 Hr earlier HDS) OT  
NOTAM*Chartlet* 11**YMMM/R339 Cape Schanck***Nature of Activity* Gunnery, military flying and naval activity*Vertical Limits* NOTAM-FL550*Chart* Aus 788 and Aus 801

(a) 38° 51' 00" S 144° 21' 00" E (b) 38° 38' 00" S 144° 41' 00" E (c) 38° 36' 16" S 144° 43' 28" E  
thence the minor arc of a circle of 16 NM radius centred on 38° 28' 55" S 145° 01' 35" E, to  
(d) 38° 44' 45" S 145° 04' 34" E (e) 38° 49' 30" S 144° 56' 30" E (f) 39° 02' 00" S 144° 34' 00" E.

*Controlling Authority* Navy HMAS Cerberus*Times of Use* NOTAM*Chartlet* 11**YMMM/R362A Stony Head***Nature of Activity* Firing*Vertical Limits* SFC-3 500*Chart* Aus 798

(a) 41° 03' 10" S 146° 56' 25" E (b) 41° 01' 44" S 146° 55' 54" E thence along the coast to  
(c) 41° 00' 01" S 147° 04' 50" E (d) 41° 03' 54" S 147° 04' 06" E.

*Controlling Authority* Army DOTAM VIC/TAS*Times of Use* NOTAM*Chartlet* 11**YMMM/R362B Stony Head***Nature of Activity* Firing*Vertical Limits* 3 500-NOTAM*Chart* Aus 798

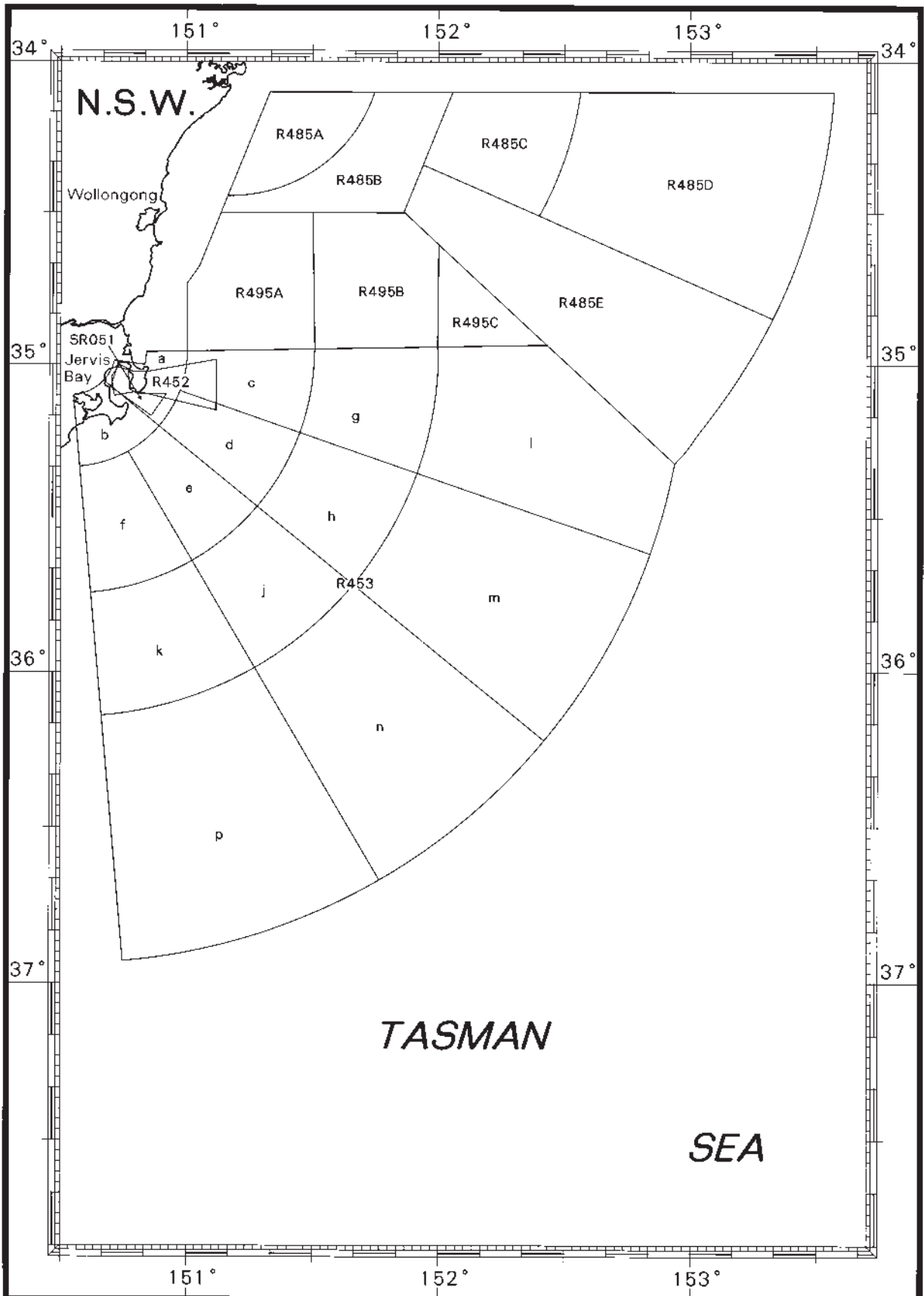
(a) 41° 03' 10" S 146° 56' 25" E (b) 41° 01' 44" S 146° 55' 54" E thence along the coast to  
(c) 41° 00' 01" S 147° 04' 50" E (d) 41° 03' 54" S 147° 04' 06" E.

*Controlling Authority* Army DOTAM VIC/TAS*Times of Use* NOTAM*Chartlet* 11**YMMM/R374 Swan Island***Nature of Activity* Firing*Vertical Limits* SFC-1 500*Chart* Aus 158

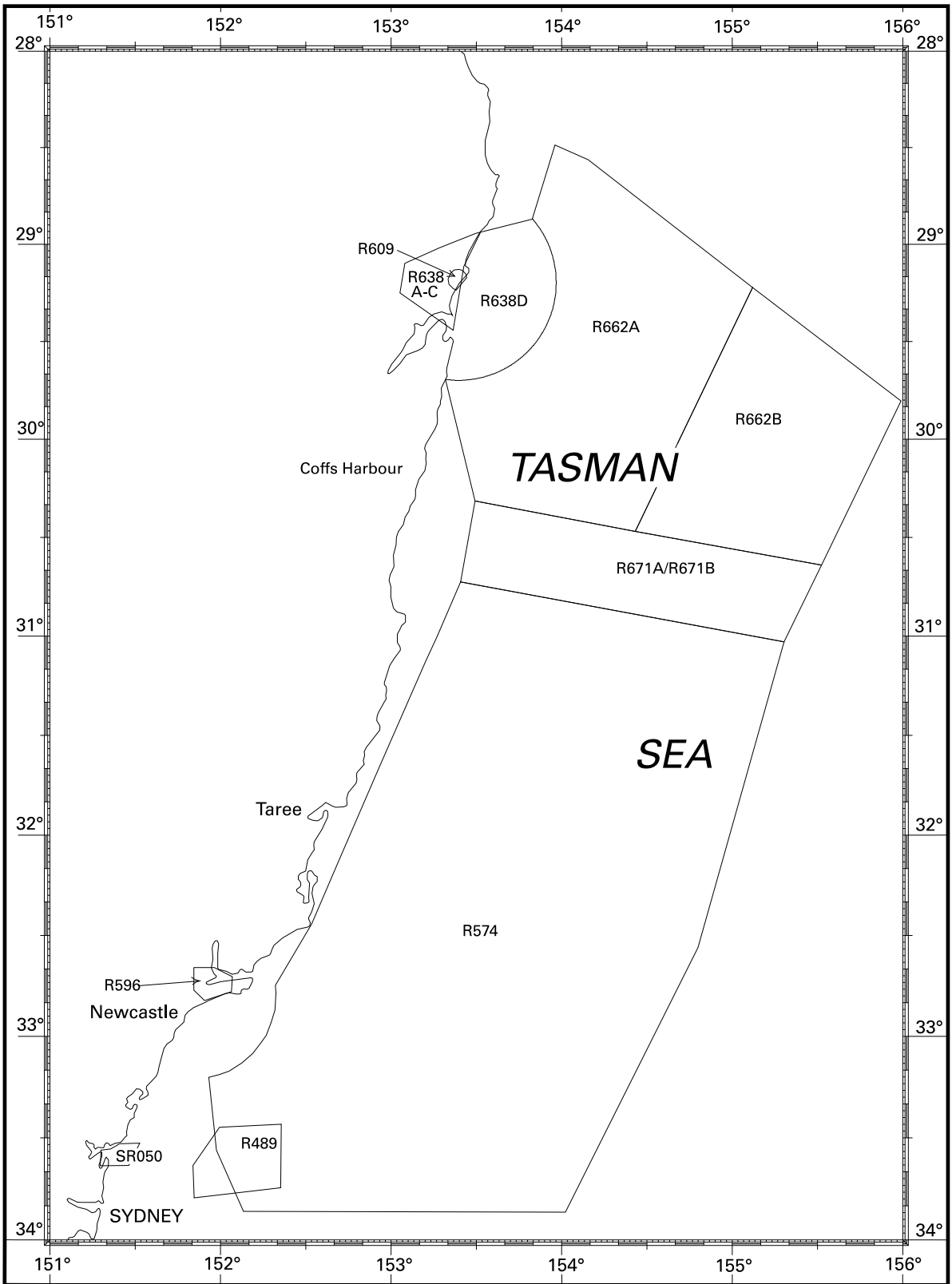
A circle of 1 NM radius centred on 38° 14' 50" S 144° 41' 30" E.

*Controlling Authority* Army RCO Swan Island*Times of Use* H24*Chartlet* 11

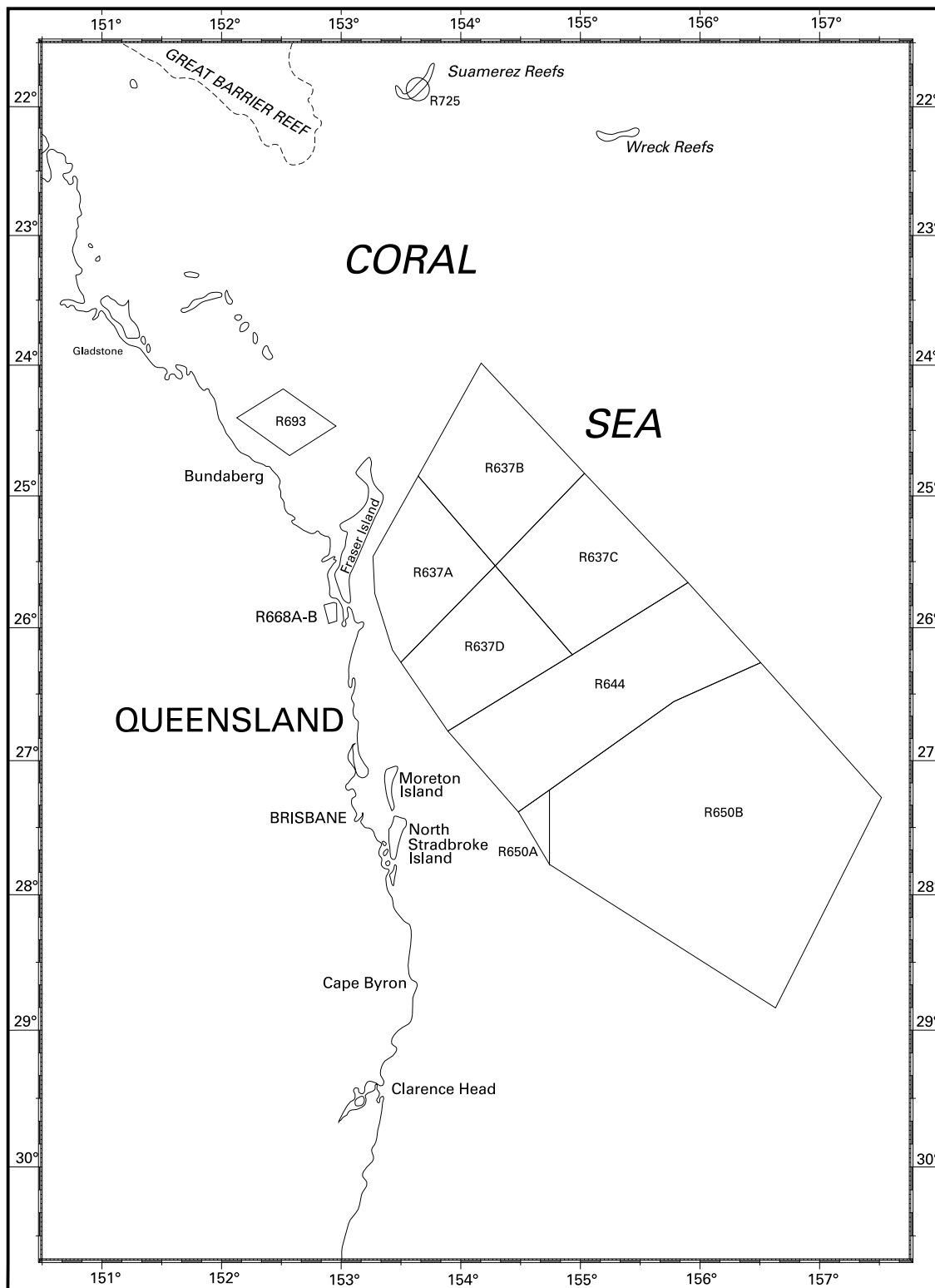
### Tasman Sea - Jervis Bay



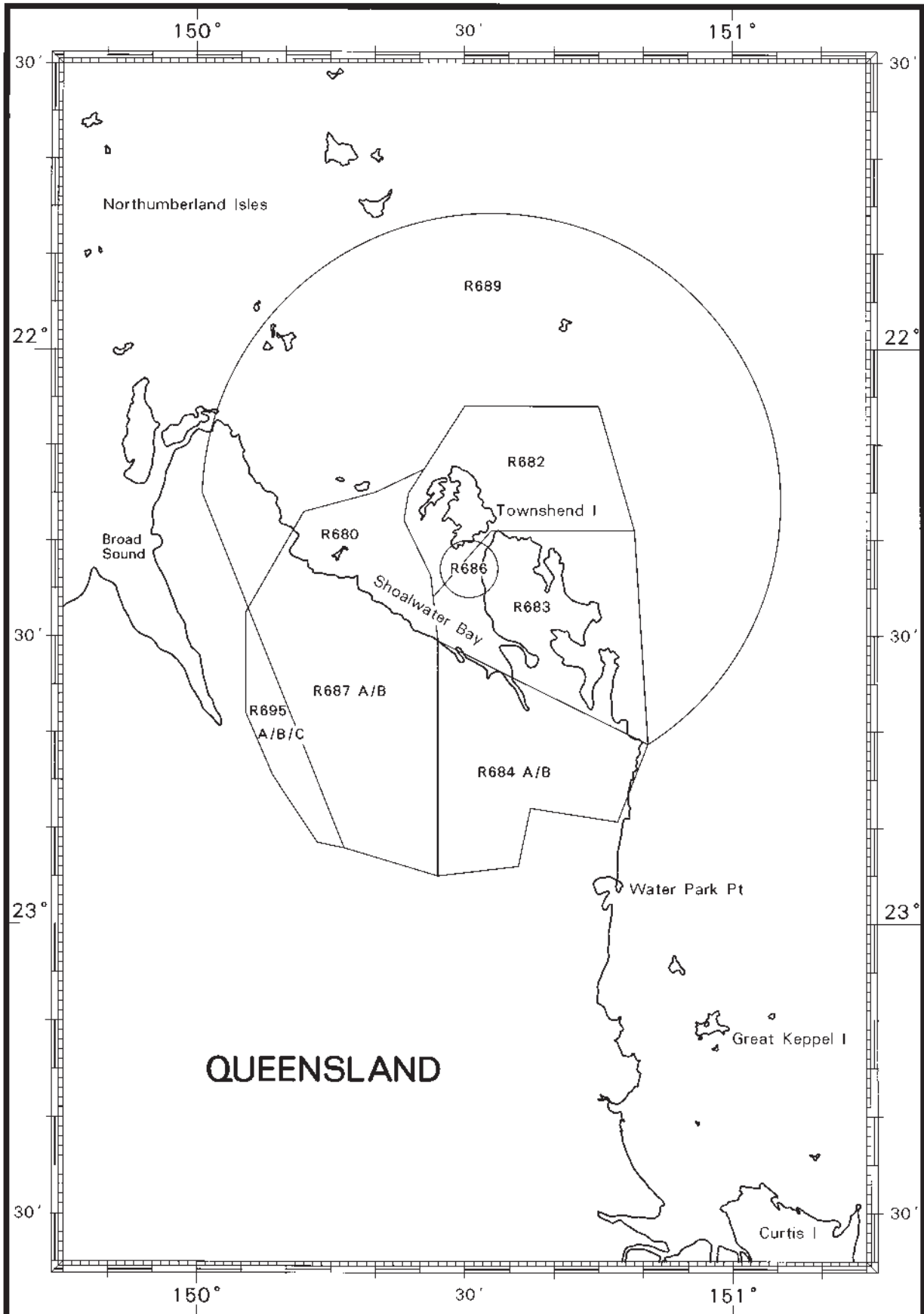
### Tasman Sea - Newcastle



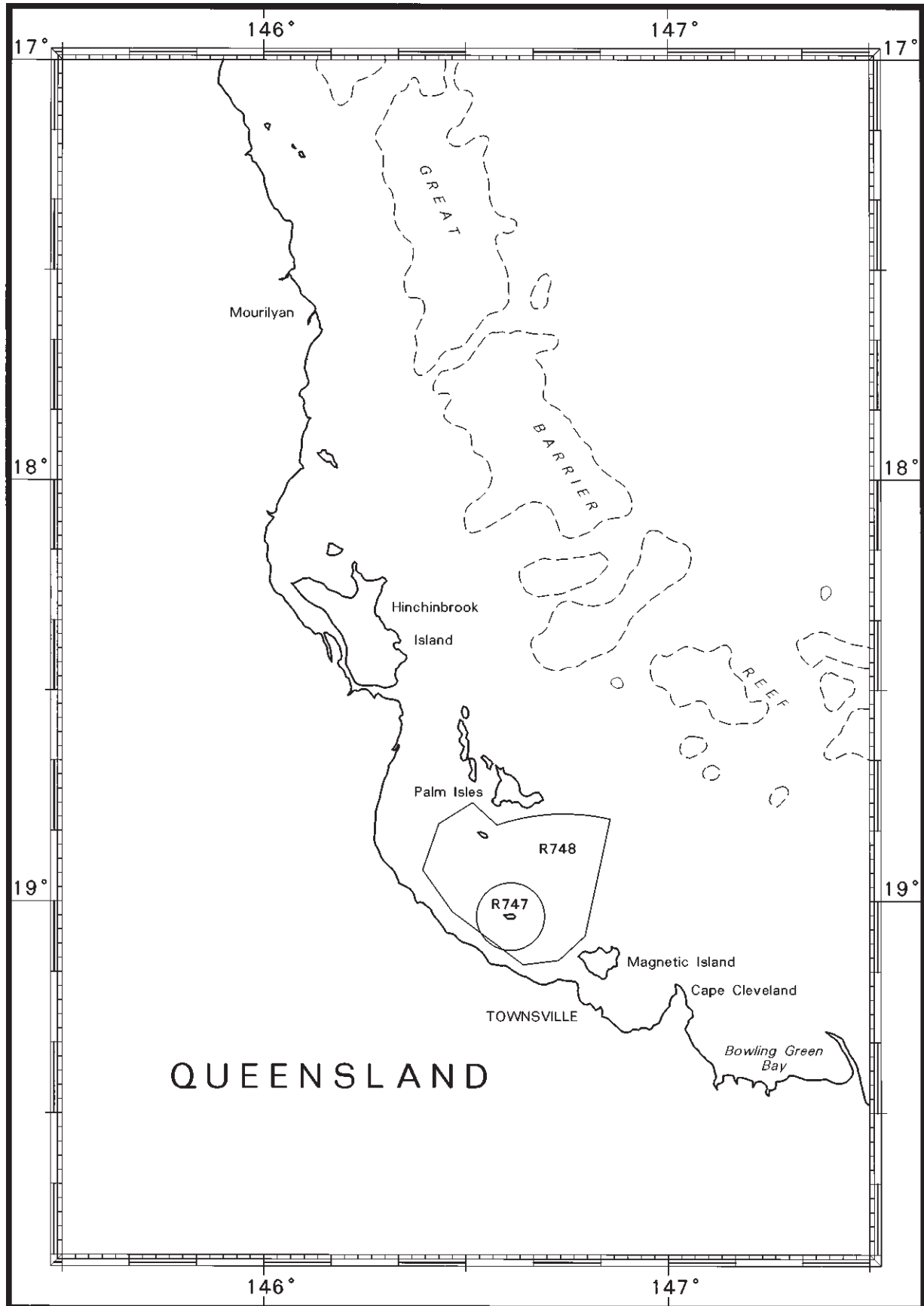
### Queensland South – Coral Sea



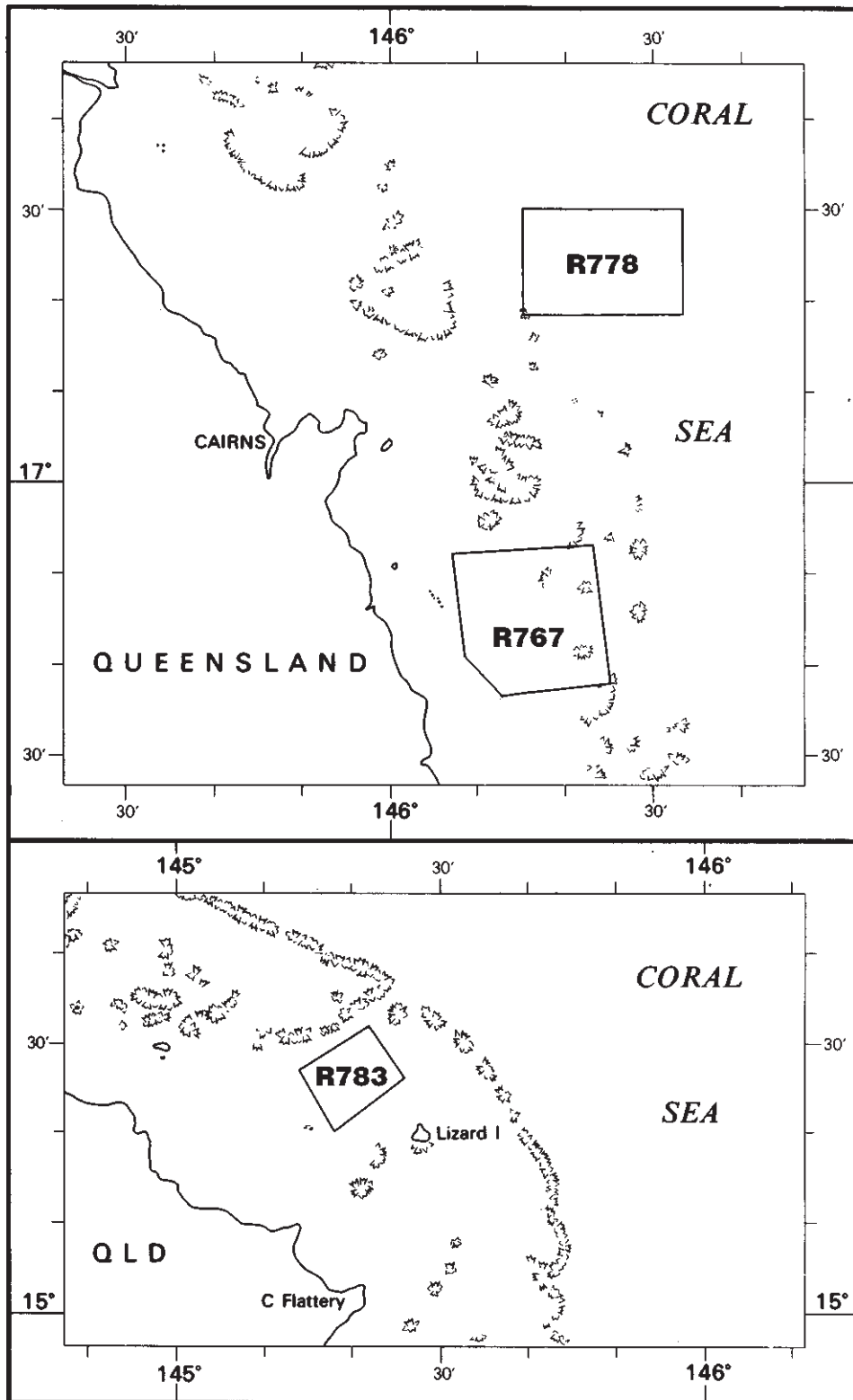
# Shoalwater Bay



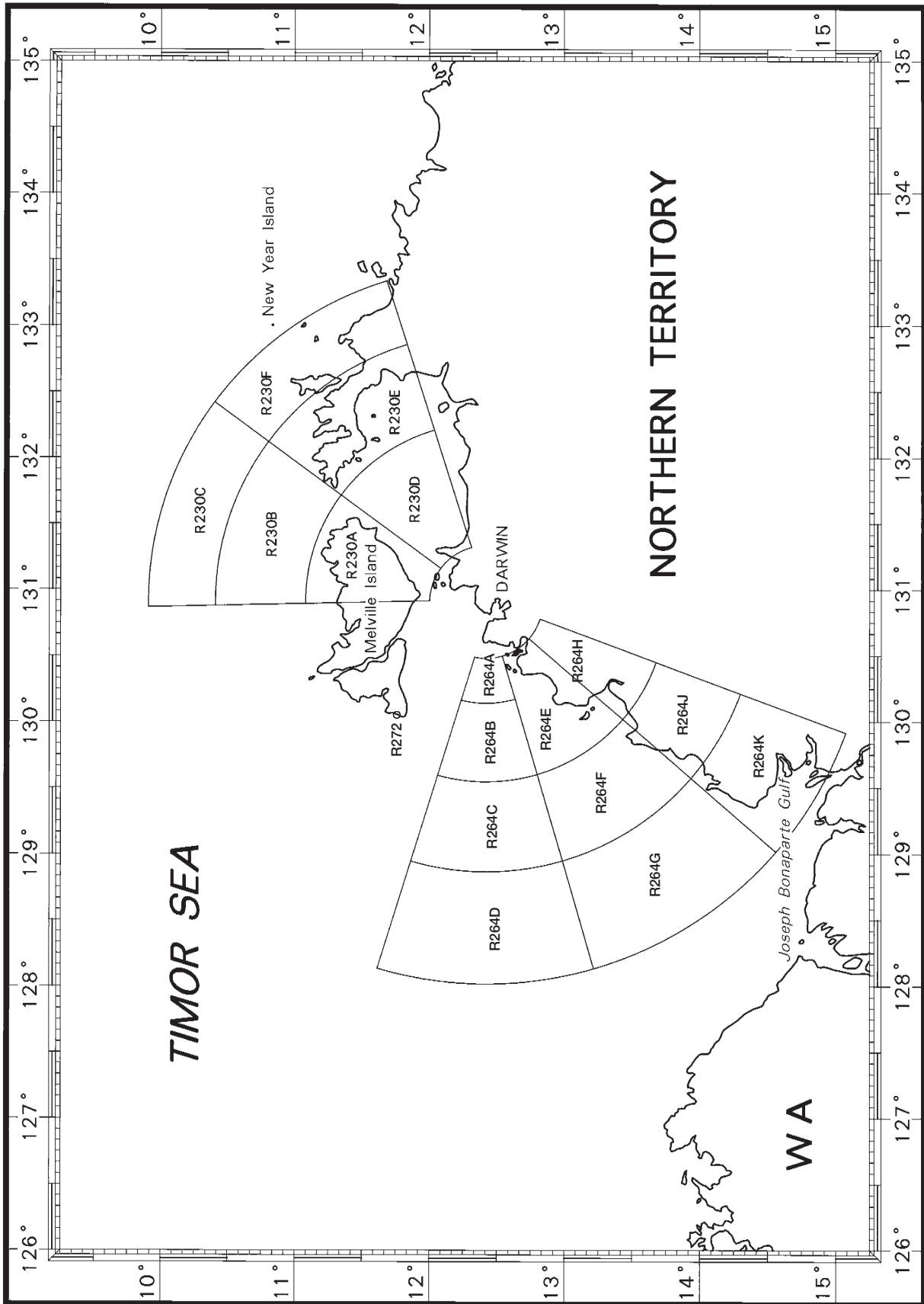
# Townsville



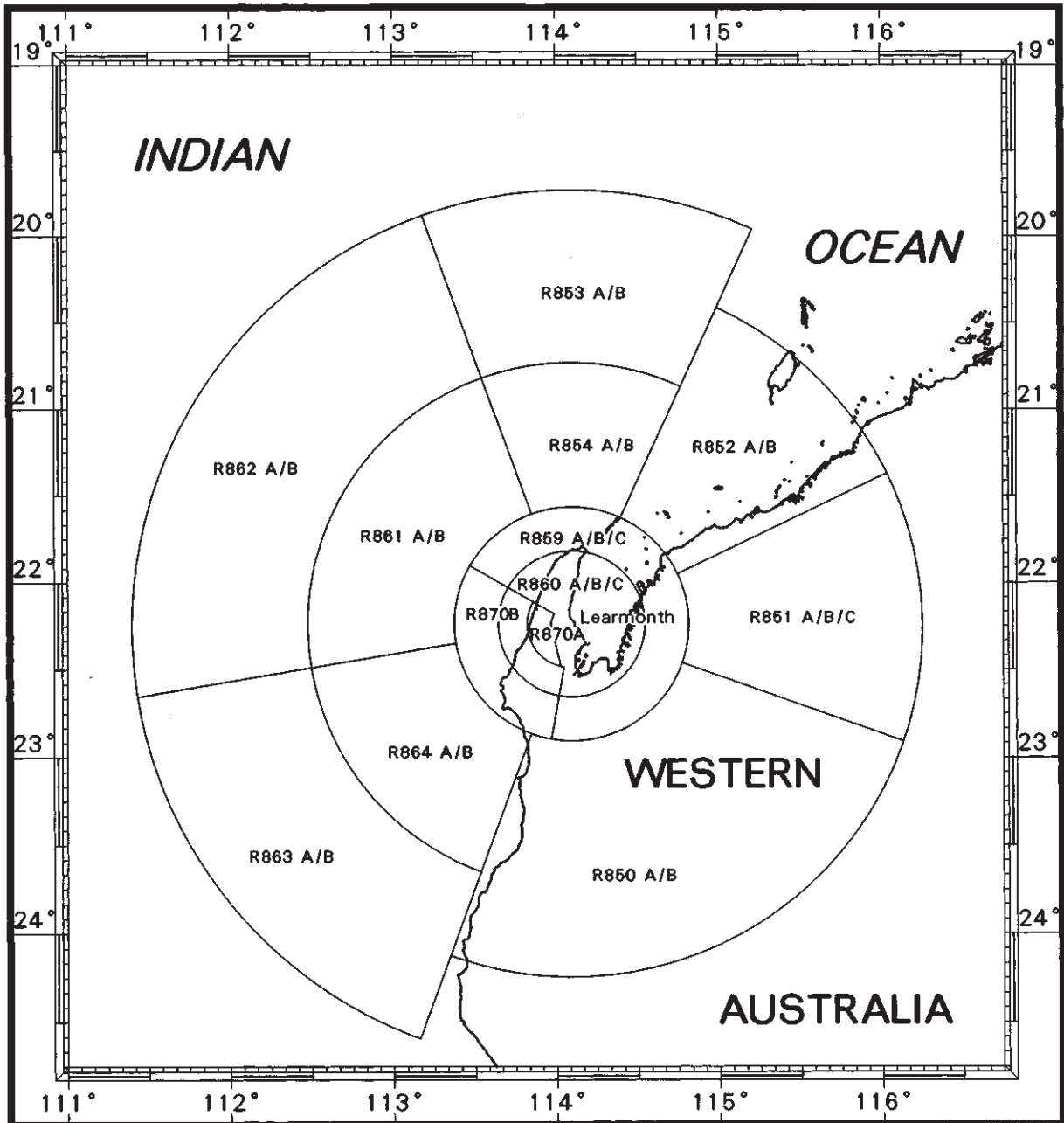
### Queensland North - Coral Sea



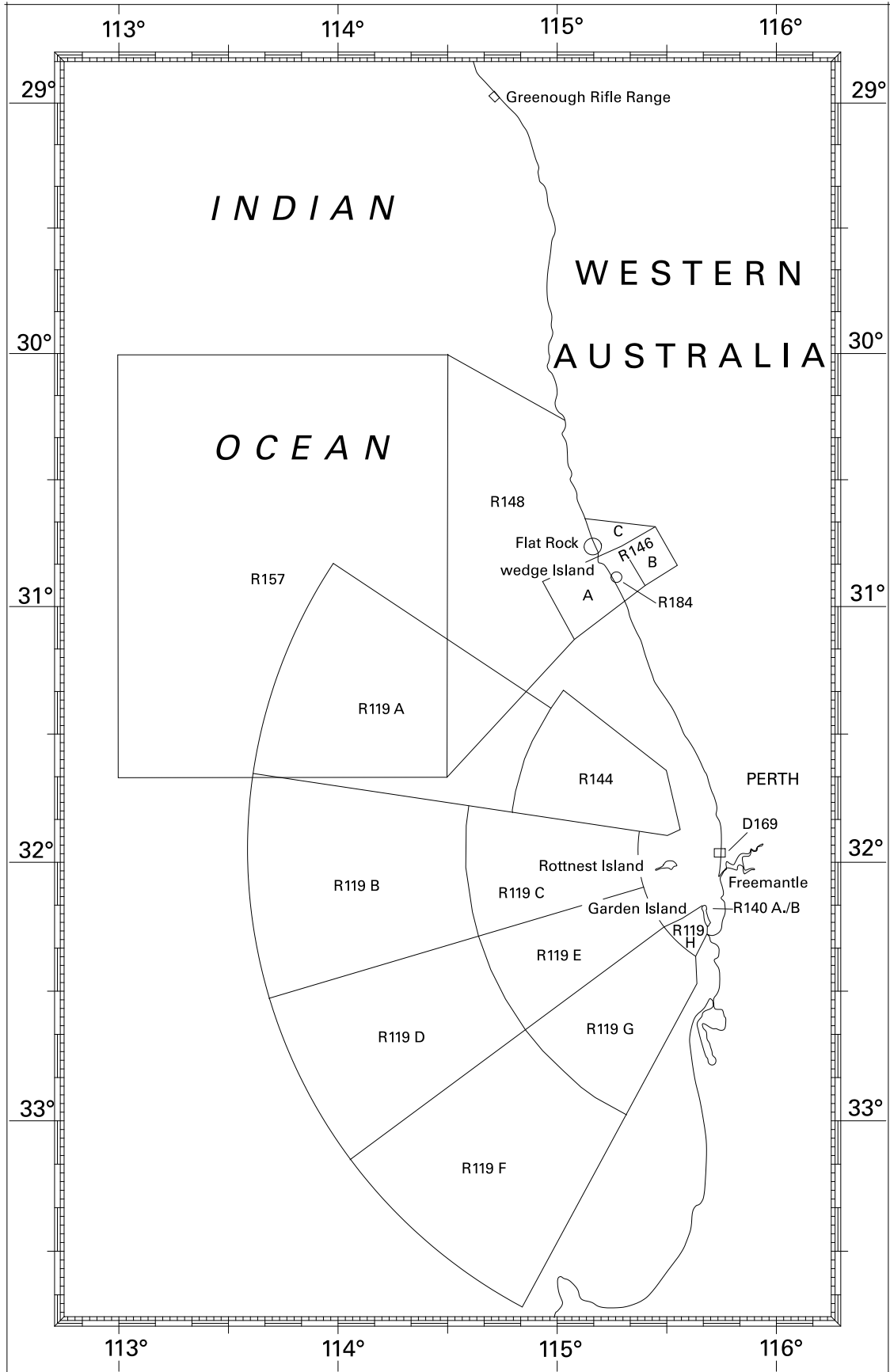
# Northern Territory



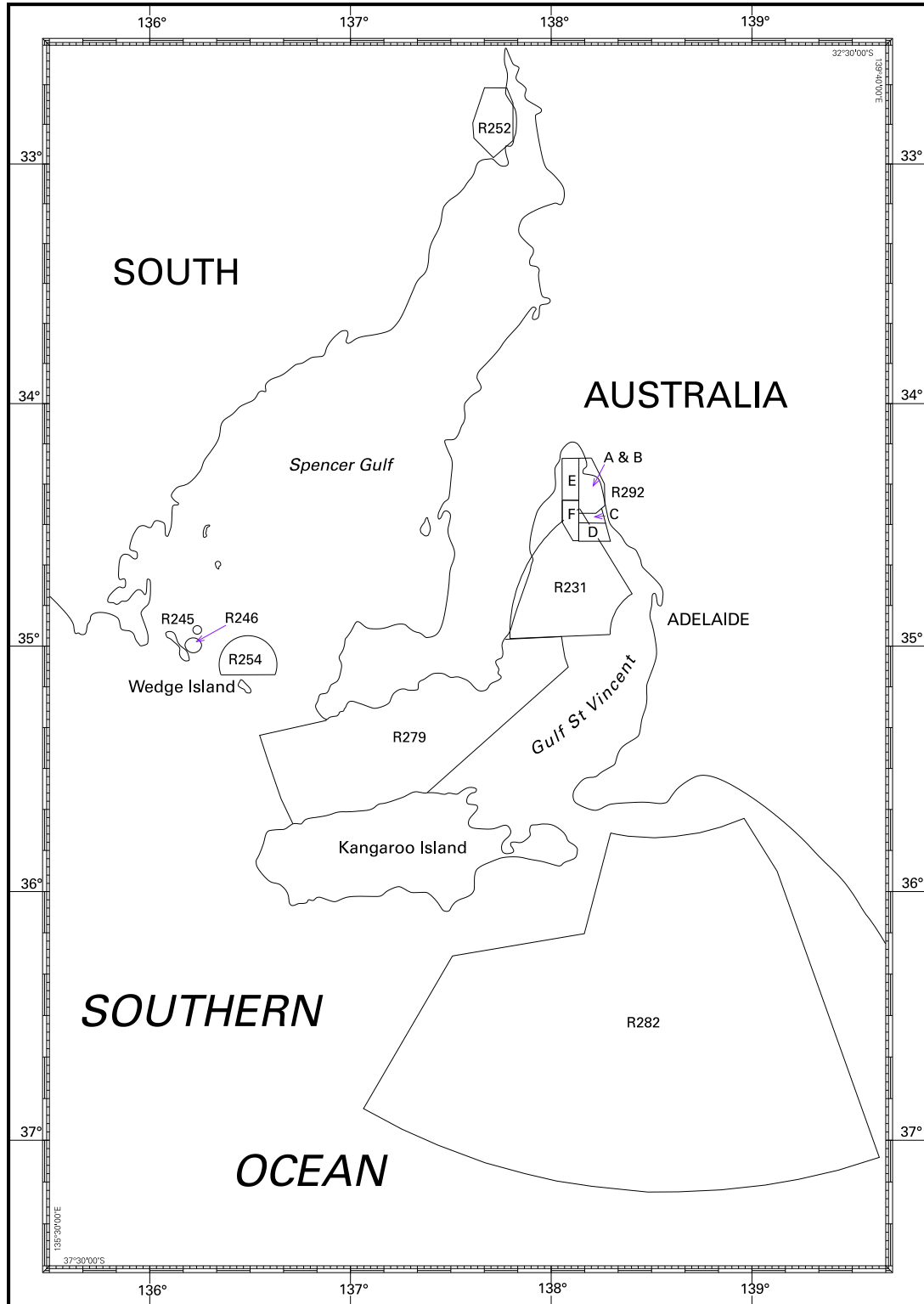
### North West Cape



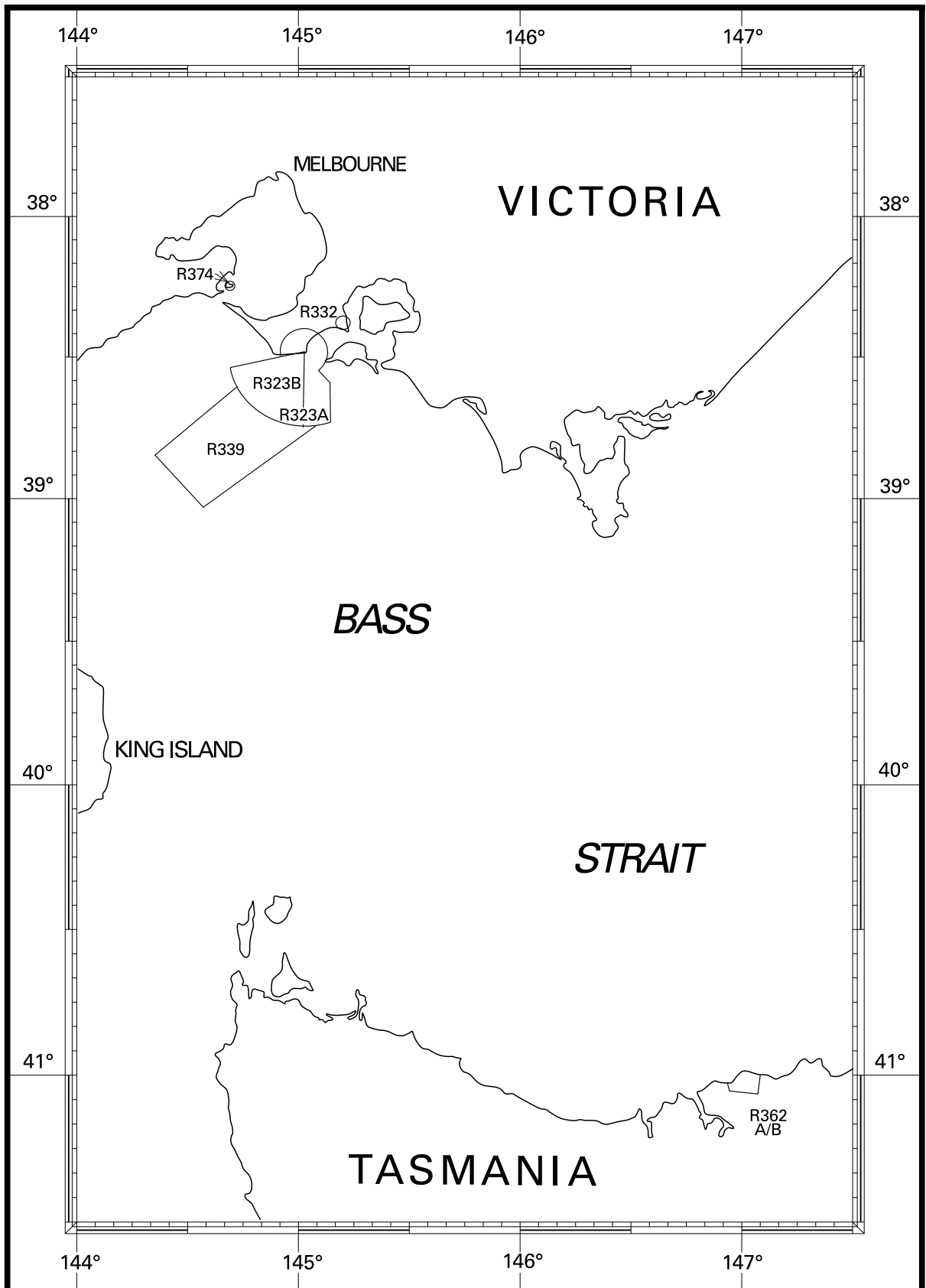
### Western Australia – South West



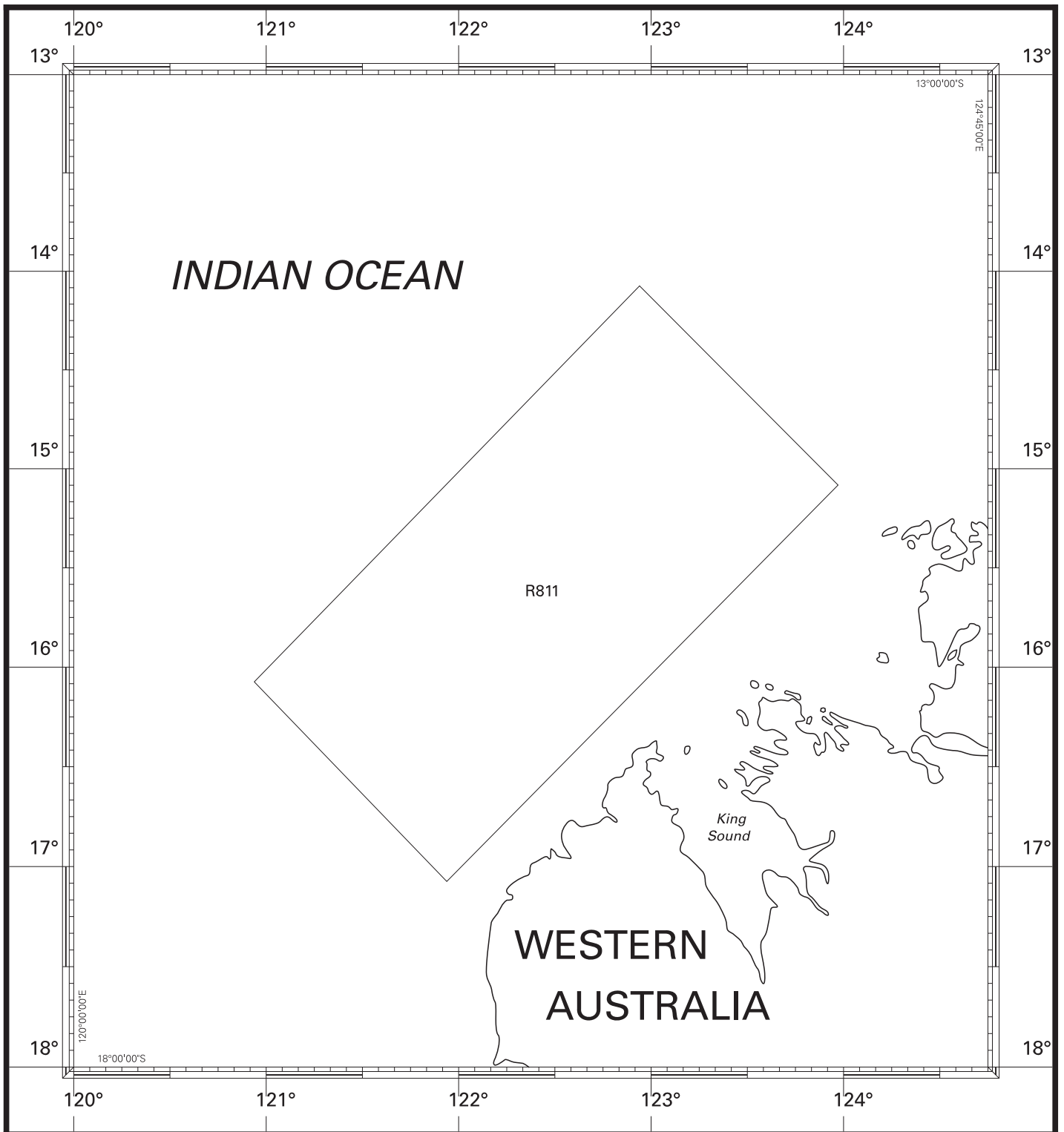
# South Australia



### Bass Strait - Victoria Tasmania



# Western Australia



12

**9A. RESTRICTED AND DANGER AREAS WITH ASSOCIATED AIRSPACE  
PAPUA NEW GUINEA**

**AY/R921 Port Moresby**

*Nature of Activity* Gunnery

*Vertical Limits* SFC-FL200

*Chart* Aus 505

(a) 9° 38' 00" S 146° 52' 00" E

(d) 9° 44' 00" S 146° 38' 30" E.

*Controlling Authority* Department of Defence

*Times of Use* NOTAM

*Chartlet* 1

(b) 9° 41' 30" S 146° 55' 30" E

(c) 9° 55' 00" S 146° 50' 00" E

**AY/R962 Admiralty Islands**

*Nature of Activity* Gunnery and weapons

*Vertical Limits* SFC-FL200

*Chart* Aus 462

(a) 0° 47' 00" S 147° 00' 00" E

(d) 1° 47' 00" S 147° 00' 00" E.

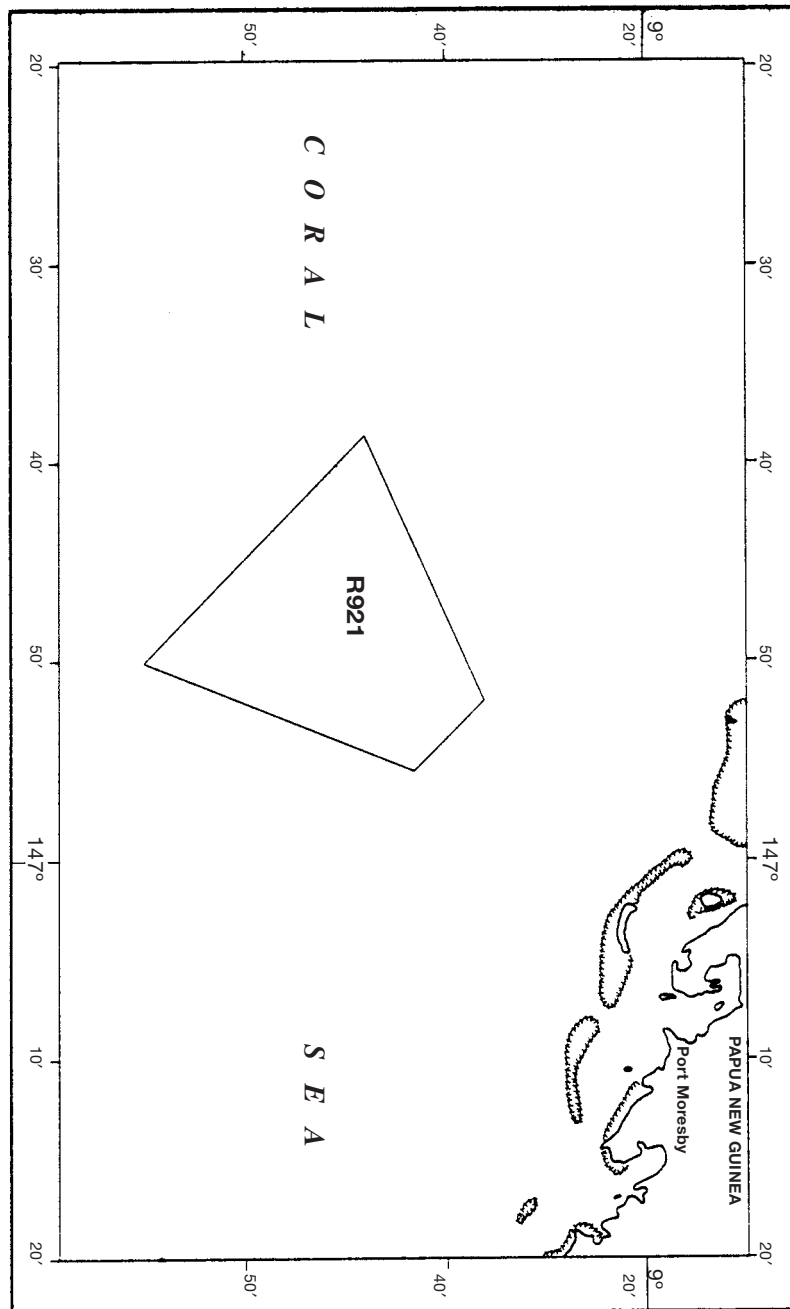
*Controlling Authority* Department of Defence

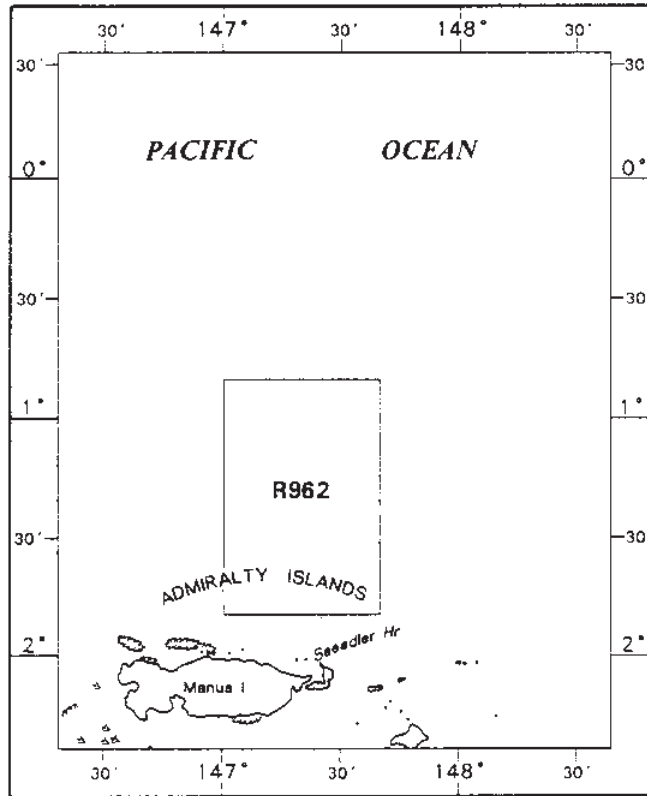
*Times of Use* NOTAM

*Chartlet* 2

(b) 0° 47' 00" S 147° 40' 00" E

(c) 1° 47' 00" S 147° 40' 00" E





2



### 10A. DIFFERENTIAL GPS.

1. The Australian Maritime Safety Authority (AMSA) operates sixteen Differential GPS (DGPS) broadcasting stations along Australia's coastline. The data broadcast from these stations informs users of the integrity of GPS and enables mariners to achieve greater accuracy from their GPS receivers. Based on signal monitoring results position fixing accuracies of better than 10 metres (95% probability) will be obtained within each station's coverage area.

2. Each broadcasting station transmits DGPS data on a radio frequency in the band allocated for maritime radionavigation (285 to 325 kHz in the Australian region).

3. The transmitted data complies with the recommendations of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA). In particular, the transmissions comply with the International Telecommunication Union *Recommendation ITU-R M.823 on Technical characteristics of differential transmissions for global navigation satellite systems from maritime radio beacons in the Frequency Bands 283.5-315 kHz in Region 1 and 285-325 kHz in Regions 2 and 3* (2006).

4. The latest information on the AMSA DGPS service can be obtained from AMSA's DGPS website at [http://www.amsa.gov.au/Shipping\\_Safety/Navigation\\_Safety/Differential\\_Global\\_Positioning\\_System](http://www.amsa.gov.au/Shipping_Safety/Navigation_Safety/Differential_Global_Positioning_System).

5. The locations and frequencies of the stations are:

<i>Site</i>	<i>Position (WGS84)</i>	<i>Frequency</i>
Albany (WA)	35° 05.25' S 117° 54.03' E	315 kHz
Brisbane (QLD)	27° 04.15' S 153° 03.32' E	294 kHz
Cape Flattery (QLD)	14° 57.94' S 145° 18.05' E	304 kHz
Cornwall Point (SA)	34° 53.97' S 137° 00.88' E	316 kHz
Crib Point (VIC)	38° 21.61' S 145° 10.19' E	314 kHz
Darwin (NT)	12° 26.72' S 130° 57.51' E	294 kHz
Exmouth (WA)	21° 53.05' S 114° 08.04' E	297 kHz
Gladstone (QLD)	24° 02.21' S 151° 21.53' E	313 kHz
Horn Island (QLD)	10° 35.52' S 142° 16.48' E	320 kHz
Ingham (QLD)	18° 33.34' S 146° 18.35' E	306 kHz
Karratha (WA)	20° 42.41' S 116° 46.44' E	304 kHz
Mackay (QLD)	21° 06.19' S 149° 12.68' E	315 kHz
Mallacoota (VIC)	37° 34.09' S 149° 44.16' E	318 kHz
Perth (WA)	31° 47.88' S 115° 56.01' E	306 kHz
Sydney (NSW)	33° 59.18' S 150° 58.67' E	308 kHz
Weipa (QLD)	12° 39.21' S 141° 51.61' E	316 kHz

6. To use the DGPS services a vessel needs either:

- (a) a GPS receiver with the capability of processing DGPS data fed to it in accordance with the RTCM standards, and a DGPS radio beacon receiver, which receives the data from the DGPS broadcasting station, demodulates the received data, and converts it into a form suitable for feeding to the GPS receiver; or
- (b) a differential GPS receiver that includes the radio beacon receiver within the unit (an all-in-one receiver).

7. Further information may be obtained from:

Aids to Navigation  
 Maritime Standards Division,  
 AMSA  
 GPO Box 2181  
 Canberra City ACT 2601  
 Telephone +61 (0)2 6279 5927  
 Fax +61 (0)2 6279 5966

Australian Maritime Safety Authority, Canberra.

(AA300412, AA300413)

## 10B. RADAR BEACONS (RACONS)

<i>Place</i>	<i>Ident</i>	<i>Band (Hz)</i>	<i>Range (NM)</i>	<i>Elev (m)</i>	<i>Position (WGS 84)</i>
<b>Northern Territory</b>					
*Cape Wessel	Y	9GHz 3GHz	20-27 23-27	55	11° 00'.28 S 136° 45'.57 E
<b>Western Australia and Indian Ocean</b>					
*Adele Island	C	9GHz 3GHz	16-23 20-25	34	15° 30'.62 S 123° 09'.46 E
Angel Production Platform	X				19° 29'.92 S 116° 35'.88 E
Bayu-Undan Floating Production Facility	K				11° 02'.97 S 126° 37'.08 E
Bayu-Undan Production Platform	X				11° 04'.38 S 126° 40'.86 E
*Bedout Island	O	9GHz 3GHz	15-22 18-23	25	19° 35'.35 S 119° 05'.99 E
*Browse Island	O	9GHz 3GHz	13-20 16-21	17	14° 06'.51 S 123° 32'.90 E
Dampier Sea Buoy	M	9GHz 3GHz			20° 25'.41 S 116° 42'.97 E
Enfield Floating Production Facility	N				21° 28'.82 S 114° 00'.51 E
Fremantle Fairway Buoy	C	9GHz 3GHz			31° 57'.13 S 115° 38'.81 E
Geraldton Fairway Buoy	G	9GHz 3GHz			28° 46'.19 S 114° 31'.72 E
*Imperieuse Reef	Q	9GHz 3GHz	16-23 20-25	32	17° 31'.00 S 118° 56'.92 E
Jabiru (RTM)	U	9GHz			11° 55'.55 S 125° 00'.40 E
*Lacrosse Island	M	9GHz 3GHz	27-33 30-35	114	14° 44'.28 S 128° 17'.82 E
*North Island	N	9GHz 3GHz	11-18 14-19	9	28° 17'.88 S 113° 35'.38 E
*Pelsaert Island	X	9GHz 3GHz	14-21 17-23	22	28° 59'.13 S 113° 57'.74 E
*Port Hedland C1 Beacon	G	9GHz 3GHz	11-18 14-19	9	19° 59'.54 S 118° 26'.10 E
*Port Walcott C1 Buoy	K	9GHz 3GHz	10-17 13-18	7	20° 23'. S 117° 25'.60 E
*Shoal Point	O	9GHz 3GHz	27-34 30-35	116	28° 03'.45 S 114° 12'.64 E
<b>South Australia</b>					
*Middle Bank South	M	9GHz 3GHz	11-17 9-15	11	33° 43'.99 S 137° 29'.81 E
*Robe	G	9GHz 3GHz	21-28 25-30	65	37° 09'.86 S 139° 44'.67 E
*South Neptunes Island	B	9GHz 3GHz	18-25 22-27	44	35° 20'.28 S 136° 07'.04 E
*South Page	O	9GHz 3GHz	11-18 14-19	9	35° 46'.65 S 138° 17'.48 E
*Troubridge Hill	K	9GHz 3GHz	21-28 24-29	63	35° 09'.96 S 137° 38'.44 E
<b>Victoria</b>					
Fawkner Light Beacon	F	9GHz 3GHz			37° 56'.93 S 144° 55'.61 E
*Flounder A Platform	Q	9GHz 3GHz	15-22 19-24	28	38° 18'.65 S 148° 26'.36 E
*Gabo Island	G	9GHz 3GHz	20-27 23-28	55	37° 34'.04 S 149° 55'.01 E
*Kingfish B Platform	B	9GHz 3GHz	16-23 20-25	34	38° 35'.82 S 148° 11'.28 E
Prince George Light Beacon	G	9GHz 3GHz			38° 06'.41 S 144° 44'.20 E
Western Port Fairway Buoy	Y				38° 30'.21 S 145° 05'.36 E

<b>Tasmania</b>					
*Maatsuyker Island	M	9GHz 3GHz	29-36 32-38	140	43° 39'.34 S 146° 16'.40 E
<b>Queensland and Coral Sea</b>					
*Bramble Cay	K	9GHz 3GHz	14-20 17-22	20	9° 08'.53 S 143° 52'.56 E
*Breaksea Spit Light Buoy	G	9GHz 3GHz	10-17 13-18	12	24° 21'.22 S 153° 08'.97 E
*Cape Bowling Green	O	9GHz 3GHz	17-24 21-26	34	19° 19'.61 S 147° 25'.54 E
*Carpentaria Light Buoy	G	9GHz 3GHz	9-16 12-17	4	10° 44'.49 S 141° 03'.38 E
*Creal Reef	M	9GHz 3GHz	16-23 20-25	34	20° 31'.87 S 150° 22'.68 E
*Dalrymple Islet	M	9GHz 3GHz	15-21 18-23	24	9° 36'.87 S 143° 17'.88 E
*Diamond Reign Reef	K	9GHz 3GHz	14-21 17-22	21	13° 11.56' S 143° 47.55' E
*Duyfken Point	K	9GHz 3GHz	19-26 22-27	48	12° 34'.15 S 141° 35'.98 E
*East Cay	G	9GHz 3GHz	16-23 19-24	30	9° 24'.11 S 144° 14'.22 E
*East Diamond Islet	M	9GHz 3GHz	16-22 19-24	29	17° 26'.45 S 151° 04'.53 E
*Euston Reef	K	9GHz 3GHz	13-20 17-22	18	16° 41'.08 S 146° 14'.86 E
*Fairway Channel	B	9GHz 3GHz	14-21 17-22	21	13° 54'.05 S 144° 14'.31 E
*Frederick Reefs	C	9GHz 3GHz	16-23 20-25	34	20° 56'.15 S 154° 24'.05 E
Gladstone S1 Light Beacon	G	9GHz 3GHz			23° 53'.92 S 151° 30'.40 E
*Gubbins Reef	C	9GHz 3GHz	10-17 13-18	7	15° 42'.58 S 145° 23'.83 E
*Kirkcaldie Reef	K	9GHz 3GHz	11-18 14-19	10	10° 20'.02 S 142° 49'.94 E
*Lady Elliot Island	B	9GHz 3GHz	17-24 21-26	38	24° 06'.87 S 152° 42'.69 E
*Lihou Reef	K	9GHz 3GHz	17-24 20-25	33	17° 07'.79 S 152° 08'.47 E
*North Reef	Q	9GHz 3GHz	14-21 18-23	23	23° 11'.10 S 151° 54'.19 E
*Piper Islands	G	9GHz 3GHz	13-20 17-22	12	12° 15'.07 S 143° 14'.92 E
*Pith Reef	G	9GHz 3GHz	16-22 19-24	29	18° 13'.30 S 147° 01'.32 E
*Proudfoot Shoal	T	9GHz 3GHz	9-16 12-17	4	10° 32'.01 S 141° 28'.00 E
*Saumarez Reef	O	9GHz 3GHz	13-20 17-22	18	21° 39'.59 S 153° 46'.01 E
*Smith Cay	B	9GHz 3GHz	11-18 14-19	12	9°45'.93 S 143° 19'.15 E
*Stagg Patches	O	9GHz 3GHz	11-18 14-19	12	17°01'.35 S 146° 07'.86 E
*Swain Reefs	T	9GHz 3GHz	11-18 15-20	12	22° 19'.95 S 152° 43'.84 E
*Varzin Passage	Y	9GHz 3GHz	10-17 13-18	7	10° 32'.47 S 141° 52'.20 E
*White Tip Reef Rear	K	9GHz 3GHz	17-24 21-26	38	19° 55'.48 S 150° 16'.09 E
<b>Papua New Guinea</b>					
Basilisk Beacon	G	9GHz	10		9° 32'.33 S 147° 08'.02 E
Kumul Platform	Q	9GHz 3GHz			8° 04'.00 S 144° 33'.60 E

\* Racons operated by AMSA

1. Radar beacons are indicated on a radar PPI by a radial Morse paint of the beacons identifying character. These beacons are not intended to give a continuous response. In some cases the quiet period may last as long as two minutes and paints may appear for just a few seconds only.

2. The Australian Maritime Safety Authority calculates the nominal ranges of its racons using the following formula:

$$\text{Range} = 2.1(\sqrt{H} + \sqrt{h})$$

Where:

h = height of racon above MHWS/MHHW (metres)

H = height of ship's radar aerial (metres)

Assumed heights for ships' radar antennas are:

3 cm (9 GHz) band – 5 m and 30 m

10 cm (3 GHz) band – 15 m and 40 m

3. The racon range achieved in practice depends on a number of factors, including the height of a ship's radar aerial, the characteristics of a ship's radar (such as aerial gain, transmitter power and receiver sensitivity), and atmospheric features which may affect radio propagation. The ranges listed in the above table are nominal ranges and somewhat greater or lesser ranges will be experienced in practice.

4. The most significant determinant of nominal range is height of the vessel's radar antenna. Other factors may however be important in determining whether the racon signal is detected and displayed on a vessel's radar. Some of these factors may be controlled by the user (for example, the rain clutter adjustment setting), but factors due to radio propagation effects (for example, multi path effects) are outside the control of the user.

5. The settings of the rain clutter and/or sea clutter controls on some radars may cause the racon response to disappear partially or completely. If such effects are suspected, these controls should be switched off for the desired racon observation period.

6. Radio propagation conditions may cause a racon response to be seen at distances significantly greater or less than the geographic range. The most important radio propagation factor is the multi path effect. This is due to reflections from the sea interfering with the direct signal between the radar and the racon, causing cancellation of the received signal. The effect can be pronounced in calm sea conditions. It can cause the loss of racon paints well within the geographic range of the racon to radar antenna path. Multi path effects may cause a racon paint to intermittently disappear and reappear as a vessel gets closer to a racon. The distance over which a racon paint disappears could be only several metres, but it could be up to a few miles.

7. The reception of racon signals can also be influenced by a vessel's superstructure and where a vessel's radar antenna is mounted. It is also possible that on some vessels the strength of a received racon signal will vary according to the orientation of a vessel with respect to a racon's bearing.

Australian Maritime Safety Authority, Canberra.

(AA300412, AA300413)

## 10C. TORRES STRAIT TIDE GAUGES

1. Transmitting tide gauges and one current meter are located in the Torres Strait region as listed in the table below:

<i>Name and Identification</i>	<i>Position (WGS 84)</i>	<i>Hours of Operation</i>
Booby Island BB	10° 36' 09" S 141° 54' 36" E	H 24
Goods Island GD	10° 33' 53" S 142° 08' 44" E	H 24
Turtle Head TH (Hammond Island)	10° 31' 14" S 142° 12' 47" E	H 24
Nardana (height) NT Nardana (stream) NS	10° 30' 17" S 142° 14' 38" E	H 24
Ince Point IP (Wednesday Island)	10° 30' 51" S 142° 18' 17" E	H 24

2. All stations broadcast on VHF Marine Channel 68 (156-425 MHz). The tide data is broadcast in the sequence listed in the above table and each value is preceded by a station identification, which is broadcast as morse code.

3. The tide height is transmitted as groups of pseudo morse `dots', the number of dots in groups indicating respectively metres and tenths of metres of tide height above chart datum. A zero is indicated by a ' and negative heights indicated by a preceding 1.5 second warbling tone.

4. Tidal stream station character is followed by pseudo morse indication of tidal stream speed in knots and direction (East or West flowing) as:

[Direction] [knots in dots] [space] [knots/10 in dots]

East flowing is treated as a positive value and West flowing as a negative value.

Eg: 2.0 knots west flowing ~ [warble] [space] [dot, dot] [space] [dash]

5. The station identification and tide data broadcast cycle is repeated every 125 seconds.

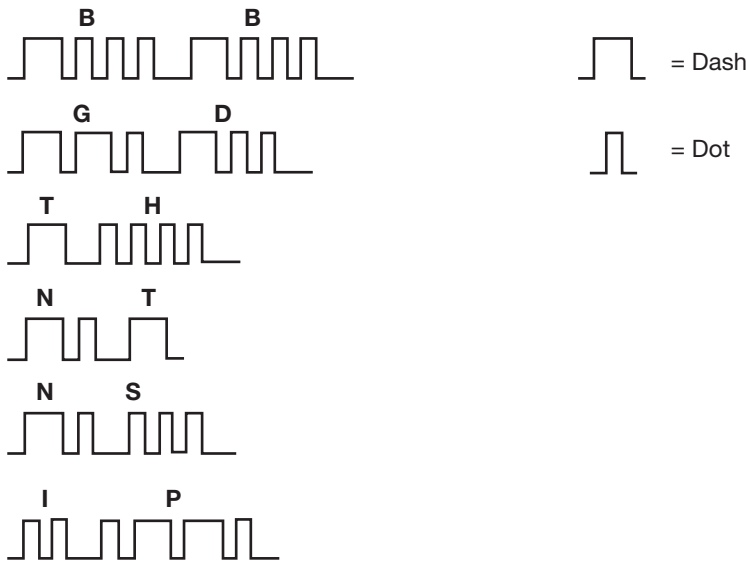
6. All broadcasts are made from a radio transmitter at Hammond Hill (hill 152, which is 0.5miles southeast of Turtle Head Lighthouse). The nominal range is 24 miles. Where line of sight to Hammond Hill is obscured reception may be lost.

7. The tide data information is also available by a public telephone circuit which can be accessed by dialing 07 4069 2821. The telephone answering service disconnects the caller four (4) minutes after connection.

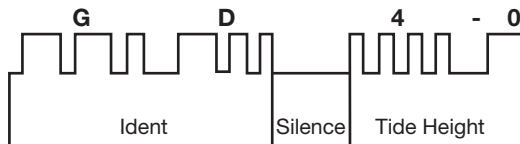
8. Stations are identified on Channel 68 by morse code identifiers transmitting in the following sequence:

Booby Island	BB
Goods Island	GD
Turtle Head	TH
Nardana (tidal height)	NT
Nardana (tidal stream)	NS
Ince Point	IP

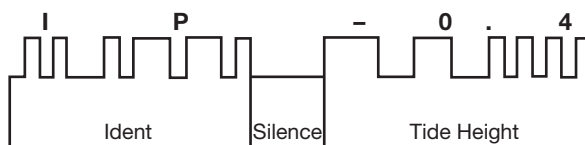
9. Examples of the format of the tide height broadcasts are as follows:



Example 1- Positive Tide Height, Goods Island, 4.0 metres



Example 2 - Negative Tide Height, Ince Point, -0.4 metres



Scale: Dot = 160 msecs      Dash = 480 msecs      Space = 160 msecs      Silence = 3.0 secs  
 Letter space = 0.7 secs      Decimal point = 1.0 secs      Minus sign = 1.6 secs (Warble)

10. The tidal stream information from Nardana has the station identifier (NS) followed by the rate of the stream in knots broadcast dash/dot format. East flowing streams are treated as positive and west as negative. West flowing streams are preceded by a warbling note. Examples as follows:

Nardana east-going 3.2 knots



Nardana west-going 2.5 knots



Nardana west-going 0.3 knots



Easterly flow is approximately in the direction of 080° true. Westerly flow is in the general direction of 260° true.

Australian Maritime Safety Authority, Canberra.

(AA300412, AA300413)

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## 11. HYDROGRAPHIC NOTES

1. Reports conveying information that could be useful to mariners generally, are always welcome in the Hydrographic Office. Such information will be used to improve existing charts sailing directions and other navigational publications not only in the Area of Australian Charting Responsibility, but worldwide. The Area of Australian Charting Responsibility includes the waters around Australia and its territories as well as those around Papua New Guinea, see *Notice to Mariners No 1*.
2. The type of information most needed concerns safe routes through poorly surveyed waters (with courses and depths where available - see *Australian Seafarers Handbook AHP20*), anchorages, harbour facilities, conspicuous objects, navigational aids, obstructions and other dangers that are not correctly or fully charted or described on the charts or in the Sailing Directions.
3. When reports are received in the Hydrographic Office, copies are sent to other affected maritime authorities including the British Admiralty for correcting British charts and Sailing Directions.
4. Reports are accepted in any style or form that best suits the writer. Rough but legible handwritten reports are quite acceptable and can be sent, if desired, as a Hydrographic Note of which a blank copy, as a printed form, can be found on the AHS website ([www.hydro.gov.au](http://www.hydro.gov.au)). Sketches, maps, diagrams, photographic views (see *Australian Seafarers Handbook AHP20*), newspaper cuttings etc, when attached to reports can be very useful.
5. Without making the task too arduous reports should include copies of the original observations on which a report is founded, with times courses and speeds bearings radar distances or measured depths rather than merely the derived latitudes and longitudes or reduced depths.
6. Most reports record what someone has seen or done. The report should include the name and address of that person, together with the mariner's comments on its known or assumed reliability, so that enquiries can be made when checking against other sources.
7. Mariners who send charts with their reports should ask for replacements to be sent to them, if required.

8. Reports, which will be acknowledged in *Section II* of the fortnightly editions of *Notices to Mariners*, should be sent to:

Hydrographer of Australia  
Locked Bag 8801  
Wollongong  
NSW 2521

or  
email [Hydro.NTM@defence.gov.au](mailto:Hydro.NTM@defence.gov.au)

or  
web site [www.hydro.gov.au](http://www.hydro.gov.au)

#### Privacy Notice

9. Any personal information supplied will be recorded and used solely to enable us to clarify or verify any matters that are reported to us using a Hydrographic Note. Any personal information supplied will not be given to any other party without prior consent.

Australian Hydrographic Service.

(AH 99/0511)

## 12. AREAS DANGEROUS DUE TO MINES AND UNEXPLODED ORDNANCE

1. Minefields were laid in Australia and Papua New Guinea during the World War of 1939 to 1945. These minefields have been swept and have been used safely by shipping for many years. For details of areas which exist in other parts of the world see *Admiralty Notice to Mariners No 6*.

2. Due to the lapse of time, navigation through the areas outlined below is now considered no more dangerous from mines than from any other of the usual hazards to navigation. However, there is a remote risk that mines may still remain, having failed to respond to orthodox sweeping methods. Therefore a danger still exists with regard to anchoring, fishing or any form of submarine or seabed activity.

3. Drifting mines may occasionally be sighted. Sightings of mine-like objects should be reported to the nearest Navy authority without delay, ensuring that a clear description is provided.

4. Mines, torpedoes, depth charges, bombs and other explosive missiles are sometimes picked up in trawls often in waters comparatively distant from Australia. Explosive weapons may still be dangerous even if they have been in water for many years and the following guidance is given in dealing with them:

- (a) A suspected explosive weapon should not be landed on deck if it has been observed while the trawl is still outboard. The trawl should be lowered and then towed clear of regular fishing grounds before cutting away the net as necessary.
- (b) In the event of the weapon not being detected until the contents of the trawl have been discharged on deck, the skipper of the fishing vessel must decide whether to rid his ship of the weapon by passing it over the side or to make for the nearest port informing the Navy authority without delay. His decision will depend on their circumstances but he should be guided by the following points:
  - (i) Great care should be taken to avoid bumping the weapon.
  - (ii) If retained onboard it should be stowed on deck, away from heat and vibration firmly chocked and lashed to prevent movement.
  - (iii) It should be kept covered up and dampened down. This is important because any explosive which may have become exposed to the atmosphere is liable to become very sensitive to shock if allowed to dry out.
  - (iv) The weapon should be kept onboard for as short a time as possible.
  - (v) If within two or three hours steaming of the Australian coastline the safest measure will generally be to run towards the nearest port and lie a safe distance off shore to await the arrival of the Explosive Ordnance Disposal Unit.
- (c) Under no circumstances should attempts be made to clean the weapon for identification purposes.
- (d) A ship with an explosive weapon on board, or in her gear, should warn other ships in the vicinity giving her position and, if applicable, intended position of jettisoning.

5. Under no circumstances should an attempt be made to recover a mine and bring it to port and rewards formerly paid to mariners for such recovery have been discontinued.

#### Australia

6. Napier Broome Bay (*chart Aus 727*). The area within a circle of radius 1 mile centred on 14° 04' S 126° 40' E.

7. Cartier Island (*chart Aus 314*). The area within a circle of radius 5 mile centred on 12° 32'.0 S 123° 32'.5 E..

8. Great Barrier Reef (*charts Aus 270, 281, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 4620, 4621*). All passages from seaward through the Great Barrier Reef between 11° 40' S and 19° 07' S have been swept.

9. Moreton Bay (*charts Aus 236, 814*). The area within a circle of radius 1 mile with centre 27° 14'.58 S 153° 21'.08 E.

10. Pyramid Rock (*chart Aus 487*). The area within a circle of radius 1 mile with centre 39° 49' S 147° 15' E.

### Irian Jaya

11. Kamrau Bay (*charts BA 2102, 942B*). The area bounded by the parallels of 3° 38' S and 3° 40' S between the meridian of 133° 38' E and the coast north of Tg Simora.

### Papua New Guinea

12. Port Moresby (*charts Aus 621, 505*).

(a) The area enclosed by lines joining the following positions:

(i) 9° 32'.00 S 147° 03'.00 E (ii) 9° 32'.00 S 147° 07'.50 E (iii) 9° 31'.03 S 147° 07'.38 E

(iv) 9° 30'.32 S 147° 05'.52 E (v) 9° 29'.50 S 147° 05'.50 E (vi) 9° 29'.52 S 147° 07'.18 E

(vii) 9° 28'.00 S 147° 07'.00 E (viii) 9° 28'.00 S 147° 03'.00 E.

(b) The area bounded by the land, the parallel of 9° 36' S and by the meridians of 147° 11' E and 147° 18' E.

13. Kavieng (*charts Aus 666, 543*). The area enclosed by lines joining the following positions:

(a) 2° 25' S 150° 25' E (b) 2° 25' S 150° 55' E (c) 2° 45' S 150° 55' E

(d) 2° 45' S 150° 25' E.

14. Buka Passage (*charts Aus 683, 399*). The area bounded by the parallel of 5° 20' S and by the meridians of 154° 35' E and 154° 48' E.

15. Bougainville Island (*chart Aus 399*). The sea area north of a line joining the following positions:

(a) Moila Point (6° 53'.50 S 155° 42'.00 E) (b) East Point (6° 48'.75 S 155° 54'.33 E).

16. Tonolei Harbour (*chart Aus 399*). A channel 0.5 miles wide with centreline 035° - 1.0 mile from centre of Aiaisina Island (6° 50'.6 S 155° 50'.4 E) in a direction 035° - 5.5 miles.

17. Shorthand Island (*chart Aus 399*). The area enclosed by the shore and lines joining the following positions:

(a) 7° 02'.93 S 155° 51'.20 E (b) 7° 02'.82 S 155° 52'.32 E (c) 7° 05'.40 S 155° 53'.57 E

(d) 7° 06'.40 S 155° 52'.90 E (e) 7° 04'.93 S 155° 51'.40 E.

18. Malaita Island (*chart BA 3998*). The area within a line joining a position (a) 310° - 2.63 miles from Hauhari'i (Sail) Rock (9° 18'.4 S 161° 20'.0 E), thence in a direction 139° - 3.95 miles, thence in a direction 228° - 0.8 miles, thence in a direction 319° - 3.75 miles, thence to (a).

### Areas Dangerous due to Unexploded Ordnance

Locality	Chart	Position of Centre of Area	Radius of Area in Miles	Depth Metres
<b>Western Australia-</b>				
Timor Sea	Aus 318	13° 09' 53".5 S 127° 54' 36".3 E	0.25	78
	Aus 315	12° 18' 40".0 S 128° 22' 45".8 E	0.25	107
	Aus 315	12° 49' 43".8 S 123° 05' 08".4 E	0.25	100
Yampi Sound	Aus 41	16° 06' 57".0 S 123° 36' 51".0 E	0.5	30
Yampi Sound	Aus 40	16° 05' 35".0 S 123° 35' 20".0 E	0.5	10
E of Montebello Islands	Aus 742	20° 23' 02".0 S 115° 39' 57".0 E	0.5	45
NW of Bessieres Island	Aus 744	21° 29' 00".0 S 114° 39' 42".0 E	0.5	60
NW of Rottneest Island	Aus 754	31° 45' 12".0 S 115° 13' 12".0 E	0.25	100
NW of Rottneest Island	Aus 754	31° 47' 30".0 S 115° 14' 18".0 E	0.25	120
N of Rottneest Island	Aus 112	31° 58' 19".5 S 115° 32' 01".0 E	0.25	15
<b>Victoria-</b>				
Port Phillip	Aus 158	38° 13' 58".0 S 144° 49' 39".0 E	0.25	25
Port Phillip	Aus 158	38° 11' 35".0 S 144° 51' 55".0 E	0.5	25
Port Phillip	Aus 143	38° 08' 54".0 S 144° 50' 35".0 E	0.25	25
Bass Strait	Aus 801	39° 05' 44".0 S 146° 45' 05".0 E	0.5	55
Bass Strait	Aus 801	39° 38' 06".0 S 146° 46' 30".0 E	0.5	70
Bass Strait	Aus 357	38° 07' 24".0 S 148° 00' 52".0 E	0.5	50
<b>New South Wales-</b>				
Wreck Bay	Aus 807	35° 15' 30".0 S 150° 38' 00".0 E	0.5	45
Wreck Bay	Aus 807	35° 15' 13".0 S 150° 41' 20".0 E	0.5	75
Wreck Bay	Aus 807	35° 12' 00".0 S 150° 38' 00".0 E	0.5	20
Jervis Bay	Aus 193	35° 06' 41".0 S 150° 48' 07".0 E	0.5	33
Shoalhaven Bight	Aus 808	34° 53' 12".0 S 150° 57' 48".0 E	0.5	90
Shoalhaven Bight	Aus 808	34° 52' 00".0 S 150° 58' 00".0 E	0.5	88

Shoalhaven Bight	Aus 808	34° 50' 00".0 S 150° 59' 00".0 E	0.5	100
Tom Thumb Islands	Aus 194	34° 27' 37".0 S 150° 55' 48".0 E	0.3	7
NE of Bulli	Aus 808	34° 18' 00".0 S 151° 03' 00".0 E	0.5	42
E of Wattamolla	Aus 808	34° 10' 00".0 S 151° 15' 00".0 E	0.5	120
Port Jackson	Aus 201	33° 50' 27".5 S 151° 16' 17".5 E	0.05	10
Port Jackson	Aus 201	33° 50' 35".0 S 151° 16' 19".0 E	0.05	10
Port Jackson	Aus 201	33° 50' 58".0 S 151° 16' 15".0 E	0.05	10
Port Jackson	Aus 201	33° 51' 02".0 S 151° 16' 13".0 E	0.05	10
E of Broken Bay	Aus 197	33° 34' 45".0 S 151° 27' 33".0 E	0.5	55
E of Bungan Head	Aus 197	33° 40' 53".0 S 151° 22' 21".0 E	0.25	52
S of Newcastle	Aus 207	32° 59' 10".5 S 151° 48' 47".0 E	0.5	33
<b>Queensland-</b>				
Moreton Island	Aus 236	27° 02' 00".0 S 153° 29' 30".0 E	0.5	30
Moreton Island	Aus 236	27° 01' 48".0 S 153° 25' 00".0 E	0.5	3
Moreton Bay	Aus 236	27° 14' 24".0 S 153° 15' 40".0 E	0.25	13
NW Channel	Aus 235	26° 54' 42".0 S 153° 08' 33".0 E	0.5	10
Shoalwater Bay	Aus 822	22° 14' 18".0 S 150° 25' 24".0 E	1.0	15
Cleveland Bay	Aus 256	19° 10' 18".0 S 146° 55' 00".0 E	1.0	10
Fitzroy Island	Aus 830	16° 55' 21".0 S 145° 54' 12".0 E	0.25	7
N of Cape Grafton	Aus 830	16° 47' 18".0 S 145° 55' 18".0 E	0.25	30
N of Cape Grafton	Aus 830	16° 41' 54".0 S 145° 51' 36".0 E	0.25	33
<b>Northern Territory-</b>				
NW of Darwin	Aus 722	12° 21' 48".0 S 130° 46' 29".0 E	0.5	13
<b>Papua New Guinea-</b>				
Milne Bay	Aus 508	10° 21' 03".0 S 150° 21' 20".0 E	0.25	12
Milne Bay	Aus 508	10° 20' 32".0 S 150° 21' 21".0 E	0.25	12
Milne Bay	Aus 508	10° 20' 14".0 S 150° 21' 40".0 E	0.25	15
Blanche Bay	Aus 680	4° 14' 48".0 S 152° 12' 30".0 E	0.2	Var
Gazelle Harbour	Aus 399	6° 30' 06".0 S 155° 11' 54".0 E	0.6	Var

Australian Hydrographic Service.

(AH 99/0500)

## 12A. DUMPING GROUNDS

1. Within Australian waters there have been numerous dumpings of ships, hulks, aircraft, chemical warfare agents and explosives. Some principal areas include east and south east of Sydney, east of Cape Moreton and north east of Townsville. A consolidated listing of this data is contained in the Australian Hydrographic Service website [www.hydro.gov.au](http://www.hydro.gov.au) or from the Australian Hydrographic Office.

2. Some of these items can be picked up in trawls, guidance on what action should be taken in this instance is given in *Notice to Mariners No 12*.

Australian Hydrographic Service.

(AH 99/0174)

### 13. OCEANOGRAPHIC DATA ACQUISITION SYSTEM (ODAS).

1. The Data Buoy Cooperation Panel working under the auspices of the World Meteorological Organization and the Intergovernmental Oceanographic Commission maintains arrays of instrumented drifting and moored buoys in the world oceans. These automated buoys make routine measurements and transmit their data in real time through satellites. Such measurements include wind speed and direction, air temperature, air humidity, atmospheric pressure, currents, sea surface temperature, but also water temperature at various depths to 500 metres. All buoys transmit their positions along with the data.

2. Advice to fishermen and mariners:

- (a) DO NOT pick up drifting buoys. Buoy operators do not refurbish the drifting buoys once deployed. They would continue to transmit their position along with erroneous meteorological and oceanographic data from the deck of the ship.
- (b) DO keep watch for the moored buoys at sea; they should be visible on radar and can be avoided.
- (c) Always keep your fishing operations well clear of the buoys in order to avoid entanglements of your net with the buoy moorings.
- (d) DO NOT moor to, damage, or destroy any part of the buoys.
- (e) DO educate your fellow community about the use of data buoys.

International Hydrographic Bureau.

(AH 98/312)

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### 14. SUBMARINE CABLES AND PIPELINES

#### Caution against Anchoring and Trawling in vicinity.

1. Mariners are warned that every care should be taken to avoid anchoring or trawling in the vicinity of submarine cables or pipelines. Severing of an under-sea pipeline or cable would rate as a national disaster and very severe criminal penalties may apply. In addition the vessel which has fouled such an under water feature will be exposed to extreme explosion or electrocution risks.

#### Symbols.

2. Cables, cable areas, pipelines and pipeline areas are shown on charts in magenta using the appropriate symbol. Mariners should note the Caution on charts which have these symbols.

3. Submarine cables are shown as wavy lines, submarine cable areas may be shown bounded by pecked lines or by dashed T-shape lines interspersed with a short section of the wavy cable symbol. Disused cable is shown by an interrupted wavy cable symbol.

4. Submarine pipelines are shown as a pecked line using a bulbous type symbol with an annotation such as *gas*, *chem*, *oil*. Disused pipe-lines will be shown with an interrupted pecked line

#### Danger Involved in Cutting to Clear Anchors or Fishing Gear.

5. In the event of any vessel fouling a submarine cable, every effort should be made to clear the anchor or gear by normal methods; should these efforts fail, the anchor or gear should be slipped and abandoned without attempting to cut the cable. High voltages are fed into submarine cables as well as power transmission cables and serious risk exists of loss of life or severe burns from electric shock if any attempt to cut the cable is made. No claim in respect of injury or damage sustained through such interference with a submarine cable will be entertained.

6. In the event of any vessel fouling a pipeline the anchor or gear should be slipped and abandoned without attempting to get it clear. Any excessive force applied to a pipeline could result in a rupture and, in the case of a gas pipeline, the consequential sudden release of gas at high pressure - somewhat like an explosion - could cause serious damage or loss of the vessel. There would be an accompanying severe and immediate fire hazard.

7. In order to afford greater protection to submarine cables and pipelines, and to avoid expensive repairs and disruption of communications or supplies, the attention of mariners and particularly fishermen, is drawn to *Article VII of the Submarine Telegraphs Convention of 1884*, and to the procedure for making claims for sacrifice of gear. *The 1958 Convention on the High Seas Article 29*, has the effect of extending the provisions of *Article VII of the 1884 Convention* to cover *Damage to Submarine Pipelines and High-voltage Power Cables*.

8. *Article VII* provides that:

- (a) Owners of ships or vessels who can prove that they have sacrificed an anchor, a net, or other fishing gear in order to avoid injuring a submarine cable or pipeline, shall receive compensation from the owner of the cable or pipeline.
- (b) In order to establish a claim for such compensation, a statement which is supported by the evidence of the crew, should be drawn up immediately after the occurrence. The master must make a declaration to the proper authorities within twenty-four hours after his return to port or next putting into port.
- (c) The latter shall communicate the information to the consular authorities of the country to which the owner of the cables belongs.

9. In Australia, compensation for anchors or fishing gear which have been sacrificed outside territorial waters in order to avoid injuring a submarine cable, can be claimed under the *Commonwealth Submarine Cables and Pipeline Protection Act 1963*.

10. Vessels required to carry official log books should enter appropriate details in the log.

Australian Hydrographic Service.

(AH 99/0397)

## 15. OIL RIGS AND OFFSHORE STRUCTURES

### General.

1. Petroleum exploration rigs and petroleum production platforms may be encountered off the Australian coast. At present the main areas of activity are Bass Strait and off the North West Coast of Australia. Isolated rigs however, may be encountered in other areas.

2. Safety zones extending for a radius of up to 500 metres are gazetted around fixed installations and entry into these safety zones is prohibited to all except authorised vessels.

3. A penalty of up to 15 years imprisonment or a fine of up to \$100 000 may be imposed for navigation within the safety zone.

4. Mariners are warned that drilling rigs are moored within a ring of large anchor buoys. This ring may exceed one mile in diameter. The buoys are unlit and may not give good radar echoes.

5. The positions of oil producing platforms are shown on the appropriate charts. Attention is drawn to the Area to be Avoided in Bass Strait (see *para 9*) and the Cautionary Areas charted around off-shore structures in the vicinity of shipping routes.

6. When navigating in the vicinity of production platforms or exploration rigs an adequate safe margin of distance should be allowed. Where there is sufficient sea room vessels should keep at least 2.5 miles clear of these installations. Due allowance should always be given to prevailing weather conditions and the possibility of engine, steering or other mechanical failures.

7. The position of exploration rigs which change their location from time to time are promulgated in *Auscoast Warnings* and in *Section III* of editions of *Australian Notices to Mariners*. Mariners are cautioned that rigs move at short notice. Rig locations other than those listed in the latest *Section III Summary* are the subject of Radio Navigational Warnings. Rigs in transit will not be the subject of Warnings. Mariners should ensure that their chart and navigational warning information is up to date at all times.

### Area to be Avoided in Bass Strait

8. A significant amount of Australia's petroleum supplies come mainly from the Bass Strait offshore oil fields which lie across the main shipping track. Damage to a structure or pipeline could endanger many lives and seriously disrupt oil production.

9. Traffic separation schemes approved by IMO, serving Bass Strait and the area south of Wilsons Promontory, are promulgated in *Notice to Mariners No 16*. In addition, in Bass Strait, there is an Area to be Avoided, which should be avoided by ships of more than 200 gross tonnage. The area is bound by a line joining the following points:

- (a) The low water line at latitude 38° 15' S
- (b) 38° 35' S 147° 44' E
- (c) 38° 41' S 148° 06' E
- (d) 38° 41' S 148° 13' E
- (e) 38° 32' S 148° 26' E
- (f) 38° 19' S 148° 35' E
- (g) 38° 08' S 148° 31' E
- (h) 38° 05' S 148° 24' E
- (i) the low water line at latitude 37° 58' S
- (j) thence along the low water line to the point of commencement.

10. Exploratory Rigs may be encountered outside the Area to be Avoided, and should not be approached within 2.5 nautical miles.

11. Production platforms and exploration rigs maintain a continuous radio watch on VHF Channel 16 and will attempt to make contact with any ship entering the area to be avoided or heading towards an exploration rig outside the area. All ships required to be fitted with VHF must maintain a continuous listening watch on Channel 16.

12. Under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* it is an offence, punishable on conviction by a heavy fine or imprisonment or both, for any vessel without authorisation to enter the safety zone that extends up to 500 metres from the outer edge of platform, well heads and other offshore structures.

13. Under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* it is an offence, punishable on conviction by a heavy fine or imprisonment or both, for an Australian registered ship with a registered gross tonnage in excess of 200, without authorisation to enter the Area to be Avoided.

14. Masters of ships registered elsewhere than Australia are warned that any infringements of the Area to be Avoided will be reported to the maritime authority in the country of registry.

Australian Maritime Safety Authority, Canberra.

(AA565578)

## 16. TRAFFIC SEPARATION SCHEMES

1. The arrangements described in this *Notice* are designed for the protection of installations in the Bass Strait area and for the safety of shipping, and have been approved by the International Maritime Organisation (IMO). Ships operating in or near the Traffic Separation Schemes must comply with *Rule 10 of the Regulations for Preventing Collisions at Sea, 1972*.

### **Bass Strait** (see charts *Aus 357 & Aus 487*)

2. Description of the traffic separation scheme is:

(a) A separation zone 1.5 nm wide is centred on a line connecting the following geographical positions:

- |                                |                               |
|--------------------------------|-------------------------------|
| (i) 38° 41'.5 S 148° 20'.2 E   | (ii) 38° 44'.5 S 148° 14'.9 E |
| (iii) 38° 46'.3 S 148° 09'.0 E |                               |

(b) A traffic lane for westbound shipping is established between the separation zone and a line connecting the following geographic positions:

- |                                |                               |
|--------------------------------|-------------------------------|
| (i) 38° 38'.5 S 148° 17'.5 E   | (ii) 38° 41'.0 S 148° 13'.2 E |
| (iii) 38° 42'.8 S 148° 07'.3 E |                               |

(c) A traffic lane for eastbound shipping is established between the separation zone and a line connecting the following geographic positions:

- |                                |                               |
|--------------------------------|-------------------------------|
| (i) 38° 49'.8 S 148° 10'.8 E   | (ii) 38° 48'.0 S 148° 16'.7 E |
| (iii) 38° 44'.6 S 148° 23'.0 E |                               |

3. Navigational aids have been established in the area as follows:

- (a) Kingfish B Platform (38° 36'.00 S 148° 11'.48 E) - *Racon (3 & 9 GHz) Morse B*.  
 (b) Flounder A Platform (38° 18'.7 S 148° 26'.4 E) - *Racon (3 & 9 GHz) Morse Q*.

### **South of Wilsons Promontory** (see charts *Aus 802, Aus 357 & Aus 487*)

4. Description of the traffic separation scheme:

(a) A separation zone bounded by a line connecting the following geographical positions:

- |                                |                               |
|--------------------------------|-------------------------------|
| (i) 39° 11'.0 S 146° 45'.0 E   | (ii) 39° 15'.0 S 146° 33'.0 E |
| (iii) 39° 15'.0 S 146° 15'.0 E | (iv) 39° 12'.0 S 146° 25'.0 E |

(b) A traffic lane for westbound traffic is established between the separation zone and a separation line connecting the following geographic positions:

- |                                |                               |
|--------------------------------|-------------------------------|
| (i) 39° 02'.0 S 146° 45'.0 E   | (ii) 39° 09'.0 S 146° 26'.0 E |
| (iii) 39° 10'.8 S 146° 19'.2 E | (iv) 39° 10'.8 S 146° 15'.0 E |

(c) A traffic lane for eastbound traffic is established between the separation zone and a line connecting the following geographic positions:

- |                              |                               |
|------------------------------|-------------------------------|
| (i) 39° 19'.0 S 146° 15'.0 E | (ii) 39° 19'.0 S 146° 45'.0 E |
|------------------------------|-------------------------------|

5. The main traffic directions are 090° - 270° and 069° - 252°.

### **Inshore Traffic Zone**













6. The area between Wilsons Promontory and the separation line in *para 4(b)* is designated as an inshore traffic zone (ITZ).

Australian Maritime Safety Authority, Canberra.

(AH 99/0514)

## 17. SYMBOLOGY USED ON AUSTRALIA NAVIGATIONAL CHARTS

1. The following symbology is used in Australian Navigational charts and generally has not been adopted into the International Hydrographic Organisation INT 1 (symbols and abbreviations) publication:

INT 1 Reference	Description	Symbol
D 17b	Helicopter Landing Site	
J 21	Approximate Rock Reef	
J 21	Rock Symbol	
J 22	Approximate Coral Reef	
J 22	Areas Considered to be Coral Reef	
J 22	Areas of possible shoaling	
J 22	Coral Pinnacle	
L 17	Moored Storage Tanker	
M	Preferred Route	
K 48.1	Marine Farm	
U 3	Visitors Mooring	
N	Ship Reporting System	

Australian Hydrographic Service.

(AA175642)

## 18. CAUTION WITH REGARD TO SHIPS APPROACHING FORMATIONS, CONVOYS, AIRCRAFT CARRIERS AND OTHER WARSHIPS AND SURVEY VESSELS AT SEA

### Formations and Convoys

1. The attention of ship owners and mariners is called to the danger to all concerned which is caused by single vessels approaching a formation of warships or merchant vessels in convoy, so closely as to involve risk of collision, by attempting to pass ahead of or through such a formation or convoy.

2. Mariners are therefore warned that single vessels should adopt early measures to keep out of the way of a formation or convoy.

3. Although a single vessel is advised to keep out of the way of a formation or convoy, this does not entitle vessels sailing in company to proceed without regard to the movements of the single vessel. Vessels sailing in formation or convoy should accordingly keep a careful watch on the movements of any single vessel approaching the formation or convoy and should be ready, in case the single vessel does not keep out of the way, to take such action as will best aid to avoid collision.

### Navigation Light Arrangements

4. Some warships, in accordance with *Rule 23 and Annex 1* of the above Regulations, cannot comply fully with the requirements of the rules in this regard.

5. The common principal departures from the rules are as follows:

- The height above the hull of the lower main masthead light is often less than the breadth of the vessel.
- The horizontal distance between masthead lights is frequently less than half the length of the vessel.
- The forward masthead light may be more than one quarter of the length of the vessel from the stern.

6. Mariners are further warned that some warships, particularly large allied aircraft carriers, may have:
- (a) Their masthead lights placed permanently off the centre line of the ship, and at considerably reduced horizontal separation.
  - (b) Alternative positions for their side lights :
    - (i) on either side of the hull;
    - (ii) on either side of the island structure, in which case the port side light may be as much as 30 metres from the port side of the ship.
  - (c) Different anchor light configurations due to their unique size and shape.

#### **Ships Operating Aircraft**

7. Attention is called to the uncertainty of movements of warships when aircraft or helicopters are operating to or from their decks. Such ships are required usually to steer a course which is determined by the wind direction. While operating aircraft or helicopters from their decks, warships may show the lights and shapes prescribed by *Rule 27 (b) of the Regulations for Preventing Collisions at Sea, 1972* if their manoeuvrability is affected by the flying operations.

#### **Replenishment-at-Sea**

8. Warships and support ships frequently exercise *Replenishment-at-Sea*. While doing so, the two or more ships taking part may be connected to jackstays and hoses. They display the signals prescribed by *Rule 27(b) of the Regulations for Preventing Collisions at Sea, 1972*.

9. Mariners are warned that while carrying out these exercises the ships are severely restricted, both in manoeuvre ability and speed. Other vessels are therefore advised to keep well clear in accordance with *Rule 18(a) of the Regulations for Preventing Collisions at Sea, 1972*.

#### **Survey Vessels**

10. Survey vessels while carrying out hydrographic or oceanographic surveys will display the signals prescribed in *Rule 27 (b) of the above Regulations*. The ship may also show an international two-letter group stating - *I am engaged in submarine survey work. You should keep clear of me.*

11. Mariners are warned that while carrying out this work, which may often be run across the normal shipping lanes survey ships may be towing instruments up to 300 metres astern. These will restrict their manoeuvrability and ability to change speed or stop quickly. Other vessels are therefore advised to keep well clear in accordance with *Rule 18 (a) of the Regulations for Preventing Collisions at Sea, 1972* giving a clearance of at least 0.5 miles if passing astern.

## 19. INFORMATION CONCERNING SUBMARINES

### Warning Signals

1. Mariners are warned that considerable hazard to life may result from the disregard of the following signals which denote the presence of submarines:

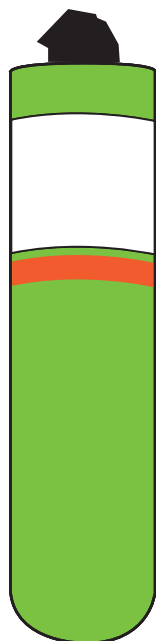
(a) **Visual signals.** Australian warships fly the International Code Group "NE2" to denote that submarines which may be submerged, are in the vicinity. Vessels are cautioned to steer so as to give a wide berth to any vessel flying this signal. If from any cause it is necessary to approach her, a good look-out must be kept for submarines whose presence may be indicated only by their periscopes or snort masts showing above the water.

(b) **Pyrotechnics and Smoke Candles.** The following signals are used by submerged submarines:

<i>Signal</i>	<i>Signification</i>
White smoke candle (with flame).....	Indicates position in response to request from ship or aircraft or as required.
Yellow smoke candles	
Yellow and green pyro flares.	
Red pyro flares.....	Keep clear. I am carrying out emergency surfacing procedure. Do not stop propellers. Clear the immediate area, but stand by to render assistance.
(may be accompanied by smoke candles repeated as often as possible).	

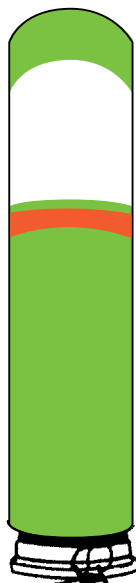
*Note:* If the red pyro flare signal is sighted and the submarine does not surface within 5 minutes it should be assumed that the submarine is in distress and has sunk. An immediate attempt should be made to fix the position in which the signal was sighted, after which action in accordance with *paras 13-20* should be taken.

Candle Smoke White Mk 4 N



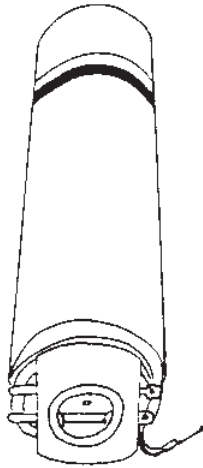
Description	Green, red and white, with red and black markings
Length	42.5cm
Diameter	9.5 cm
Content	Calcium Phosphide
Duration	15 mins – white smoke and flame

Candle Smoke White Mk N6



Description	Green, red and white, with red and black markings
Length	42.5cm
Diameter	9.5 cm
Content	Red phosphorous – Two detonators
Duration	Four mins – white smoke

### Float Signal Submerged (Grenade) Mk N3



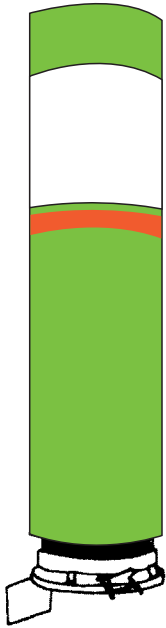
Description	White and black, with black and red markings
Length	43 cm
Diameter	10.2 cm
Content	Two detonators, one ejection charge, one grenade Signal (green/red)
Duration	5 sec – a coloured star is ejected to 91 metres.

### Float Signal Submerged Mk N4



Description	White and black, with black and red markings
Length	40 cm
Diameter	10.2 cm
Content	Two detonators, one ejection charge, one fluorescein dye in a green canister.
Duration	No time element: The container is ejected 6 metres splitting the dye canister.

## Candle Smoke Yellow Mk N7

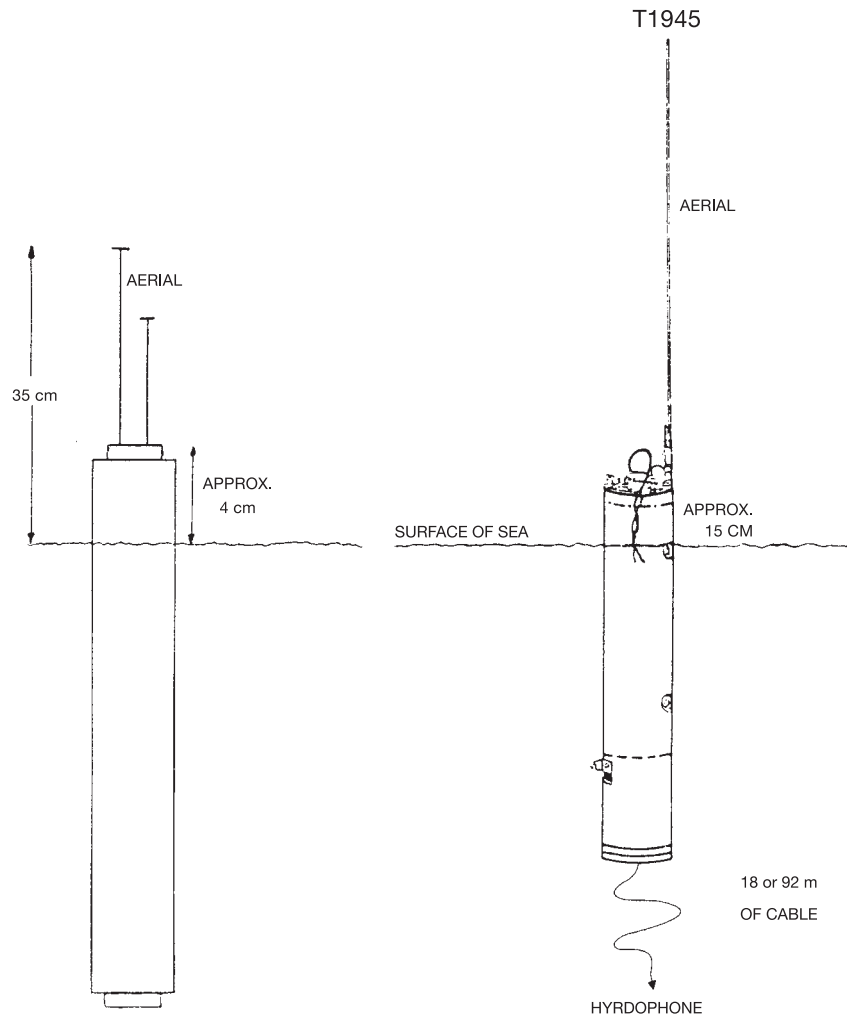


Description	Green, red and white, with red and black markings
Length	42.5cm
Diameter	9.5 cm
Content	Smoke composition — Two detonators
Duration	4 mins — yellow smoke

## Marker Location Marine Mk25



Description	Silver body, black gasket 2.5cm white band
Length	46cm
Diameter	7.6 cm
Content	Red phosphorous
Duration	16 mins — smoke and flame
Caution	An explosive charge is fitted, fragmentation to 8 metres



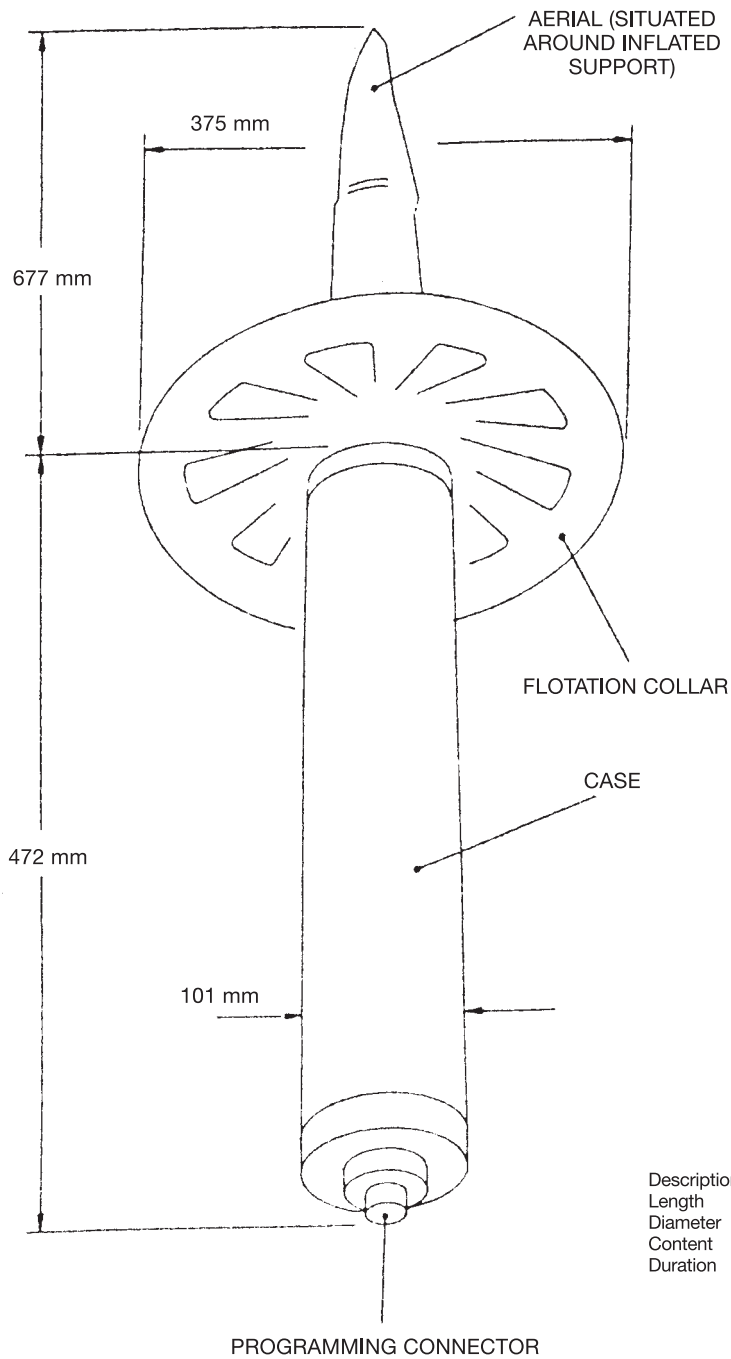
Submarine Launched Emergency Communications Buoy

Description	Orange
Length	86cm
Diameter	10cm

Rough Drawing Sonobuoy

Description	Grey
Length	72-6m
Diameter	5-2m

Expendable Communications Buoy (ECB)



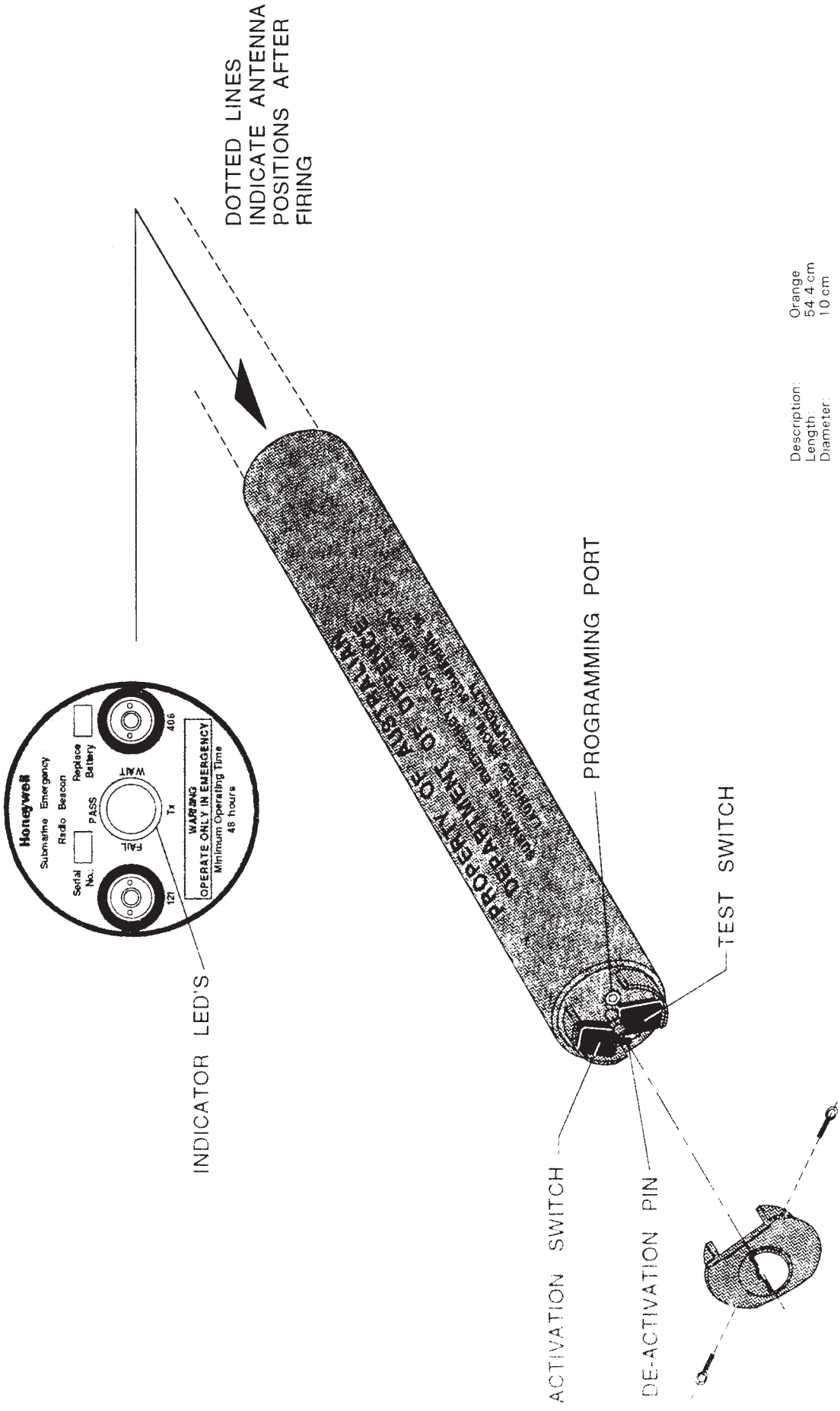
Submarine Launched Flare D4A2



Description  
Length  
Diameter  
Content  
Duration

Silver body, white markings  
1 m  
7.6 cm  
Red, Green or White Flares (Magnesium)  
30 - 40 secs. A flare is ejected to 170m  
Red flare nose cap is buoyant, coloured fluorescent red, contains dye marker and may contain a message.

Description Silver



Description:  
 Length 54.4 cm  
 Diameter 10 cm

# SUBMARINE EMERGENCY RADIO BEACON

ACTIVATION PLATE  
 REMOVE SPLIT PINS ONLY  
 PLATE WILL SEPARATE FROM  
 SERB ON FIRING

2. It must not be inferred from the above that submarines exercise only when in company with escorting vessels.

### **Australian Submarine Exercise Area**

3. The note *Submarine Exercise Area* on certain charts should not be read to mean that submarines do not exercise outside such areas. The whole of the Exclusive Economic Zone (EEZ) is a permanently established Australian submarine exercise area. Under certain circumstances warnings that submarines are exercising in specified areas may be broadcast by a coast radio station or promulgated in printed navigational warnings.

### **Navigation Lights**

4. Submarines have their masthead and side lights placed well forward and very low over the water in proportion to the length and tonnage of these vessels. In particular:

- (a) some submarines can only show a forward masthead light in calm confined waters;
- (b) in other submarines the forward masthead light may be lower than the sidelights;
- (c) the main masthead light may be well forward of the mid-point of the submarine's length.

g

5. Stern lights are placed very low indeed, and may at times be partially obscured by spray and wash. In some cases the stern lights will be well forward of the after part of the submarine, and thus will not give a true indication of the submarine's length. They are invariably lower than the side lights.

6. The after light of nuclear submarines at anchor is mounted on the upper rudder which is some distance astern of the hull's surface waterline. Care must be taken to avoid confusion with two separate vessels of less than 50 metres in length.

7. The overall arrangement of submarine lights is therefore unusual and may well give the impression of markedly smaller and shorter vessels than they are. Their vulnerability to collision when proceeding on the surface and the fact that some submarines are nuclear powered dictates particular caution when approaching them. Nearly all submarines are fitted with an amber quick-flashing light situated above or abaft the main steaming light. This additional light is for use as an aid to identification in narrow waters and areas of dense traffic. Australian submarines will normally burn this identification light under the above conditions and when entering or leaving harbour at night.

8. Australian Collins Class submarines exhibit a very quick flashing yellow identification light (120 flashes per minute) **VQ. Y**. This identification light should not be confused with an air cushion vessel operating in a non-displacement mode which displays the same light.

### **Sunken Submarine**

9. A bottomed submarine which is unable to surface will try to indicate her position by firing candles giving off yellow or white smoke either on the approach of surface vessels or at regular intervals.. As far as possible yellow candles will be used by day.

*Note:* It should be remembered that it may be impossible for a submarine to fire her smoke candles. Correspondingly a partially flooded submarine may have only a certain number of her smoke candles available and searching ships should not therefore expect many to appear.

10. Since oil slicks or debris may be the only indication of the presence or whereabouts of the sunken submarine, it is vitally important that surface ships refrain from discharging anything which might appear to have come from a submarine while they are in the submarine probability area. Searching ships and aircraft can waste many valuable hours investigating these false contacts.

11. Some submarine pyrotechnics can be fitted with message carriers. If a message has been attached, the pyrotechnic will be fitted with a dye marker, giving off a yellowish-green dye on the surface. Such a pyrotechnic should be recovered as soon as it has finished burning.

12. Collins Class submarines are fitted with the purpose Submarine Launched EPIRB (SERB). A description of the SERB is given at *para 20*.

13. The sighting of any beacon answering the attached description should at once be reported by the quickest available means to the Rescue Co-ordination Centre Australia, the Navy or Police. However, if vessels are unable to establish communications without leaving the vicinity of the submarine, it should be borne in mind that the primary consideration should be for vessels to remain standing by to rescue survivors and not leave the scene of the accident. Every effort should be made to include in the report the serial number of the beacon; this number is affixed on top of the SERB (see *para 20*).

14. At any time after a submarine accident survivors may start attempting to escape. Current policy dictates that survivors will wait before escaping until:

- (a) rescue vessels are known to be standing by; or
- (b) conditions inside the submarine deteriorate to such an extent that an attempt to escape must be made.

15. It should be noted that, in certain circumstances the situation *para 14(b)* may not arise through lack of air supply until a time after the accident of several days. However, if the submarine is badly damaged, survivors may have to make an escape attempt immediately. Any ship finding a SERB should not therefore leave the position but stand by well clear ready to pick up survivors. The latter will ascent nearly vertically, and it is plainly important plenty of sea room is given to enable them to do so in safety. On arrival on the surface men may be exhausted or ill, and if circumstances are favourable therefore the presence of a boat already lowered is very desirable. Some men may require a recompression chamber, and it will therefore be the aim of the Naval authorities to get such a chamber to the scene as soon as possible.

16. In order that those trapped in the submarine shall be made aware that help is at hand, Navy vessels drop small charges into the sea, which can be heard from inside the submarine. There is no objection to the use of small charges for this purpose; but it is vital that they are not dropped too close since men in the process of making ascents are particularly vulnerable to underwater explosions and may easily receive fatal injuries. A distance of a quarter of a mile is considered to be safe. If no small charges are available, the running of an echo sounder or the banging of the outer skin of the ship's hull with a hammer from a position below the water-line is likely to be heard in the submarine, and such banging and/or sounding should therefore be carried out at frequent intervals.

17. Submarines may at any time release pyrotechnic floats, which on reaching the surface burn with flame and/or smoke thus serving to mark the position of the wreck. They are likely to acknowledge sound signals by this means.

18. To sum up, the aims of a submarine rescue operation are:

- (a) To fix the exact position of the submarine.
- (b) To get a ship standing by to pick up survivors if practicable with boats already lowered.
- (c) To get medical assistance to survivors picked up.
- (d) To get a diver's decompression chamber to the scene in case this is required by those seriously ill after being exposed to great pressure.
- (e) To inform the trapped men that help is at hand.
- (f) To notify appropriate authorities.

19. There is a large Navy organisation designed to fulfil these aims which is always kept at instant readiness for action. It is clear, however, that any ship may at anytime find evidence of a submarine disaster, and if she takes prompt and correct action as described above she may be in a position to play a vital part.

#### **Submarine Emergency Radio Beacon (SERB).**

20. This beacon is made of aluminium, coloured orange and is cylindrical in shape, with two whip aerials. The beacon is fitted with an automatic transmitting unit, battery life of 48 hours operating on the following frequencies:

- (a) 406.025 MHz Cospas/Sarsat.
- (b) 243 MHz Military Air Guard.
- (c) 121.5 MHz Civil Air Guard.

#### **Submarine Launched Expendable Communications Buoy (ECB).**

21. This buoy is used for tactical communications between submarines and warships/aircraft. It can, however, be fired in an emergency default mode in which case it will transmit a SABRE tone on 243 MHz Military Air Guard. Physical description of the ECB are shown in the drawing on *page 88*.

22. The accompanying diagrams on *pages 83-88* show Submarine Emergency Radio Beacon (SERB), Expendable Communications Buoy (ECB), smoke candles fired from submarines, sonobuoy, and aircraft float, smoke and flame markers. A general description of each is as follows:

- (a) *White Smoke Candles*. These are fired from submarines to indicate their position. They burn for up to 15 minutes emitting white smoke and flame and can thus be seen day or night; they can easily be confused with aircraft marine markers and floats smoke and flame.
- (b) *Yellow Smoke Candles*. These are fired from submarines to indicate their position. They burn for about five minutes emitting yellow smoke. They can be seen more easily than the white smoke candles in rough weather but cannot be seen at night.
- (c) *Sonobuoys*. These are dropped from aircraft to detect submarines and may be countered anywhere at sea. Other countries have similar sonobuoys but their colour and dimension are not known.

23. The above may frequently be encountered in areas where HMA Ships and Aircraft exercise, whether or not submarines are present, and should not be confused with submarine emergency buoys and beacons. In case of doubt the object should be approached to confirm, visually, whether or not it is a submarine emergency buoy or beacon before reporting it.

24. The following is a list of candle smoke and markers currently used by the RAN and RAAF:

- (a) Submarine Bubble Decoy Mk N2
- (b) Schermuly Icarus Band Radar flare
- (c) Marker Man Overboard, Smoke and Light Mk N3 and Series 2
- (d) Marker Location Marine Mk 25
- (e) Float Signal Submerged Mk N4
- (f) Float Signal Submerged (Grenade) Mk N3
- (g) Candle Smoke Yellow Mk N7
- (h) Candle Smoke White Mk N6
- (i) Candle Smoke White Mk 4N
- (j) Submarine Launched Flare D4A2

Department of Defence (Navy).

(AH 99/0500)

## 20. QUARANTINE PRE-ARRIVAL REPORTS FOR VESSELS

1. The Australian Quarantine and Inspection Service (AQIS) requires all vessels arriving in Australia from overseas, or who have been in contact with overseas vessels or sea installations, to submit a *Quarantine Pre-Arrival Report (QPAR)* to AQIS. Copies of this report can be accessed from the AQIS Seaports web site: <http://www.aqis.gov.au/shipping>.

2. The *QPAR* details the condition of the vessel including human health, cargoes and ballast water management. AQIS must be notified immediately if the current status of the vessel (pertaining to questions on this report) changes at any time. Vessel Masters or Medical Officers who knowingly give false or misleading information or negligently give false or misleading information are guilty of an offence. Maximum penalty is imprisonment for one year.

3. Vessel Masters/agents are required to submit the *QPAR* to AQIS no more than 48 hours and no less than 12 hours prior to the vessel's arrival in Australia. This will allow efficient processing of the *QPAR* and avoid any disruption to the vessel arrival.

4. Vessel Masters/agents that do not submit the *QPAR* to AQIS will be met by a quarantine officer on or shortly after arrival to complete quarantine formalities. This will cause delays to the vessel and will incur additional AQIS charges.

5. Vessels will require written permission to discharge any ballast water in Australian ports or waters. This may be given following lodgement of the *QPAR* to AQIS. If the vessels ballast water details change, a revised *QPAR* must be sent to AQIS for clearance prior to discharging any ballast water.

6. Vessel Masters are also required to complete *AQIS Ballast Water Log*. The *AQIS Ballast Water Log* must be used to demonstrate the current state of all ballast water tanks upon arrival in Australia. The log is structured to clearly display the management of all ballast water taken up in a foreign port. The inspecting quarantine officer will use the information recorded on the AQIS Ballast Water log to verify the ballast water management statement made on the *QPAR*. Furthermore, the inspecting officer will request deck, engine room and dedicated ballast water logs to verify the vessel's compliance with Australia's ballast water management requirements. There is no requirement for the *AQIS Ballast Water Log* to be submitted with the *QPAR* though it must be available to the inspecting officer at the time of the first port pratique inspection.

7. AQIS advises that it is best practice to manage all high risk ballast water, prior to arrival, to make it suitable for discharge in Australian ports and waters. This is to assist vessels that arrive with no intention to discharge but circumstances change with the altering of cargo plans and then must discharge ballast water.

8. Vessels should also contact their agent to be informed of Australian State Government jurisdictional requirements for the management of domestically sourced ballast water.

### **Quarantine Pre-Arrival Report for Vessels without Facsimile**

9. This report is provided by AQIS as a guide to assist in the transferal of information from the vessel to the agent. **Under no circumstances will AQIS accept vessel information in telex format.** AQIS will only accept the information in the approved format. The approved report (*QPAR*) must reach AQIS no more than 48 hours and no less than 12 hours prior to the vessels arrival in Australia. AQIS must be notified immediately if the current status of the vessel (pertaining to questions on this report) changes at any time. Vessel Masters or Medical Officers who knowingly give false or misleading information or negligently give false or misleading information are guilty of an offence. Maximum penalty is imprisonment for one year.

10. Enquiries concerning the *Quarantine Pre-Arrival Report* can be directed to:

AQIS Seaports Program Manager Ph +61 (0)2 6272 5700, Email [seaports@aqis.gov.au](mailto:seaports@aqis.gov.au)

Ballast Water Adviser - Seaports Program Ph +61 (0)2 6272 4363, Email [ballastwater@aqis.gov.au](mailto:ballastwater@aqis.gov.au)

AQIS Area Offices:

Adelaide	+61 (0)8 8201 6053
Brisbane	+61 (0)7 3246 8755
Cairns	+61 (0)7 4030 7800
Darwin	+61 (0)8 8920 7000
Hobart	+61 (0)3 6233 3352
Melbourne	+61 (0)3 8318 6700
Perth	+61 (0)8 9334 1555
Sydney	+61 (0)2 8334 7444

Australian Quarantine Inspection Service.

(AA177151)

## 21. NAVIGATION IN THE GREAT BARRIER REEF AND TORRES STRAIT

### Compulsory Pilotage in the Great Barrier Reef and Torres Strait

1. Under Australian law most vessels must carry a pilot licensed by the Australian Maritime Safety Authority in Torres Strait and sections of the Great Barrier Reef.

2. Details of pilotage services available for the Great Barrier Reef and Torres Strait are in *Notice to Mariners No 23*.

### Compulsory pilotage Great Barrier Reef

3. The *Great Barrier Reef Marine Park Act 1975* requires all 'regulated' ships, that is vessels of 70 metres or more in overall length, and all loaded oil tankers, chemical tankers and liquefied gas carriers except Defence Force vessels, to carry a pilot, licensed by the Australian Maritime Safety Authority, when taking passage through the Inner Route of the Great Barrier Reef (GBR) between Cape York (latitude 10° 41'S) and the vicinity of Cairns Roads (latitude 16°40'S) or when passing through Hydrographers Passage or the Whitsunday and Lindeman Island Groups.

### Applications for Exemptions in the Great Barrier Reef

4. Under *Section 59F* of the *Great Barrier Reef Marine Parks Act 1975*, the master or owner of a regulated ship may apply in writing to the Minister for the Environment and Heritage for an exemption to navigate with a licensed coastal pilot in the GBR compulsory pilotage area. Application enquiries should be made to the Great Barrier Reef Marine Park Authority for attention by the Project Manager Ports and Shipping.

### Penalties

5. It is an offence for a 'regulated ship' to navigate without a pilot in the compulsory area, the Master and owner each being liable to a fine of \$55,000 and \$275,000 respectively. It is also an offence, with similar liabilities and penalties for a vessel to enter an Australian port having previously navigated without a pilot in the compulsory area. A prosecution of such offences may be commenced within three (3) years of the commitment of the offence.

### Compulsory Pilotage Torres Strait

6. Under Australian law the following vessels must embark a pilot, licensed by the Australian Maritime Safety Authority, when transiting the Torres Strait Compulsory Pilotage Area (see *page 93*):

- All vessels of 70 metres or more in overall length, and all loaded tankers, chemical tankers and liquefied gas carriers, except defence force vessels, when transiting through **Torres Strait Pilotage Area A with a draught of 8 metres or more** must have a pilot on board.
- All vessels (irrespective of draught) of 70 metres or more in overall length, and all loaded tankers, chemical tankers and liquefied gas carriers, except defence force vessels, when transiting through **Torres Strait Pilotage Area B** must have a pilot on board.

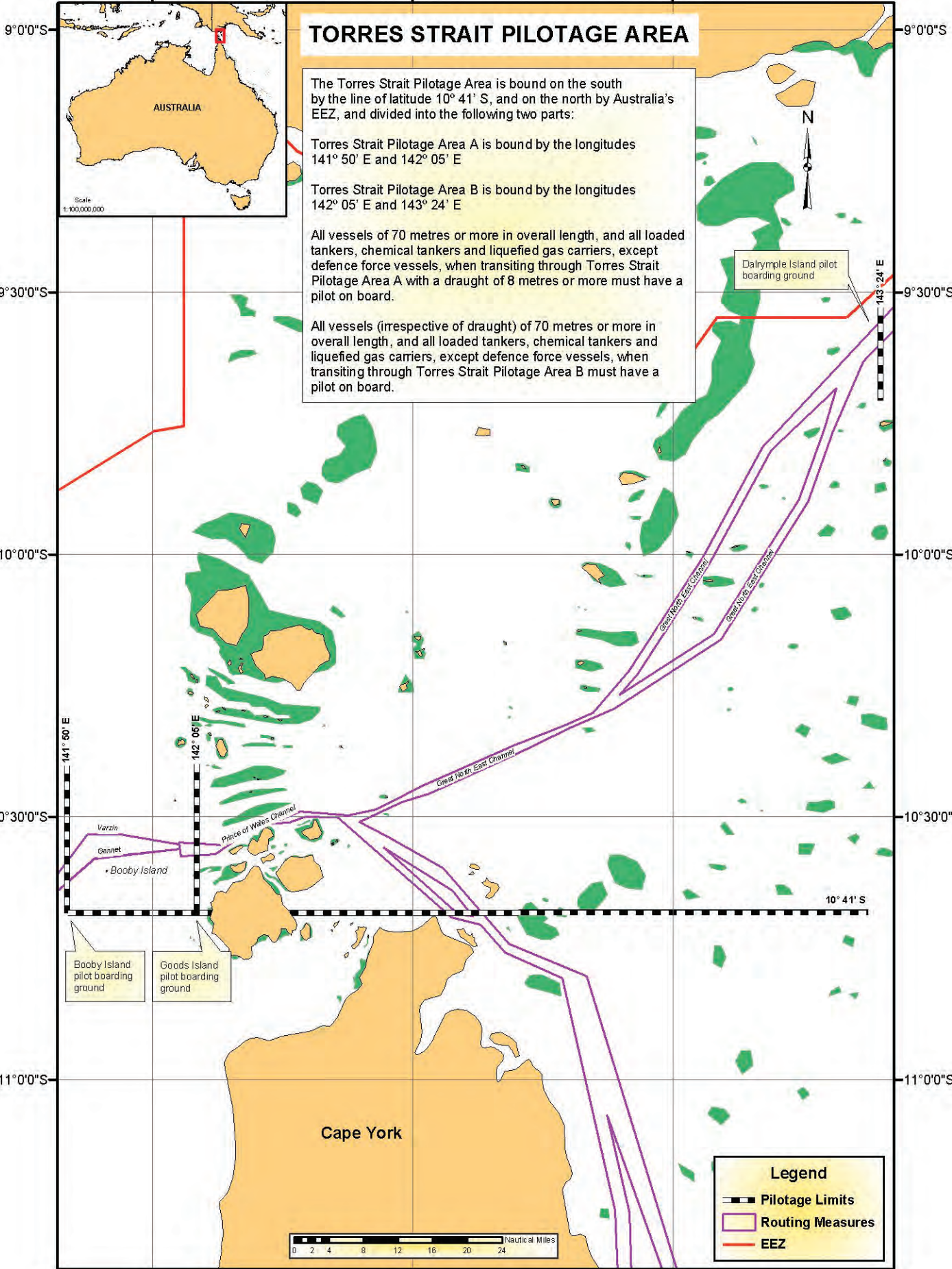
7. The Torres Strait Pilotage Area is bound on the south by the line of latitude 10° 41' S, and on the north by Australia's EEZ, and divided into the following two parts (see *page 93*):

- Torres Strait Pilotage Area A is bound by the longitudes 141° 50' E and 142° 05' E.
- Torres Strait Pilotage Area B is bound by the longitudes 142° 05' E and 143° 24' E.

142°0'0"E

142°30'0"E

143°0'0"E



# TORRES STRAIT PILOTAGE AREA

The Torres Strait Pilotage Area is bound on the south by the line of latitude 10° 41' S, and on the north by Australia's EEZ, and divided into the following two parts:

Torres Strait Pilotage Area A is bound by the longitudes 141° 50' E and 142° 05' E

Torres Strait Pilotage Area B is bound by the longitudes 142° 05' E and 143° 24' E

All vessels of 70 metres or more in overall length, and all loaded tankers, chemical tankers and liquefied gas carriers, except defence force vessels, when transiting through Torres Strait Pilotage Area A with a draught of 8 metres or more must have a pilot on board.

All vessels (irrespective of draught) of 70 metres or more in overall length, and all loaded tankers, chemical tankers and liquefied gas carriers, except defence force vessels, when transiting through Torres Strait Pilotage Area B must have a pilot on board.

Dalrymple Island pilot boarding ground

Scale  
1:100,000,000

141° 50' E

142° 05' E

143° 24' E

10° 41' S

Varzin  
Gannet  
Booby Island

Price of Wales Channel

Great North East Channel

Great North East Channel

Great North East Channel

Booby Island pilot boarding ground  
Goods Island pilot boarding ground

Cape York

**Legend**

- Pilotage Limits
- Routing Measures
- EEZ



142°0'0"E

142°30'0"E

143°0'0"E

11°0'0"S

10°30'0"S

10°0'0"S

9°30'0"S

9°0'0"S

11°0'0"S

10°30'0"S

10°0'0"S

9°30'0"S

9°0'0"S

AUSTRALIA

### Pilot Boarding Places (PBP)

8. Vessels requiring a pilot are to arrange for the pilot to board at the following locations:

Constraints	Pilot Boarding Place	Position (WGS84)
East-bound vessels of draught of 8 metres or more	Booby Island	10° 36'.30 S, 141° 49'.80 E
East-bound vessels of draught less than 8 metres	Goods Island	10° 33'.90 S, 142° 04'.40 E
West-bound vessels	Dalrymple Island	9° 34'.00 S, 143° 24.50 E

Masters of east-bound vessels with a draught of less than 8 metres can request the services of a pilot from Booby Island if they wish to do so.

9. Significant penalties will apply to a master and/or owner who fails to comply with the compulsory pilotage requirements in the *Navigation Act* and Marine Orders Part 54.

10. Queries on the compulsory pilotage requirements for Torres Strait or exemptions from this requirement may be addressed to AMSA, Manager Vessel Traffic & Pilotage Services, phone 02 6279 5092 or email [msdpilot@amsa.gov.au](mailto:msdpilot@amsa.gov.au). General information on pilotage in the Great Barrier Reef and Torres Strait may be found at [www.amsa.gov.au/coastal-pilotage](http://www.amsa.gov.au/coastal-pilotage).

### Vessel Traffic Service Great Barrier Reef and Torres Strait

11. The Australian Government operates a Vessel Traffic Service called REEF VTS in Torres Strait and the Great Barrier Reef. Full details of REEF VTS are contained in *Notice to Mariners No 22* and the Reef VTS User Manual. The User Manual is available from AMSA and Maritime Safety Queensland offices.

12. The Great Barrier Reef and Torres Strait Vessel Traffic Service (REEFVTS) is comprised of two major components:

- (a) a mandatory Ship Reporting System (the Great Barrier Reef and Torres Strait Ship Reporting System (REEFREP):
- (b) monitoring and surveillance systems including radar, Automatic Identification System (AIS), Automated Position Reporting via Inmarsat-C (APR) and VHF Reporting.

13. The system is manned and operated on a 24 hour a day basis by Maritime Safety Queensland personnel based at the REEFVTS Centre, Radio Call Identity "REEFVTS" Radio Callsign "VZQ 641," situated at Hay Point near Mackay.

14. The following categories of ships are required to report to REEFVTS:

- (a) All ships of 50 metres or greater in overall length;
- (b) All oil tankers, liquefied gas carriers, chemical tankers or ships coming within the INF Code, regardless of length;
- (c) Ships engaged in towing or pushing where it, or the ship being towed or pushed is a ship described in (a) or (b) or where the length of the tow is or exceeds 150 metres.

### The Great Barrier Reef Marine Park

15. *The Great Barrier Reef Marine Park Zoning Plan 2003*, in force at 1 July 2004 sets out the zoning regime in the park, the purposes for which zones may be used or entered without permission, and the purposes for which zones may be used or entered only with the written permission of the Great Barrier Reef Marine Park Authority. See *Australian Seafarers Handbook* for GBRMP Activities Table.

### Designated Shipping Area (DSA)

16. *The Great Barrier Reef Marine Park Zoning Plan 2003* establishes a Designated Shipping Area (DSA) through the Inner Route, in recognized passages, and in the approaches to all ports in the Great Barrier Reef Marine Park. The DSA accommodates vessels using accepted or normally used routes and shipping should stay within the DSA. Penalties apply to vessels which operate outside the DSA or General Use Zones without the written permission of the Great Barrier Reef Marine Park Authority, other than for the purposes mentioned in *para 18*.

17. The DSA applies to any vessel that is:

- (a) 50 metres or more in overall length; or
- (b) an oil tanker (within the meaning given by the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973), regardless of its length; or
- (c) a chemical carrier or liquefied gas carrier, regardless of its length; or
- (d) a ship to which the INF Code applies, regardless of its length; or
- (e) a vessel that is adapted to carry oil or chemicals in bulk in cargo spaces; or
- (f) a vessel engaged in towing or pushing another vessel or vessels if any of paragraphs (a) to (e) applies to the towed or pushed vessel, or the total length of the tow, from the stern of the towing vessel to the after end of the tow, is greater than 150 metres;

but is not:

- (g) a vessel of the Defence Force; or
- (h) a vessel of the armed service of another country, if the vessel is in Australian waters with the consent of Australia; or
- (i) a super-yacht (that is, a vessel more than 50 metres in overall length used for private recreational activities).

18. All such vessels are required to navigate within the limits of the DSA and the General Use Zones of the Great Barrier Reef Marine Park, except in the case of an emergency for any of the following purposes:

- (a) to investigate and respond to an emergency alert;
- (b) to save human life or avoid the risk of injury to a person;
- (c) to locate or secure the safety of an aircraft, vessel or structure that is, or may be, endangered by stress of weather or by navigational or operational hazards;
- (d) to carry out emergency repairs to a navigational aid;
- (e) to deal with a threat of pollution to the marine environment under a Commonwealth law or a national emergency response arrangement in which the Great Barrier Reef Marine Park Authority participates;
- (f) under Commonwealth law, to remove or salvage a vessel or an aircraft, or a section of a vessel or aircraft, or other wreck, that is wrecked, stranded, sunk or abandoned and poses a threat to the marine environment or safety.

19. Vessels wishing to deviate from the DSA or General Use Zones, cruise ships for example, must seek permission from the Great Barrier Reef Marine Park Authority.

20. All vessel owners, vessel operators, owners and masters are advised to obtain a copy of the *Great Barrier Reef Marine Park Zoning Plan 2003* from the Great Barrier Reef Marine Park Authority at:

PO Box 1379,  
TOWNSVILLE  
QLD 4810,  
or by telephone: 61 7 4750 0700  
or via their website [www.gbrmpa.gov.au](http://www.gbrmpa.gov.au).

#### Capricorn and Bunker Groups Area to be Avoided

21. The International Maritime Organisation (IMO) has promulgated the area of the Capricorn and Bunker groups of islands and reefs as an Area to be Avoided. This area is also protected by the *Great Barrier Reef Marine Park Zoning Plan 2003*, however all ships in excess of 500 tons gross tonnage should avoid the area bounded by a line connecting the following geographic positions:

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| (a) 23° 10' S 151° 56' E | (b) 23° 53' S 152° 28' E | (c) 23° 55' S 152° 28' E |
| (d) 23° 57' S 152° 26' E | (e) 23° 57' S 152° 24' E | (f) 23° 32' S 152° 55' E |
| (g) 23° 36' S 151° 39' E | (h) 23° 33' S 151° 35' E | (i) 23° 30' S 151° 35' E |
| (j) 23° 25' S 151° 53' E | (k) 23° 20' S 151° 50' E | (l) 23° 20' S 151° 40' E |
| (m) 23° 15' S 151° 40' E | (n) 23° 10' S 151° 52' E |                          |

#### Fishing Vessels

22. Concentrations of fishing and trawling vessels will frequently be encountered in the Inner Route and Great North East Channel. Close quarters situations are often unavoidable due to the confined nature of these waterways. Investigations into previous incidents between commercial vessels and vessels fishing almost invariably show that either one or both vessels were not keeping a proper lookout. Masters are reminded of their responsibilities under Rule 5 of the collision regulations.

Australian Maritime Safety Authority, Canberra.

(AA566117)

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## 22. MANDATORY SHIP REPORTING SYSTEM Covering the Torres Strait region and the Inner Route of the Great Barrier Reef

#### Mandatory Ship Reporting System – (REEFREP)

1. The Great Barrier Reef and Torres Strait Ship Reporting System (REEFREP) was established as a mandatory ship reporting system under the International Convention for the Safety of Life at Sea (SOLAS Regulation V/11). REEFREP was formally adopted by the IMO's Maritime Safety Committee in Resolution MSC.52(66), and later amended by Resolutions MSC.161(78) and MSC.315(88).

2. REEFREP is an integral component of the Great Barrier Reef and Torres Strait Vessel Traffic Service (REEFVTS). Within the REEFVTS area ships identify themselves and report their intended passage through the region. This information, together with the monitoring and surveillance systems used by REEFVTS, assists with the proactive monitoring of a ship's transit through the Great Barrier Reef and Torres Strait.

3. Mariners are referred to *Marine Orders Part 56* for details of their obligations under REEFREP. This is available on the AMSA website at [www.amsa.gov.au](http://www.amsa.gov.au).

4. In December 2010, the International Maritime Organization approved a submission by Australia to extend the area covered by the Great Barrier Reef and Torres Strait Ship Reporting System (REEFREP) to the southern boundary of the Great Barrier Reef Marine Park. Marine Order Part 56 (REEFREP) has been amended to give effect to the new REEFREP area from the 1 July 2011.

### Purpose

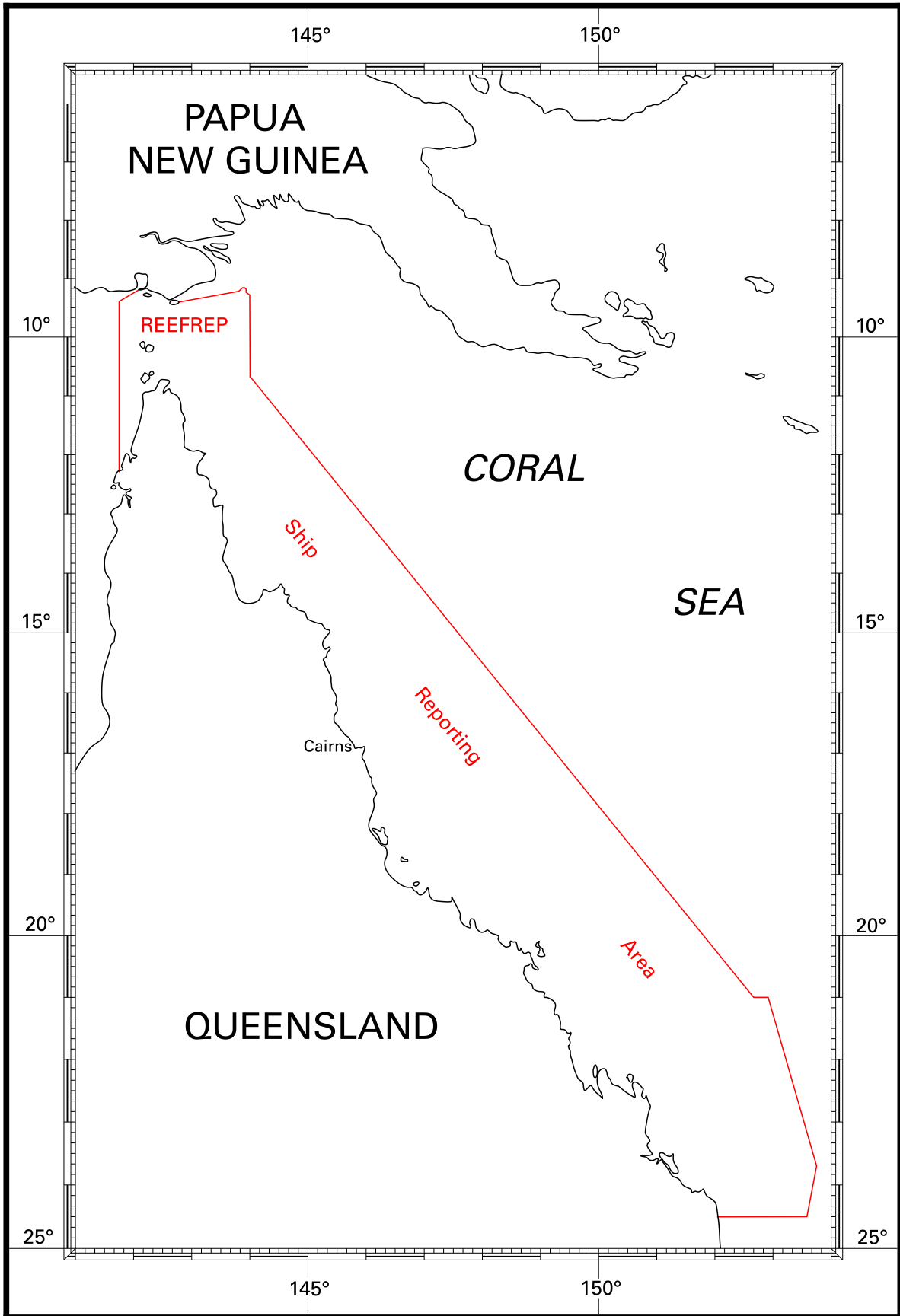
5. The Queensland and Australian Governments established the coastal Vessel Traffic Service REEFVTS in 2004. Its purpose is to:
- (a) enhance navigational safety in the Torres Strait and the Great Barrier Reef region by interacting with shipping to provide improved information on potential traffic conflicts and other navigational safety information;
  - (b) minimise the risk of a maritime accident and consequential ship sourced pollution and damage to the marine environment in the Torres Strait and Great Barrier Reef region, and
  - (c) provide an ability to respond more quickly in the event of any safety or pollution incident.
6. REEFVTS is comprised of four key components:
- (a) a mandatory Ship Reporting System (REEFREP), providing the reporting requirements for ships to identify themselves and their intended passage through the region.
  - (b) monitoring capabilities. REEFVTS utilises three sensor technologies to identify and monitor the transit of individual ships. The sensor inputs are Radar, Automatic Identification System (AIS) and Automated Position Reporting (APR) via Inmarsat-C.
  - (c) decision support tools. Systems are used to monitor the transits of individual ships and assist REEFVTS to determine where interaction may be necessary to assist on-board decision-making. This may include situations where a ship may be in danger of running aground, deviating from a recommended route or does not alter course at a critical waypoint.
  - (d) communication capabilities, primarily through the use of Inmarsat-C and VHF radio.

### Categories of ships

7. Ships of the following general categories are required to participate in the reporting system:
- (a) all ships of 50 metres or greater in overall length;
  - (b) all oil tankers;
  - (c) all liquefied gas carriers;
  - (d) all chemical tankers;
  - (e) all ships to which the INF Code applies;
  - (f) ships engaged in towing or pushing where the towing or pushing vessel or the towed or pushed vessel is a vessel prescribed within the categories in *sub-paras 7(a), 7(b), 7(c), 7(d) or 7(e)* or where the length of the tow, measured from the stern of the towing vessel to the after end of the tow, exceeds 150 metres.
8. For the purposes of the requirement at *sub-para 7(b)* "oil tanker" means:
- (a) a ship constructed or adapted primarily to carry oil in bulk as cargo; or
  - (b) a combination carrier when it is carrying oil in bulk as cargo; or
  - (c) a chemical tanker when it is carrying oil in bulk as cargo; or
  - (d) any other ship fitted with cargo spaces which are constructed and used to carry oil in bulk of an aggregate capacity of 200 cubic metres or more.

### Geographical Coverage.

9. The REEFVTS area is defined by:
- (a) the Torres Strait between longitude 141° 45' E and 144° 00' E, including the Endeavour Strait and the Great North East Channel; and
  - (b) the waters of the Great Barrier Reef between:
    - (i) the Australian coast; and
    - (ii) the outer edge of the Great Barrier Reef, as bounded by a line:
      - (A) starting from the outer edge of the Reef at latitude 10°40'.00 S, longitude 144°00' E; and
      - (B) then running south east to latitude 21° 00' S, longitude 152° 40' E; and
      - (C) then running east to latitude 21° 00' S, longitude 152° 55' E; and
      - (D) then running south south east to latitude 23°42'.00 S, longitude 153°45'.00 E; and
      - (E) then running south south west to latitude 24°30'.00 S, longitude 153°35'.00 E; and
      - (F) then running west to the intersection of latitude 24° 30'.00 S with the Australian coast at the low water line.
10. The area serviced by REEFVTS is the same area as defined for REEFREP (see chartlet *page 97*).
11. The Australian Hydrographic Office has produced charts of the area, Aus 4620 (INT 620), Aus 4621 (INT 621), Aus 4635 (INT 635) which provide details of REEFREP including coverage, categories of ships required to report and the reporting point positions with their associated VHF channel allocations. These charts are available through normal outlets.



### System Overview

12. REEFVTS is manned and operated 24 hours a day by personnel operating from the REEFVTS Centre, radio call identity “**REEFVTS**”, situated in Townsville.
13. REEFVTS provides both information services and navigational assistance services in the REEFVTS area. In summary, the services delivered include:
- (a) Ship Traffic Information (STI) - Ship encounters are predicted and this information is sent to individual ships as STI, usually through Inmarsat-C messaging.
  - (b) Maritime Safety Information (MSI) - Information that is relevant to the ships location and intended movement is provided.
  - (c) Navigational Assistance - REEFVTS may contact that ship, if there is information available to REEFVTS which may help on-board decision-making such as where the ship is heading into shallow water or deviating from a planned route.
14. REEFVTS may not know about all the hazards in the area. If a ship encounters any hazard that is not already included in Maritime Safety Information (for example, a faulty navigational aid) they should advise REEFVTS so they may pass that information on to other mariners.

### Ship Reporting Requirements

15. For further information regarding REEFVTS, reporting procedures including message format, communications arrangements and reporting points are detailed in the publication *REEFVTS User Guide*. Copies are available:
- (a) online at [www.amsa.gov.au](http://www.amsa.gov.au) or [www.msq.qld.gov.au](http://www.msq.qld.gov.au),
  - (b) hardcopies from any office of the Australian Maritime Safety Authority (AMSA), or
  - (c) may be requested by email - [reefvts@amsa.gov.au](mailto:reefvts@amsa.gov.au).

### Reports and Procedures

16. Mariners are reminded that a master of a ship to which Marine Orders 56 applies must make the following reports to REEFVTS:
- (a) Pre-Entry Position Report (PER)
  - (b) Entry Report (ER)
  - (c) Passage Plan Report (RP)
  - (d) Route Deviation Report (DR)
  - (e) Intermediate Position Reports (IP), if applicable
  - (f) Defect Reports (IR)
  - (g) Final Report (FR)

#### Pre-Entry Position report (PER)

17. A Pre-Entry position report must be made in respect of a ship at least two hours prior to:
- (a) entering the REEFVTS area; or
  - (b) departing from a port within REEFVTS area

18. The purpose of a pre-entry report is to advise REEFVTS of the ship intentions (eg. entry to the REEFVTS area) and take the necessary steps to ensure that the ship's Inmarsat-C terminal is operational when the vessel enters the region. The vessel's Inmarsat-C terminal is to be logged into the Pacific Ocean Region.

#### Entry Report (ER)

19. An Entry Report must be made in respect of a ship as soon as it:
- (a) enters the REEFVTS area; or
  - (b) departs from a port within REEFVTS area.

20. This report provides a ship's details, intentions and passage through REEFVTS area. Ships are encouraged to provide their passage plan when providing an Entry Report otherwise this is to be provided as a separate passage plan as described in *sub-para 22*.

#### Passage Plan

21. Route information must be provided by one or more of the following methods:
- (a) standard route plan, or
  - (b) mandatory reporting points, or
  - (c) waypoints.

22. More information on standard routes are described in the *REEFVTS User Guide*.

#### Route Deviation Report

23. If the ship deviates from the Passage Plan which was sent to REEFVTS, this information should be reported to REEFVTS before the deviation is made. However, in situations where a deviation is made without much warning, a report should be sent to REEFVTS as soon as possible.

24. The deviation is to be reported using one of Passage Plan Reports as described in *sub-para 22*.

**Intermediate Position Reports (PR)**

25. Where REEFVTS advises that the ship's position is being tracked by sensors then Intermediate Position Reports at the Mandatory Reporting Points are not required.

26. If the ship's position is not being tracked by sensors, then a brief position report must be given as advised by REEFVTS.

**Defect Report (DR)**

27. Reports must be provided without delay should a ship suffer damage, failure or breakdown which affects the safety of the ship.

28. Reports of pollution or cargo lost overboard must also be reported to REEFVTS without delay using lines Q and R, or special reports as defined by the IMO for incidents involving Dangerous Goods (DG), Harmful Substances (HS) or Marine Pollutants (MP).

**Final Report (FR)**

29. A Final Report must be made in respect of a ship:

- (a) exiting REEFVTS area; and
- (b) arriving at a port within the REEFVTS area.

**Communication with REEFVTS**

30. Communication with REEFVTS is in English. The IMO's Standard Marine Communication Phrases are to be used.

31. The means of communication with REEFVTS are:

- (a) Inmarsat-C – messages sent to REEFVTS using the special access code (SAC) 861 via POR LES 212.
- (b) VHF Radio – REEFVTS can be contacted using callsign "REEFVTS" 24 hours a day on either VHF Channel 11 or 14.
- (c) Alternate communications – telephone, fax, email.

32. If a ship's radio equipment fails and the ship cannot send the required reports to REEFVTS, the failure must be recorded in the ship's radio log book or the official log book.

**Inmarsat-C**

33. REEFVTS will pay the cost of messages sent by Inmarsat-C if the ship uses the special access code (SAC) 861 via POR LES 212. When setting up the Inmarsat-C address book, select either: ASCII or 7-bit or IA5 for data presentation or character code.

**VHF Radio**

34. A VHF radio network is available along the Queensland coast and Torres Strait for communication with REEFVTS. REEFVTS keeps a listening watch at all times on the VHF working Channels 11 and 14.

35. The VHF channels alternate through the REEFVTS area based on latitude:

Latitude from:	Latitude to:	VHF Channel
9° 00' S	13° 30' S	14
13° 30' S	18° 00' S	11
18° 00' S	20° 00' S	14
20° 00' S	22° 00' S	11
22° 00' S	24° 30' S	14

**Other Communications**

36. If for any reason a ship cannot communicate via Inmarsat-C or the VHF working channel, the ship must send the required information to REEFVTS in another way. The ship can use one of the following:

- (a) Telephone: 1300 721 293 or +61 7 4726 3428
- (b) Facsimile: +61 7 4721 0633
- (c) Email: reefvts@vtm.qld.gov.au

**AUSREP Reporting**

37. Ships participating in AUSREP ship reporting system do not have to report to RCC Australia while they are transiting the REEFVTS Area. REEFVTS automatically forwards regular position reports to RCC Australia. Ships participating in AUSREP will also continue to be polled while they are transiting the REEFVTS Area.

38. When a ship departs a port within the REEFVTS Area and intends to report to AUSREP when it exits the REEFVTS Area, the ship should send a Sailing Plan to RCC Australia no more than 2 hours after it has departed from the port.

39. When a ship departs the REEFVTS Area and is reporting to AUSREP, the Master should continue reporting directly to RCC Australia until the ship departs from the AUSREP area. Further information about reporting to AUSREP is provided in the AUSREP User Manual.

**Offences**

40. Any Master, or Officer of the Watch at the time, who fails to report in accordance with the REEFREP requirements, as specified in *Australian Marine Orders Part 56*, or who deliberately transmits information which is incorrect, false or misleading, will have committed an offence and may be fined if convicted.

Australian Maritime Safety Authority, Canberra. (AA539200, AA539201)

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**23. GREAT BARRIER REEF AND TORRES STRAIT PILOTAGE SERVICES**  
**Draught Limitation and Service Advice.**

1. Pilots undertaking pilotage duties in the Queensland Coast and Torres Strait areas are licensed by the Australian Maritime Safety Authority as required by the *Great Barrier Reef Marine Park Act 1975* for the declared compulsory pilotage areas.

2. Licensed pilots will pilot vessels through Gannet Passage, Varzin Passage, Prince of Wales Channel, and Torres Strait with a maximum draught up to 12.2 metres.

3. The minimum underkeel clearances are:

- (a) Gannet and Varzin Passages - 1.0 metre,
- (b) Prince of Wales Channel - 1.0 metre for vessels with a draught less than 11.90 metres or 10% of draught for draughts of 11.90 metres or more.

4. The draught limitation of 12.2 metres applies only to vessels transiting the Great Barrier Reef Inner Route from Torres Strait (Booby Island) to Cape Flattery or through the Great North East Channel to Dalrymple Island.

5. Vessels entering or leaving the Inner Route by way of Grafton, Palm and Hydrographers Passages are restricted only by any draught limitation at the Australian port of arrival or departure.

**Pilotage Services and Arrangements**

6. Pilotage services in the Torres Strait (including the Great North East Channel) and the Great Barrier Reef are provided by three commercial companies, these are:

- (a) Australian Reef Pilots Pty Ltd "**Reef Pilots**".
- (b) Torres Pilots Pty Ltd "**Torres Pilots**".
- (c) Hydro Pilots Australia Pty Ltd "**Hydro Pilots Helicopter**" (Hydrographers Passage only).

7. Masters are to ensure that pilot ladders and pilotage boarding arrangements comply strictly with current SOLAS regulations, *Australian Marine Orders Part 23* and the requirements of the International Maritime Pilots Association. A line will be required to lift aboard the pilot's luggage and equipment (usually two items).

8. Boarding by helicopter is used as an alternative to launch services at some pilot boarding places (PBP) and is the only method used for Hydrographers Passage. Boarding by helo, when used, is by land-on only. Masters should consult *Marine Orders Part 57* and the *Australian Code of Safe Practice for Ship Helicopter Transfers* or the *International Chamber of Shipping's Guide to Helicopter/Ship Operations* and confirm that the vessel is suitable for a land-on operation when ordering a Pilot at a boarding place where this method is an option.

**Australian Reef Pilots Pty Ltd Contact and Boarding Arrangements**

9. Pilotage contacts are:
- |                               |          |                                |
|-------------------------------|----------|--------------------------------|
| Brisbane Head Office          | Telex:   | (UK) 51 94076260 ARPB G        |
|                               | Fax      | +61 (0)7 3666 4040             |
|                               | Phone    | +61 (0)7 3666 4000             |
|                               | Mobile   | +61 (0)413 878 792 (all hours) |
|                               | Email    | operations@reefpilots.com.au   |
|                               | Internet | www.reefpilots.com.au          |
|                               | Postal   | GPO Box 826 Brisbane QLD 4001  |
| Mackay Pilot Station          | Telex:   | (UK) 51 94076257 ARPM G        |
|                               | Phone    | +61 (0)7 4957 4877             |
|                               | Email    | arpmky@reefpilots.com.au       |
| Cairns Pilot Station          | Telex:   | (UK) 51 94076258 ARPC G        |
|                               | Phone    | +61 (0)7 4055 8311             |
|                               | Email    | arpcns@reefpilots.com.au       |
| Thursday Island Pilot Station | Telex    | (UK) 51 94076256 ARPT G        |
|                               | Phone    | +61 (0)7 4069 1570             |
|                               | Email    | arptis@reefpilots.com.au       |

VHF callsign for all areas: "REEFPILOTS"

**Ordering a Pilot****TORRES STRAIT (INCLUDING THE GNE CHANNEL) AND THE INNER ROUTE**

10. Inbound. Contact Reef Pilots Brisbane five days before arrival, advising the IMO number, call sign, boarding place, ETA (UTC+10 hours), deepest draught, sea speed and destination. All messages will be acknowledged by Reef Pilots Brisbane, together with advice on ETA update requirements.

11. Outbound. Arrange directly with Reef Pilots Brisbane or through the ship's agent.

12. Boarding at Queensland, New South Wales, Northern Territory or Papua New Guinea ports is possible depending on pilot availability and logistics, or at any of the following pilot boarding places:

Location	Position	VHF Ch	Method
Cairns (Yorkeys Knob)	16° 44'.0 S 145° 45'.0 E	20	Launch or Helo
Torres Strait (Goods Island)	10° 34'.0 S 142° 04'.0 E	20	Launch or Helo
Torres Strait (Booby Island)	10° 36'.3 S 141° 49'.8 EE	20	Launch or Helo
GNE Channel (Dalrymple Island)	9° 34'.0 S 143° 24'.5 E	20	Launch

**HYDROGRAPHERS PASSAGE**

13. Inbound. Pilot boarding place is at Blossom Bank 19° 43'.6 S 150° 25'.9 E. Pilots board by land-on helicopter only. Pilots are ordered by contacting the Brisbane office five days before arrival advising ETA (UTC+10) at the PBP and confirming that the ship is suitable for a land-on helicopter. The Reef Pilot helicopter will call on VHF Ch 16 thirty to forty minutes before the given ETA, changing to Ch 9 to give advice on the boarding procedures.

14. Outbound. Arrange with the Brisbane office direct or through the ship's agent at Hay Point.

**Torres Pilots Pty Ltd Contact and Boarding Arrangements**

15. Pilotage contacts are:
- |                                |          |                                                      |
|--------------------------------|----------|------------------------------------------------------|
| Brisbane Head Office           | Email    | operations@torrespilots.com.au                       |
|                                | Fax      | +61 (0)7 3217 9722                                   |
|                                | Phone    | +61 (0)7 3217 9544                                   |
|                                | Internet | www.torrespilots.com.au                              |
|                                | Postal   | PO Box 674 Bulimba QLD 4171                          |
| Thursday Island Pilot Station  | Phone    | +61 (0)7 4069 2251                                   |
|                                | Fax      | +61 (0)7 4069 2252                                   |
|                                | Email    | torresti@bigpond.com                                 |
| Dalrymple Island Pilot Station | Phone    | +61 (0)7 4090 0666                                   |
|                                | Fax      | +61 (0)7 4069 4188                                   |
|                                | Email    | torrescoconut@torrespilots.com.au                    |
|                                |          | or contact through the Thursday Island Pilot Station |
| Mackay Pilot Base              | Phone    | +61 (0)7 4944 0455                                   |
|                                | Fax      | +61 (0)7 4944 0755                                   |
| Email                          |          | torres@avta.com.au                                   |

VHF Call sign for all areas: "TORRES PILOTS"

**Ordering a Pilot****TORRES STRAIT (INCLUDING THE GNE CHANNEL) AND THE INNER ROUTE**

16. Inbound. Contact TORRES PILOTS Brisbane office four to five days (if possible) before arrival advising the IMO Number, Call Sign and initial ETA at the pilot boarding place (UTC + 10 hours), maximum draught, sea speed, destination and pilot disembarkation point if different from the destination. All initial pilot orders will be acknowledged by Torres Pilots Brisbane office.

17. Outbound. Arrange by direct contact with the Brisbane office or through the ship's agent.

18. Boarding of pilots is arranged by request to the Torres Pilots Brisbane offices. GBR pilots are licensed for the following pilot boarding places (PBPs):

<i>Location</i>	<i>Position</i>	<i>VHF Ch</i>	<i>Method</i>
Cairns (Cairns Fairway)	16° 47'.0 S 145° 53'.0 E	79	Launch
Grafton Passage (Euston Reef)	16° 39'.0 S 146° 14'.0 E	79	Launch
Torres Strait (Goods Island)	10° 34'.0 S 142° 04'.0 E	79	Launch
Torres Strait (Booby Island)	10° 36'.3 S 141° 49'.8 E	79	Launch
GNE Channel (Dalrymple Island)	9° 34'.0 S 143° 24'.5 E	79	Launch

\* Boarding of a pilot at Grafton Passage (Euston Reef) which is non compulsory may be arranged by request to Torres Pilots Brisbane office.

**ETA Updates**

19. Vessels should update their ETA at the Booby Island, Goods Island or Dalrymple Island PBP to the Thursday Island Pilot Station 72, 48, 24 and 12 hours before arrival.

20. Vessels should update their ETA at the Cairns Fairway PBG to the Brisbane office 72, 48, 24 and 12 hours before arrival.

**HYDROGRAPHERS PASSAGE**

21. Inbound. Pilot boarding place is at Blossom Bank 19° 43'.6S 150° 25'.9 E. Pilots board by land-on helicopter only. Pilots are ordered by contacting Torres Pilots Brisbane office four to five days before arrival advising and confirming that the ship is suitable for a land-on helicopter. Vessels should update their ETA at the Blossom Bank PBP 72, 48, 24 and 6 hours before arrival to Mackay Pilot base on fax +61 (0) 7 4944 0755 or email torres@avta.com.au.

22. Outbound. Arrange through Torres Pilots Brisbane office or with ship's agent.

**Hydro Pilots Australia Pty Ltd Contact and Boarding Arrangements**

23. Hydro Pilots specialise in providing pilotage services for Hydrographers Passage.

24. Pilotage contact:  
Mackay Office

Telex	AA48105 (answer back HPILOT)
Fax	+61 (0)7 4944 0755
Phone	+61 (0)7 4944 0455
Email	hydropilots@hydropilots.com.au
Postal	PO Box 4018 South Mackay Qld 4740
VHF Callsign	Hydro Pilots Helicopter

**Ordering a Pilot**

25. Inbound. Vessels requiring pilots should contact agents and ask for Hydro Pilots Australia Pty Ltd and give four to five days notice to the Mackay Office advising ETA (UTC+10) at the Blossom Bank Pilot Boarding Place, 19° 43'.6 S 150° 25'.9 E, maximum draught, destination, and confirming that the ship is suitable for land-on helicopter. Vessels should confirm their ETA 48, 24, 12, and 6 hours before arrival by telex, fax or e-mail.

26. Outbound. Arrange through the Mackay office or through the ship's agent advising ETD, departure point, destination, and confirming suitability for land-on helicopter.

## 24. DUMPING WASTE AT SEA

1. The *Environment Protection (Sea Dumping) Act 1981* applies to Australian Flag vessels and Australian aircraft anywhere at sea and to all vessels, aircraft or platforms within Australian waters. For the purposes of *the Act*, Australian waters includes the Australian Exclusive Economic Zone. *The Act* regulates both loading and deliberate disposal of all matter into the sea from vessels, aircraft or platforms. It does not apply to wastes arising from the "normal operation" of vessels, aircraft or platforms. Operational discharges from ships come under the control of legislation which implements MARPOL (the International Convention for the Prevention of Pollution from Ships).

2. *The Act*, which came into operation on 6 March 1984 establishes a legal regime by which Australia is able to give effect to the international convention for the Prevention of Marine Pollution by the Dumping of Wastes and Other Matter 1972, generally known as the London Convention (LC), and, since 16 August 2000, the 1996 Protocol of the London Convention.

3. Applications for permission to dump materials at sea should be made on the approved form. Provision is made for the assessment and for the stipulation of precautions and conditions to be observed.

4. If wastes are loaded, dumped or incinerated otherwise than in accordance with a permit, significant penalties apply. These refer not only to the owner of the wastes but also to the owners(s) of the vessel and to the person in charge of the vessel.

5. Masters of vessels are advised to satisfy themselves prior to the loading of wastes or other material intended for dumping or incineration, that appropriate permits have been issued by the responsible Minister under *the Act*.

6. Queries on the application of *the Act*, requests for information or applications for dumping permits should be directed to:

Director  
Approvals and Audit Section  
Department of the Environment and Heritage  
GPO Box 787,  
CANBERRA ACT 2601  
Telephone +61 (0)2 6274 2128  
Facsimile +61 (0)2 6274 1620

7. Signals can be passed via AusSAR through any Maritime Communications Station.

Department of the Environment and Heritage.

(AH 98/312)

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## 25. REQUIREMENTS FOR REPORTING POLLUTION INCIDENTS.

1. *The International Convention for the Prevention of Pollution from Ships (MARPOL)* entered into force for Australia on 14 January 1988. Protocol I of the Convention contains comprehensive requirements and recommendations for ship reporting of incidents involving harmful substances. The purpose of these new reporting obligations and guidelines is to enable the Australian Maritime Safety Authority to be informed quickly and more accurately about actual or potential accidental spillages or cargo losses as well as illegal discharges so that immediate action may be taken.

2. Reports must be made when an incident involves:

(a) A discharge or probable discharge of oil, or noxious liquid substances carried in bulk, resulting from damage to the ship or its equipment, or for the purpose of securing the safety of a ship or saving life at sea (Harmful Substances Report);

(b) A discharge or probable discharge of harmful substances in packaged form, including those in freight containers, portable tanks, road and rail vehicles and ship borne barges (Marine Pollutants Report);

(c) Damage, failure or breakdown of a ship of 15 metres in length or above which:

- (i) affects the safety of the ship; including but not limited to collision, grounding, fire, explosion, structural failure, flooding, and cargo shifting; or
- (ii) results in impairment of the safety of navigation; including but not limited to, failure or breakdown of steering gear, propulsion plant, electrical generating system, and essential shipborne navigational aids; or

(d) A discharge during the operation of the ship of oil or noxious liquid substances in excess of the quantity or instantaneous rate permitted under the present Convention.

3. These measures seek to ensure early notification of pollution or threat of pollution. The deciding factor in initiating a report is not so much the distance from the coastline (as in the past) as the possibility of harm to the coastline or territorial sea of a country. Consequently, Australian vessels trading overseas should be aware that a POLREP must be made direct to the Government of any country affected or likely to be affected by a pollution incident.

4. For incidents affecting or likely to affect Australian interests reports should continue to be made to the General Manager, Maritime Operations in the Australian Maritime Safety Authority through the AusSAR.

#### **Pollution Report**

5. POLREP to the General Manager, Maritime Operations in the Authority, Canberra:

#### **HARMFUL SUBSTANCES REPORT (oil and noxious liquid substances)**

##### **Sections of the ship report format which are inappropriate should be omitted from the report**

A. Ship: name, call sign/ship station identity and flag

B. Date and time of event

C. Position: latitude and longitude or

D. Position: true bearing and distance

E. True Course

F. Speed in knots and tenths of knots

L. Route information: intended track

M. Radio communications: full names of stations

N. Time of next report

P.\*\*

1. Type of oil or noxious liquid substances on board

2. UN number(s)

3. Pollution category (X,Y or Z) for noxious liquid substances

4. Names of manufacturers of substances or consignee or consignor

5. Quantity

Q.

1. Condition of the ship, as relevant

2. Ability to transfer cargo/ballast/fuel

R.

1. Type of oil or the correct technical name of the noxious liquid discharged into the sea

2. UN number(s)

3. Pollution category (X,Y or Z) for noxious liquid substances

4. Names of manufacturers of substances or consignee or consignor

5. An estimate of the quantity of substances

6. Whether lost substances floated or sank

7. Whether loss is continuing

8. Cause of loss

9. Estimate of the movement of the discharge or lost substances giving current conditions if known

10. Estimate of the surface area of the spill

S.

Weather conditions

T.

Name, address and telephone number of the ship's owner and representative

U.

Ship size and type

X.

1. Actions being taken with regard to the discharge and movement of the ship

2. Assistance or salvage efforts which have been requested or which have been provided by others

3. The master of an assisting or salvaging ship should report the particulars of the action undertaken or planned

\*\* In the case of a probable discharge only

#### **MARINE POLLUTANTS REPORT (harmful substances in packaged form)**

A. Ship: name, call sign/ship station identity and flag

B. Date and time of event

C. Position: latitude and longitude or

D. Position: true bearing and distance

M. Radio communications: full names of stations

P\*\*

1. Correct technical name or names of goods

2. UN number(s)

3. IMO hazard class(s)

4. Names of manufactures of substances or consignee or consignor.

5. Types of packages including identification marks (specify whether portable tank, freight container or other, include official registration marks and numbers assigned to the unit)

6. An estimate of the quantity and likely condition of goods

- Q.
1. Condition of the ship
  2. Ability to transfer cargo/ballast/fuel
- R.
1. Correct technical name or names of goods
  2. UN number(s)
  3. IMO hazard class(s)
  4. Names of manufacturers of goods or consignee or consignor
  5. Types of packages including identification marks (specify whether portable tank, freight container or other, include official registration marks and numbers assigned to the unit)
  6. An estimate of the quantity and conditions of goods
  7. Whether lost goods floated or sank
  8. Whether loss is continuing
  9. Cause of loss
- S. Weather conditions.
- T. Name, address and telephone number of the ship's owner and representative.
- U. Ship size and type
- X.
1. Action being taken with regard to the discharge and movement of the ship
  2. Assistance or salvage efforts which have been requested or which have been provided by others
  3. The master of an assisting or salvaging ship should report the particulars of the action undertaken or planned

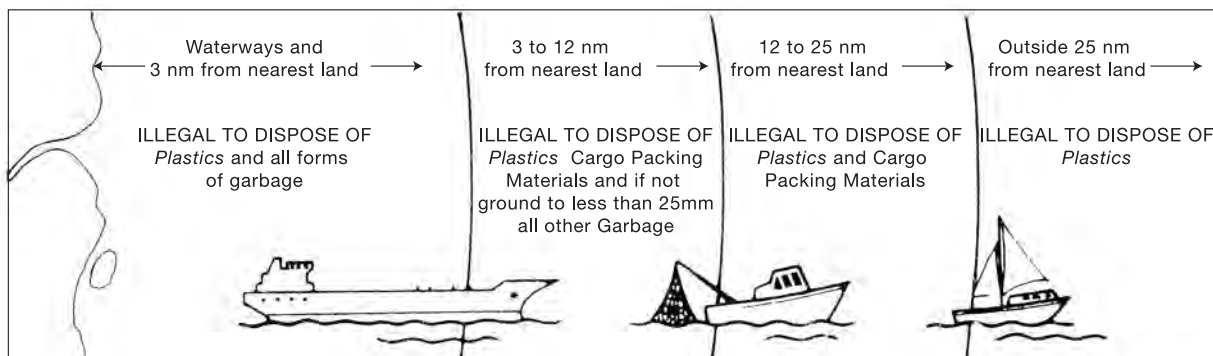
\*\* In the case of a probable discharge only

Australian Maritime Safety Authority, Canberra

(AA566093)

## 26. DISPOSAL OF GARBAGE AT SEA.

1. *The Protection of the Sea (Prevention of Pollution from Ships) Act 1983* implements the International Convention for the Prevention of Pollution from Ships (*MARPOL*). *Annex V of MARPOL* regulates the disposal of operational garbage from ships and it applies to Australian Flag vessels anywhere and to all vessels within Australian waters.
2. *Annex V of MARPOL* is in force internationally and came into force for Australia on 14 November 1990.
3. The attention of all mariners is drawn to the regulations for disposal of garbage:
  - (a) Disposal of any plastic garbage into the sea, including synthetic fishing nets, rope, plastic bags is prohibited.
  - (b) Food waste and all other garbage (including paper products, rags, glass, metal, bottles and crockery) cannot be discharged within 12 nautical miles of land unless they have first been passed through a grinder or communiter so as to be capable of passing through a screen with openings no greater than 25 millimetres square. Even when this reduction in particle size has been achieved the minimum distance from land beyond which disposal is permitted is set at three (3) nautical miles.
  - (c) Dunnage, lining and packing materials which float can only be disposed of at sea more than 25 nautical miles from land.
  - (d) the discharge of cargo residues through deck and hold washing cannot occur less than twelve nautical miles from the nearest land.



4. Despite these permitted discharges, it is preferable that all waste is returned to shore based facilities.
5. The attention of all mariners is drawn to the special protection measures under *MARPOL 73/78* for the Great Barrier Reef region. The outer edge of the reef is defined as "nearest land" therefore prohibiting the disposal of all garbage within the Great Barrier Reef area and Torres Strait.
6. Ships of 400 tonnes and above and ships certified to carry 15 persons or more are required to have a garbage management plan and to maintain a Garbage Record Book.
7. Queries on the application of the *Act*, requests for information, reports of inadequate port reception facilities or reports of garbage pollution should be directed to:

Environment Protection Standards  
 Australian Maritime Safety Authority  
 GPO Box 2181  
 Canberra City ACT 2616

Telephone +61 (0)2 6279 5040  
 Facsimile +61 (0)2 6279 5966

8. Signals can be passed via AusSAR through any Maritime Communication Station.

Australian Maritime Safety Authority, Canberra.

(AA566093)

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## 27. GENERAL NOTICE

1. Notices to Mariners which have been withdrawn from this publication have been incorporated in the Australian Seafarers Handbook (AHP 20). However, some references to these Notices may exist in other Nautical Publications; where this is the case information relating to the withdrawn Notices should be sought from AHP20.
2. It is anticipated that new editions of the affected Nautical Publications will be published by 2010.

Australian Hydrographic Service

(AA223184)

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**TEMPORARY AND PRELIMINARY NOTICES**  
In force on 1 January 2012

**NEW SOUTH WALES**

**317(T)/2006 AUSTRALIA - NEW SOUTH WALES - Batemans Bay - Shoaling; buoy.**  
Maritime Authority NSW (A187776, A187777)

Shoaling, marked by a special spar buoy, exists inside and to the east of the entrance of the marina, in vicinity of 35° 42'.88 S 150° 11'.39 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 191.**

**1113(T)/2009 AUSTRALIA - NEW SOUTH WALES - Botany Bay - Harbour works**  
Date - Until 31 March 2011  
NSW Maritime Notice SU0807 (AA430317)

Works associated with the expansion of the container terminal at Brotherson Dock are in progress north of a line between positions 33° 58'.43 S 151° 11'.66 E and 33° 58'.19 S 151° 12'.47 E, marked by a silt curtain and special light buoys.

A designated gate marked by port and starboard lateral buoys exist at the western end of the silt curtain.

Access to Penrhyn boat ramp is via 30m wide navigation channel through the works area, marked by special light buoys.

A maximum speed limit of 8 knots applies to all vessels and wash kept to minimum. Anchoring of and drifting by recreational vessels is prohibited. Vessel operators must not enter the works area from the temporary navigation channel and vessels must keep well clear of any service craft, equipment and the actual construction area.

Scientific instruments marked by special light buoys exist in the following positions:

33° 58'.60 S 151° 11'.15 E  
33° 57'.82 S 151° 10'.30 E  
33° 58'.38 S 151° 11'.88 E  
33° 58'.35 S 151° 12'.15 E  
33° 57'.25 S 151° 11'.55 E  
33° 57'.37 S 151° 11'.63 E  
33° 57'.45 S 151° 11'.82 E

For further information visit [www.maritime.nsw.gov.au](http://www.maritime.nsw.gov.au).

**Chart temporarily affected – Aus 198 – Aus 199 - AU5198X9**

**847(T)/2010 AUSTRALIA - NEW SOUTH WALES - Hastings River - Port Macquarie - Light discontinued**  
Former Notice - 50(T)/2010 is cancelled  
NSW Maritime (AA483333)

The light (31° 25'.61 S 152° 54'.87 E) has been temporarily discontinued and will be replaced with a new sector light.

**Chart temporarily affected - Aus 219 - Aus 219 - AU5219P3**

**1318(T)/2010 AUSTRALIA - NEW SOUTH WALES - Broken Bay - Barrenjoey Head - Light range reduced**  
NSW Maritime (AA506509)

The light (33° 34'.82 S 151° 19'.79 E) has been temporarily altered to *Fl(4)20s 113m 12M*.

**Chart temporarily affected - Aus 197 - Aus 204 - Aus 215 - Aus 424 - Aus 489 - Aus 809 - AX 0809E - AX 67215 - Aus 4643**

**201(T)/2011 AUSTRALIA - NEW SOUTH WALES - Newcastle - Harbour works; dredging operations**  
Date - Until 31 January 2012  
Newcastle Port Corporation (AA517200)

Works associated with the construction of berth K7 are in progress (32° 53'.17 S 151° 45'.73 E).

Dredging operations are in progress between 32° 53'.15 S 151° 45'.33 E and 32° 53'.42 S 151° 45'.85 E.

**Chart temporarily affected - Aus 207 - Aus 208**

**258(T)/2011 AUSTRALIA - NEW SOUTH WALES - Green Cape to Ballina Head - Scientific instruments***Former Notice - 708(T)/2008 is cancelled*

Manly Hydraulics Laboratory (AA520737 - AA520739)

Special light buoys, *F(5)Y.20s*, exist in positions:

28° 51'.2 S 153° 42'.1 E  
 30° 21'.7 S 153° 16'.2 E  
 31° 49'.5 S 152° 51'.6 E  
 33° 46'.1 S 151° 24'.7 E  
 34° 28'.5 S 151° 01'.6 E  
 35° 42'.2 S 150° 20'.6 E  
 37° 18'.1 S 150° 11'.1 E

Mariners are not to use these buoys as moorings.

**Chart temporarily affected – Aus 195 – Aus 197 – Aus 806 – Aus 807 – Aus 808 – Aus 809 – Aus 810 – Aus 811 – Aus 812 – Aus 813 – AX 0808E – AX 0809E****410(T)/2011 AUSTRALIA - NEW SOUTH WALES - Port Kembla - Spoil ground**

Port Kembla Port Corporation Notice 2/2011 (AA528983)

A spoil ground marked by six lit special buoys exists in the vicinity of position 34° 28'.33 S 150° 54'.57 E.

**Chart temporarily affected - Aus 194 - Aus 195****514(T)/2011 AUSTRALIA - NEW SOUTH WALES - Port Kembla - Depth information***Former Notice - 157(T)/2011 is cancelled*

Port Kembla Port Corporation Notice 3/2011 (AA533657)

Available depths as at 13 May 2011:

<i>Berth</i>	<i>Metres</i>	<i>Remarks</i>
Inner Harbour	15.1	
North West Basin	11.2	
101	11.3	
102	15.7	
103	11.7	
104	15.3	
105	15.2	(14.8 for vessels overhanging)
106	13.7	
107	12.1	
108	-	Future Development
109	11.8	
110	10.7	(9.0)
111	15.4	
112	12.8	
* 113	11.0	west of chainage 5m
	10.5	east of 5m chainage to eastern end of berthing box
201	10.3	To 250m
201	9.3	To 280m
201	9.0	To 350m
202	10.5	
202	10.4	
202	10.2	
203	10.1	
204	4.2	
205	6.8	
206	11.1	

\* Indicates new or revised entry.

**Chart temporarily affected - Aus 194**

**748(T)/2011 AUSTRALIA - NEW SOUTH WALES - Cape Baily to Ben Buckler - Scientific instruments***Former Notice - 49(T)/2010 is cancelled**Date - Until 30 June 2013*

Sydney Institute of Marine Science (AA375220, AA420046, AA545275)

Subsea moorings (25 metres below the surface) exist in positions as follows:

33° 53'.76 S 151° 17'.30 E	33° 53'.99 S 151° 17'.30 E
33° 54'.23 S 151° 17'.72 E	33° 54'.51 S 151° 18'.14 E
33° 54'.76 S 151° 18'.56 E	33° 55'.02 S 151° 19'.01 E
33° 55'.28 S 151° 19'.45 E	33° 55'.54 S 151° 19'.89 E
33° 55'.80 S 151° 20'.31 E	33° 56'.06 S 151° 21'.17 E
33° 56'.32 S 151° 22'.61 E	33° 56'.60 S 151° 22'.06 E
33° 56'.85 S 151° 22'.50 E	33° 57'.12 S 151° 22'.95 E
33° 57'.40 S 151° 23'.39 E	33° 57'.91 S 151° 24'.25 E
33° 58'.65 S 151° 23'.84 E	33° 58'.20 S 151° 24'.64 E
33° 58'.49 S 151° 25'.08 E	33° 58'.77 S 151° 25'.57 E
33° 59'.08 S 151° 26'.06 E	33° 59'.33 S 151° 26'.47 E
33° 59'.97 S 151° 27'.33 E	34° 00'.21 S 151° 27'.85 E
34° 00'.48 S 151° 28'.27 E	34° 00'.77 S 151° 28'.74 E
34° 01'.33 S 151° 29'.16 E	34° 01'.31 S 151° 29'.63 E.
34° 01'.59 S 151° 30'.08 E	

**Chart temporarily affected - Aus 197 - Aus 808 - Aus 809 - AX 0808E - AX 0809E****750(T)/2011 AUSTRALIA - NEW SOUTH WALES - Manly - Scientific instruments***Former Notice - 1009(T)/2009 is cancelled**Date - Until 30 June 2013*

University of Sydney Institute of Marine Science (AA353372, AA353373, AA424523, AA545275)

Subsurface scientific instruments exist in positions:

33° 48'.03 S 151° 18'.03 E
33° 47'.98 S 151° 17'.65 E
33° 47'.99 S 151° 17'.73 E
33° 47'.92 S 151° 17'.61 E
33° 47'.93 S 151° 17'.69 E.

**Chart temporarily affected - Aus 197 - Aus 200 - Aus 201 - AX 6201F - AX 63200****808(T)/2011 AUSTRALIA - NEW SOUTH WALES - Wamberal - Scientific instrument***Date - Until 31 January 2012*

Department of Finance and Services (AA549557, AA549558)

A special spherical light buoy, *Fl(5)Y.20s*, exists in position 33° 25'.93 S 151° 27'.12 E.**Chart temporarily affected – Aus 204****864(T)/2011 AUSTRALIA - NEW SOUTH WALES - Port Kembla - Obstruction**

Port Kembla Port Corporation Notice 9/2011 (AA551936)

A silt curtain, marked by special light buoys *Q.Y*, exists in the outer harbour between the following positions:

34° 28'.18 S 150° 54'.15 E
34° 28'.15 S 150° 54'.27 E
34° 28'.47 S 150° 54'.33 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus194 - Aus195**

**1139(T)/2011 AUSTRALIA - NEW SOUTH WALES - Botany Bay - Harbour works**

Date - Until 30 November 2012

Sydney Ports Corporation (AA562429)

Harbour works associated with the construction of Bulk Liquids berth 2 are in progress in an area bounded by the HWL and special light buoys, *Fl. Y. 5s*, in the following positions:

33° 58'.84 S 151° 12'.57 E	33° 58'.83 S 151° 12'.53 E
33° 58'.79 S 151° 12'.53 E	33° 58'.75 S 151° 12'.52 E
33° 58'.70 S 151° 12'.53 E	33° 58'.67 S 151° 12'.53 E
33° 58'.62 S 151° 12'.55 E	33° 58'.58 S 151° 12'.55 E
33° 58'.54 S 151° 12'.59 E	33° 58'.52 S 151° 12'.61 E
33° 58'.50 S 151° 12'.67 E.	

The area is restricted and only vessels involved in the works are authorised access.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 198 – Aus 199****1141(P)/2011 AUSTRALIA - NEW SOUTH WALES - Newcastle - Infrastructure; nav aids**

Former Notice - 515(T)/2011 is cancelled

Newcastle Port Corporation (AA562730, AA562731)

The new channel widening into Kooragang berths 8 and 9 has been completed. The channel is marked by the following nav aids:

<i>Position</i>	<i>Characteristic</i>
32° 52'.500 S 151° 44'.311 E	<i>F.G 19m 13M</i>
32° 52'.228 S 151° 43'.831 E	<i>F.G 33m 13M</i>
32° 52'.491 S 151° 44'.318 E	<i>F.R 19m 13M</i>
32° 52'.219 S 151° 43'.838 E	<i>F.R 33m 13M</i>
32° 53'.690 S 151° 46'.412 E	<i>F.G 30m 13M</i>
32° 53'.869 S 151° 46'.728 E	<i>F.G 38m 13M</i>
32° 53'.829 S 151° 46'.203 E	<i>Fl.R.3s No8</i>
32° 53'.698 S 151° 46'.132 E	<i>Fl.R.3s No10</i>
32° 53'.436 S 151° 45'.860 E	<i>Fl.R.3s No12</i>
32° 53'.273 S 151° 45'.573 E	<i>Fl.R.3s No14</i>
32° 53'.103 S 151° 45'.272 E	<i>Fl.R.3s No16</i>
32° 52'.965 S 151° 45'.120 E	<i>Fl.R.3s No18.</i>

The light *Dir WRG* (32° 53'.77 S 151° 46'.41 E) has been discontinued.

A diagram showing the changes is attached. New editions of Aus 208 and ENC Cell AU5XX208 will be published shortly.

**Chart which will be affected - Aus 207 - Aus 208****1197(T)/2011 AUSTRALIA - NEW SOUTH WALES - Newcastle - Hunter River - Dredging operations**

Date - Until 31 August 2012

Aurecon Hatch (AA567790, AA567982)

The dredge *Machiavellie* is conducting dredging operations in the area south of line 32° 52'.78 S 151° 44'.41 E to 32° 52'.63 S 151° 44'.40 E and north of line 32° 53'.37 S 151° 45'.66 E to 32° 53'.18 S 151° 45'.77 E.

A 30m exclusion zone exists around all vessels and equipment involved in the operations.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 207 - Aus 208**

**1264(T)/2011 AUSTRALIA - NEW SOUTH WALES - Newcastle - Depth information**

*Former Notice - 1196(T)/2011 is cancelled  
Newcastle Port Corporation (AA569986)*

Available depths as at 30 November 2011:

<i>Berth</i>	<i>Metres</i>
* Western Basin 3	11.3
* Western Basin 4	11.3
Eastern Basin 1	11.3
Eastern Basin 2 North of Ch 450	11.6
Eastern Basin 2 South of Ch 450	11.0
Channel Berth	8.3
Dyke 1	12.5
Dyke 2	12.8
* Dyke 4	16.5
* Dyke 5	16.5
Dyke 6	6.3
Mayfield 4 Ch 27 to 266	12.2
* BHP Wharf 6 to Ch 1050	7.3
Kooragang 2	11.4
Kooragang 2 North Dolphin Ch 182 to 228	11.1
Kooragang 2 South Dolphin Ch -92 to 00	10.9
Kooragang 3	13.0
* Kooragang 4	16.3
* Kooragang 5	16.0
Kooragang 6	16.5
Kooragang 8	16.5
Kooragang 9	16.5
Kooragang Ship Reveal KSR	7.5
Throsby 1	8.4
Carrington Wharf	To be sounded as and when required
Foreshore Park Berth	5.9
Elgo Wharf	To be sounded as and when required
<i>Channels</i>	
Entrance Approach	17.7
Entrance Channel (18.0m)	18.0
Entrance Channel (17.4m)	17.4
Entrance Channel (16.8m)	16.8
Entrance Channel (16.2m)	16.2
Entrance Channel to Horseshoe	15.2
Horseshoe	15.0
Steelworks Channel to Swinging Basin	15.0
Swinging Basin	15.0
Hunter River South Arm (Kooragang 6 to Kooragang 9)	15.2
Basin Cutting	12.8
Basin Area to Eastern & Western Basin Berths	12.3
Basin Area to 1 Throsby	10.0
Stockton Crossing	3.6
* Indicates revised entry.	

**Chart temporarily affected - Aus 207 - Aus 208****1317(T)/2011 AUSTRALIA - NEW SOUTH WALES - Port Hacking - Hungry Point to Gogerlys Point - Shoaling**  
NSW Maritime Notice SU1110/2011 (AA12869)

Shoaling exists between Hungry Point (34° 04'.40 S 151° 08'.88 E) and Gogerlys Point (34° 04'.30 S 151° 06'.36 E).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 198**

**1318(T)/2011 AUSTRALIA - NEW SOUTH WALES - Botany Bay - Georges River - Taren Point - Harbour works**

*Date - Until 31 March 2012*

NSW Maritime Notice SU1109/2011 (AA572351)

Maintenance works on Captain Cook Bridge are in progress (34° 00'.45 S 151° 07'.65 E).

Only the centre span of the bridge will remain open to vessels and the two spans closed to vessels will be marked by lights and shapes. Special light buoys exist 150m upstream and downstream of the affected spans of the bridge.

The barge will display appropriate lights and shapes.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 198**

**1319(T)/2011 AUSTRALIA - NEW SOUTH WALES - Port Jackson - Sow and Pigs - Beacon destroyed**

Roads and Maritime Services NSW (AA572337)

The north cardinal beacon (33° 50'.16 S 151° 16'.21E) has been destroyed; a north cardinal buoy exists in situ.

**Chart temporarily affected – Aus 200 – Aus 201 – AX 6201F**

## QUEENSLAND

**1090(T)/2006 AUSTRALIA - QUEENSLAND - Brisbane River - Quarries Reach - Lights altered.**  
Maritime Safety Queensland Notice 625(T)/2006 (A209852).

The lights K2873.3 (27° 26'.59 S 153° 06'.65 E) and K2873.31 (27° 26'.48 S 153° 07'.15 E) are altered to *F.Bu* (*F.Y day*).

The lights K2873.5 (27° 26'.62 S 153° 06'.60 E) and K2873.51 (27° 26'.60 S 153° 06'.70 E) are altered to *F.R* (*F.Y day*).

**Chart temporarily affected - Aus 238.**

**1244(T)/2006 AUSTRALIA - QUEENSLAND - Pioneer Bay - Airlie Beach - Harbour works; light buoys.**  
*Former Notice* - 1193(T)/2006 is cancelled  
Maritime Safety Queensland Notice 745(T)/2006 (A216005).

Harbour works for marina construction, are in progress in Muddy Bay.

Special light buoys, *Fl.Y.5s*, marking a silt curtain, exist in positions:

20° 16'.028 S 148° 43'.455 E	20° 16'.028 S 148° 43'.512 E
20° 16'.027 S 148° 43'.568 E	20° 16'.027 S 148° 43'.625 E
20° 16'.026 S 148° 43'.683 E	20° 16'.100 S 148° 43'.685 E
20° 16'.173 S 148° 43'.688 E	20° 16'.247 S 148° 43'.690 E
20° 16'.320 S 148° 43'.692 E	20° 16'.394 S 148° 43'.695 E

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 268.**

**930(T)/2007 AUSTRALIA - QUEENSLAND - Hook Reef - Beacon destroyed**  
Maritime Safety Queensland Notice 659(T)/2007 (AA289086)

The east cardinal beacon (19° 48'.80 S 149° 15'.11 E) has been destroyed.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 254 – Aus 825**

**710(T)/2008 AUSTRALIA - QUEENSLAND - Moreton Bay - Spitfire Channel - Light buoys established**  
*Former Notice* - 649(T)/2008 is cancelled  
Maritime Safety Queensland Notice 389/2008 (AA345287)

Starboard lateral conical light buoys, *Fl.G.2.5s*, without topmark, exist in positions 27° 02'.73 S 153° 15'.84 E and 27° 03'.12 S 153° 16'.99 E.

**Chart temporarily affected - Aus 235 - Aus 236**

**819(T)/2008 AUSTRALIA - QUEENSLAND - Airlie Beach - Light buoys established**  
Maritime Safety Queensland Notice 452(T)/2008 (AA351934)

A silt curtain exists across the southern entrance to Abel Point Marina, closing the entrance to navigation.

Special light buoys mark the location of the silt curtain in the following positions:

20° 16'.070 S 148° 42'.400 E
20° 16'.070 S 148° 42'.402 E
20° 16'.056 S 148° 42'.401 E

**Chart temporarily affected - Aus 252 - Aus 253 - Aus 268 - AU5268P2**

**1051(T)/2008 AUSTRALIA - QUEENSLAND - Karumba - Light beacon withdrawn**  
*Former Notice* - 661(T)/2007 is cancelled  
Maritime Safety Queensland Notice 604(T)/2008 (AA361931)

No 3 light beacon (17° 25'.86 S 140° 43'.66 E) has been withdrawn; a starboard lateral light buoy, *Fl.G.4s*, exists in situ.

**Chart temporarily affected – Aus 6**

**667(T)/2009 AUSTRALIA - QUEENSLAND - Airlie Beach - Abel Point - Wreck**  
Maritime Safety Queensland Notice 332(T)/2009 (AA408578)

A wreck marked by a special light buoy exists in position 20° 15'.60 S 148° 42'.45 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 252 - Aus 253 - Aus 268 - AU5268P2**

**845(T)/2009 AUSTRALIA - QUEENSLAND - Black Island - Light beacon destroyed**  
Maritime Safety Queensland Notice 446(T)/2008 (AA417751, AA418222)

Special light beacon (20° 04'.56 S 148° 53'.58 S) has been destroyed; a special light buoy, *Fl.Y.2-5s*, exists in situ.

Mariners are advised to navigate with caution.

**Chart temporarily affected - Aus 252 - Aus 254 - AU5254P2**

**1133(T)/2009 AUSTRALIA - QUEENSLAND - Townsville - Ross Creek - Light beacons withdrawn; light buoys established**

Maritime Safety Queensland Notice 624(T)/2009 (AA429766)

Light beacons *Fl.R.3s* (19° 15'.03 S 146° 49'.80 E) and *Fl.G.3s* (19° 15'.01 S 146° 49'.77 E) have been withdrawn; a port lateral light buoy, *Fl.R.3s*, and a starboard lateral light buoy, *Fl.G.3s*, exist in situ.

**Chart temporarily affected – Aus 257 - AU5XX257**

**1445(T)/2009 AUSTRALIA - QUEENSLAND - Gladstone - South Channel - Boyne Cutting - Light beacon destroyed; light buoy established**

Maritime Safety Queensland Notice 837(T)/2009 (AA445615)

S14 light beacon (23° 55'.90 S 151° 27'.42 E) has been destroyed; a port lateral light buoy, *Fl.R.4s*, has been established in situ.

**Chart temporarily affected - Aus 246 - AU424151**

**66(T)/2010 AUSTRALIA - QUEENSLAND - Weipa - Albatross Bay - Obstruction**  
Maritime Safety Queensland Notice 860(T)/2009 (AA447000)

A lost anchor exists in anchorage A in position 12° 43'.5 S 141° 39'.0 E.

**Chart temporarily affected - Aus 4**

**135(T)/2010 AUSTRALIA - QUEENSLAND - Mourilyan Harbour - Harbour works**  
Date - Until 27 August 2010

Maritime Safety Queensland Notice 51(T)/2010 (AA451605)

Harbour works associated with construction of a breakwater, boat ramp and floating walkway are in progress (17° 36'.05 S 146° 07'.50 E).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 258 - AU5258P1**

**318(T)/2010 AUSTRALIA - QUEENSLAND - Heskett Rock - Light beacon destroyed**  
Maritime Safety Queensland Notice 273(T)/2010 (AA462501)

The south cardinal light beacon (20° 56'.19 S 149° 28'.98 E) has been destroyed.

**Chart temporarily affected - Aus 251 - Aus 823 - Aus 824 – AX 0823E - AU421149**

**380(T)/2010 AUSTRALIA - QUEENSLAND - Seaforth - Light beacon destroyed**

Maritime Safety Queensland Notice 300(T)/2010 (AA463668)

The light beacon, *Fl.R.2-5s* (20° 53'.72 S 148° 58'.69 E), has been destroyed; a port lateral light buoy, *Fl.R.2-5s*, exists in situ.

**Chart temporarily affected - Aus 251 - AU421148****381(T)/2010 AUSTRALIA - QUEENSLAND - Acacia Island - Light beacon destroyed***Former Notice* - 322(T)/2010 is cancelled

Maritime Safety Queensland Notice 296(T)/2010 (AA463670)

The light beacon, *Fl.R.3s* (20° 52'.40 S 148° 55'.66 E), has been destroyed; a port lateral light buoy, *Fl.R.3s*, exists in situ.

**Chart temporarily affected - Aus 251 - AU421148****389(T)/2010 AUSTRALIA - TORRES STRAIT - Stephens Islet - Wreck northwards***Former Notice* - 1137(T)/2009 is cancelled

Australian Maritime Safety Authority (AA463913)

A wreck, *FV Poseidon*, exists in approximate position 9° 23'.4 S 143° 34'.4 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 376 - Aus 377 - Aus 840 - AX 60377 - AU410143****445(T)/2010 AUSTRALIA - QUEENSLAND - Proserpine River - Light beacon destroyed; light beacon damaged**

Maritime Safety Queensland Notice 327(T)/2010 (AA466604)

The starboard lateral light beacon, *Fl.G.3s* (20° 30'.62 S 148° 44'.03 E), has been destroyed; a light buoy exists in situ.

The starboard lateral light beacon, *Fl.G.3s* (20° 29'.88 S 148° 43'.52 E), has been damaged.

**Chart temporarily affected - Aus 252 - Aus 824 - AU421148****621(T)/2010 AUSTRALIA - QUEENSLAND - Port Douglas - Depth information***Former Notice* - 117(T)/2008 is cancelled

Maritime Safety Queensland Notice 459(T)/2010 (AA472386)

Available depths as at 19 March 2010:

	<i>Metres</i>
* Outer Channel	2.3
* Inner Channel	2.1
* Boat ramp to marina	1.9
* Shoreline to mooring piles from southern side of boat ramp to marina	0.0
* Indicates revised entry.	

**Chart temporarily affected - Aus 270 - AU5270P1****716(T)/2010 AUSTRALIA - QUEENSLAND - Barb Reef - Beacon destroyed**

Maritime Safety Queensland Notice 532(T)/2010 (AA476018)

The west cardinal beacon (19° 49'.07 S 149° 07'.45 E) has been destroyed.

**Chart temporarily affected - Aus 254 - Aus 825 - AU320149**

**717(T)/2010 AUSTRALIA - QUEENSLAND - Cape Ferguson - Scientific instruments**

Date - Until 30 June 2011

Australian Institute of Marine Science (AA478783), Maritime Safety Queensland Notice 560(T)/2010 (AA478784)

Scientific instruments marked by light buoys exist in the following positions:

19° 16'.84 S 147° 02'.98 E	19° 16'.84 S 147° 03'.26 E
19° 16'.84 S 147° 03'.55 E	19° 16'.84 S 147° 03'.83 E
19° 16'.84 S 147° 04'.09 E	19° 16'.57 S 147° 04'.09 E
19° 16'.30 S 147° 04'.09 E	19° 16'.03 S 147° 04'.09 E
19° 15'.76 S 147° 04'.09 E	19° 15'.49 S 147° 04'.09 E
19° 15'.39 S 147° 03'.93 E	19° 15'.39 S 147° 03'.70 E.

**Chart temporarily affected - Aus 256 - Aus 827 - AU320147****763(T)/2010 AUSTRALIA - QUEENSLAND - Shute Harbour - Wreck**

Maritime Safety Queensland Notice 568(T)/2010 (AA480151)

A wreck marked by a special light buoy, *Fl.Y.5s*, exists in position 20° 17'.76 S 148° 47'.24 E.**Chart temporarily affected - Aus 252 - Aus 253 - AU421148 - AU5253P1****804(T)/2010 AUSTRALIA - QUEENSLAND - Colosseum Inlet - Obstruction**

Maritime Safety Queensland Notice 610(T)/2010 (AA482348)

An obstruction exists in position 23° 57'.55 S 151° 26'.24 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 246 - Aus 819 - AU424151****929(T)/2010 AUSTRALIA - QUEENSLAND - Cooktown - Depth information**

Former Notice - 876(T)/2008 is cancelled

Maritime Safety Queensland Notice 720(T)/2010 (AA490135)

Available depths as at 20 August 2010:

	<i>Metres</i>
* Entrance Channel	1.7
* Inner Channel	2.1
* Public Wharf	2.6
Swing Basin	1.2

\* Indicates new or revised entry.

**Chart temporarily affected - Aus 270****971(T)/2010 AUSTRALIA - QUEENSLAND - Double Island - Scientific instrument**

Former Notice - 726(T)/2009 is cancelled

Maritime Safety Queensland Notice 738(T)/2010 (AA491149)

Special light buoy, *Fl(5)Y.20s*, exist in position 16° 44'.06 S 145° 42'.60 E

Mariners are not to use these buoys as moorings.

**Chart temporarily affected - Aus 830****1081(T)/2010 AUSTRALIA - QUEENSLAND - Gladys Inlet - Shoaling; light buoys repositioned**

Former Notice - 1022(T)/2010 is cancelled

Maritime Safety Queensland Notices 802(T)/2010, 829(T)/2010 (AA494990, AA497025)

Shoaling exists in the entrance to Johnstone River (17° 30'.5 S 146° 04'.7 E).

The light buoys have been repositioned as follows:

<i>Charted position</i>	<i>Current position</i>
17° 30'.37 S 146° 04'.76 E	17° 30'.40 S 146° 04'.86 E
17° 30'.51 S 146° 04'.50 E	17° 30'.44 S 146° 04'.44 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 258**

**1187(T)/2010 AUSTRALIA - QUEENSLAND - Schooner Rock - Light beacon destroyed; light buoy established**

*Former Notice* - 319(T)/2010 is cancelled  
Maritime Safety Queensland Notice 925(T)/2010 (AA500697)

The north cardinal light beacon (20° 54'.04 S 149° 25'.91 E) has been destroyed; a north cardinal light buoy, Q, exists in situ.

**Chart temporarily affected - Aus 251 - Aus 824**

**1188(T)/2010 AUSTRALIA - QUEENSLAND - Io Reef - Light beacon destroyed; light buoy established**

*Former Notice* - 382(T)/2010 is cancelled  
Maritime Safety Queensland Notice 932(T)/2010 (AA500605)

The west cardinal light beacon (20° 41'.58 S 149° 07'.70 E) has been destroyed; a west cardinal light buoy, Q(9)15s, exists in situ.

**Chart temporarily affected - Aus 251 - Aus 252 - Aus 824**

**1189(T)/2010 AUSTRALIA - QUEENSLAND - Whitsunday Group - Shaw Island - Platypus Rock - Light beacon destroyed; light buoy established**

*Former Notice* - 511(T)/2010 is cancelled  
Maritime Safety Queensland Notice 926(T)/2010 (AA500696)

The west cardinal light beacon (20° 31'.23 S 149° 02'.31 E) has been destroyed; a west cardinal light buoy, VQ(9)10s, exists in situ.

**Chart temporarily affected - Aus 252 - Aus 254 - Aus 824**

**1191(T)/2010 AUSTRALIA - QUEENSLAND - Surprise Rock - Light beacon destroyed; light buoy established**

*Former Notice* - 329(T)/2009 is cancelled  
Maritime Safety Queensland Notice 929(T)/2010 (AA500615)

The isolated danger light beacon (20° 21'.3S 149° 01'.6 E) has been destroyed; an isolated danger light buoy, FI(2)6s, exists in situ.

**Chart temporarily affected - Aus 252 - Aus 253 - Aus 824**

**1192(T)/2010 AUSTRALIA - QUEENSLAND - Whitsunday Island - Whitehaven Beach - Light beacon destroyed; light buoy established**

*Former Notice* - 323(T)/2010 is cancelled  
Maritime Safety Queensland Notice 933(T)/2010 (AA500602)

The north cardinal light beacon (20° 17'.53 S 149° 03'.35 E) has been destroyed; a north cardinal light buoy, Q, exists in situ.

**Chart temporarily affected - Aus 252 - Aus 253**

**1193(T)/2010 AUSTRALIA - QUEENSLAND - Whitsunday Island - Reef Point - Light beacon destroyed; light buoy established**

*Former Notice* - 446(T)/2010 is cancelled  
Maritime Safety Queensland Notice 927(T)/2010 (AA500700)

The port lateral light beacon (20° 17'.45 S 148° 54'.71 E) has been destroyed; a port lateral light buoy, FI.R.2.5s, exists in situ.

**Chart temporarily affected - Aus 252 - Aus 253 - Aus 254**

**1194(T)/2010 AUSTRALIA - QUEENSLAND - Macona Inlet - Light beacon destroyed; light buoy established**

*Former Notice* - 1131(T)/2010 is cancelled  
Maritime Safety Queensland Notice 923(T)/2010 (AA500702)

The starboard lateral light beacon (20° 10'.29 S 148° 55'.10 E) has been destroyed; a starboard lateral light buoy, FI.G.2.5s, exists in situ.

**Chart temporarily affected - Aus 252**

**1195(T)/2010 AUSTRALIA - QUEENSLAND - Hook Island - Nara Inlet - Light beacon destroyed; light buoy established**

*Former Notice* - 512(T)/2010 is cancelled  
Maritime Safety Queensland Notice 924(T)/2010 (AA500701)

The light beacon (20° 09'.81 S 148° 54'.04 E) has been destroyed; a port lateral light buoy, *Fl.R.2-5s*, exists in situ.

**Chart temporarily affected - Aus 252**

**1197(T)/2010 AUSTRALIA - QUEENSLAND - Hinchinbrook Channel - Cardwell - Wreck**

Maritime Safety Queensland Notice 945(T)/2010 (AA501575)

A wreck exists in position 18° 14'.72 S 146° 01'.66 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 259 - Aus 828**

**1263(T)/2010 AUSTRALIA - QUEENSLAND - Yorkeys Knob - Wreck**

*Former Notice* - 1196(T)/2010 is cancelled  
Maritime Safety Queensland Notice 980(T)/2010 (AA503397)

A wreck exists in position 16° 46'.88 S 145° 42'.20 E.

**Chart temporarily affected - Aus 830**

**1333(T)/2010 AUSTRALIA - TORRES STRAIT - Yorke Islands - Wreck**

Maritime Safety Queensland Notice 1002(T)/2010 (AA505444)

A wreck exists in position 9° 47'.46 S 143° 32'.88 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 376 - Aus 377 - Aus 840 - AX 60377**

**1386(T)/2010 AUSTRALIA - QUEENSLAND - Bundaberg - Anchoring prohibited**

Maritime Safety Queensland Notice 1017(T)/2010 (AA508845)

Temporary anchoring is restricted to an area bounded by the following positions:

24° 45'.47 S 152° 23'.43 E  
24° 45'.53 S 152° 23'.54 E  
24° 45'.48 S 152° 23'.79 E  
24° 45'.38 S 152° 23'.77 E.

Vessels are permitted to anchor in the area for up to 48hrs. Vessels must then move to one of the marinas or upstream of position 24° 46'.41 S 152° 22'.88 E.

Anchoring is not permitted in any section of the river downstream of 24° 46'.41 S 152° 22'.88 E and in the section of the Town Reach between positions 24° 51'.78 S 152° 21'.04 E and 24° 51'.81 S 152° 20'.77 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 242**

**1394(T)/2010 AUSTRALIA - QUEENSLAND - Whitsundays - The Narrows - Buoy off station**

Maritime Safety Queensland Notice 1042(T)/2010 (AA508738)

The port lateral buoy (20° 04'.34 S 148° 54'.17 E) is off station.

**Chart temporarily affected - Aus 254**

**1395(T)/2010 AUSTRALIA - QUEENSLAND - Cape Cleveland - Scientific instrument***Former Notice - 134(T)/2010 is cancelled*

Maritime Safety Queensland Notice 1061(T)/2010 (AA508933)

A special light buoy, *Fl(5)Y.20s*, exists in position 19° 09'.58 S 147° 03'.46 E.

Mariners are not to use this buoy as a mooring.

**Chart temporarily affected - Aus 256 - Aus 827****51(T)/2011 AUSTRALIA - QUEENSLAND - Gold Coast Seaway - Shoaling***Former Notice - 837(T)/2009 is cancelled*

Maritime Safety Queensland Notice 1101(T)/2010 (AA511199)

Shoaling, with a least depth of *2.6m*, exists in the North Channel between 27° 55'.86 S 153° 25'.30 E and 27° 55'.66 S 153° 25'.09 E.Deeper water to *3.5m* is found on the eastern side of the channel centre line.Shoaling, with a least depth of *3.6m*, exists in the South Channel between 27° 56'.20 S 153° 25'.49 E and 27° 56'.11 S 153° 26'.01 E.Deeper water to *4.5m* is found to the west of the channels centre line.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 230****60(T)/2011 AUSTRALIA - QUEENSLAND - Fitzroy River - Light buoys off station**

Maritime Safety Queensland Notice 1089(T)/2010 (AA511745)

Nav aids in the Fitzroy River (23° 31'.0 S 150° 50'.0 E) may be off station due to flooding.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 247 – Aus 819****62(P)/2011 AUSTRALIA - QUEENSLAND - Airlie Beach - Muddy Bay - Light beacons established***Date - On or about 14 January 2011*

Maritime Safety Queensland Notice 1109/2010 (AA511360)

Light beacons exist as follows:

<i>Positions</i>	<i>Remarks</i>
20° 16'.06 S 148° 43'.63E	special light beacon with topmark, <i>Fl.Y.2.5s</i> ,
20° 16'.17 S 148° 43'.68E	light beacon with starboard lateral topmark, <i>Fl.R.2.5s</i> ,
20° 16'.16 S 148° 43'.64E	light beacon with starboard lateral topmark, <i>Fl.G.2.5s</i> ,
20° 16'.27 S 148° 43'.66E	light beacon with port lateral topmark, <i>Fl.R.2.5s</i> ,
20° 16'.22 S 148° 43'.62E	special light beacon with topmark, <i>Fl.Y.2.5s</i> ,
20° 16'.32 S 148° 43'.66E	light beacon with port lateral topmark, <i>Fl.R.2.5s</i> ,
20° 16'.32 S 148° 43'.60E	light beacon with starboard lateral topmark, <i>Fl.G.2.5s</i> ,
20° 16'.40 S 148° 43'.60E	light beacon with port lateral topmark, <i>Fl.R.2.5s</i> .

*Note: a block update will be applied in due course on receipt of survey data.***Chart which will be affected – Aus 252 – Aus 253 – Aus 268**

**67(T)/2011 AUSTRALIA - QUEENSLAND - Weipa - Depth information***Former Notice* - 391(T)/2010 is cancelled

Maritime Safety Queensland Notice 18(T)/2011 (AA511659)

Available depths as at 6 January 2011:

	<i>Metres</i>
Weipa Approaches	11.1
South Channel	11.1
* Departure Channel	11.1
Cora Bank South Channel	7.3
Humbug Point Approaches	8.6
Humbug Point Berth	9.5
Evans Landing	9.6
Lorim Point East	12.3
Lorim Point West	12.3

\* Indicates new or revised entry

**Chart temporarily affected – Aus 4****108(T)/2011 AUSTRALIA - QUEENSLAND - Brisbane River - Town Reach - Light buoys established**

Maritime Safety Queensland Notice 80(T)/2011, 82(T)/2011 (AA514568, AA514569)

Obstructions marked by special light buoys, *Fl.Y.2.5s*, exist in the following positions;

27° 27'.94 S 153° 02'.00 E

27° 27'.84 S 153° 02'.11 E

27° 28'.49 S 153° 02'.51 E.

**Chart temporarily affected – Aus 238****113(T)/2011 AUSTRALIA - QUEENSLAND - Lisa Jane Shoals - Scientific instrument***Former Notice* - 613(T)/2010 is cancelled

Maritime Safety Queensland Notice 53(T)/2011 (AA514094)

A special light buoy, *Fl(5)Y.20s*, exists in position 23° 18'.36 S 151° 04'.32 E.

Mariners are not to use this buoy as a mooring.

**Chart temporarily affected – Aus 247 – Aus 819 – Aus 820****117(T)/2011 AUSTRALIA - QUEENSLAND - Karumba - Norman River - Light buoy withdrawn**

Maritime Safety Queensland Notice 38(T)/2011 (AA514017)

The special light buoy, *Fl.Y.4s* (17° 29'.51 S 140° 49'.67 E), has been temporarily withdrawn.**Chart temporarily affected – Aus 6****161(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - Bramble Bay - Scientific instrument**

Maritime Safety Queensland Notice 130(T)/2011 (AA516947)

A scientific instrument marked by a special light buoy, *Fl.Y.4s*, exists in position 27° 18'.15 S 153° 06'.17 E.**Chart temporarily affected - Aus 236****165(T)/2011 AUSTRALIA - QUEENSLAND - Gloucester Passage - Light beacon damaged**

Maritime Safety Queensland Notice 97(T)/2011 (AA515728)

The light beacon, Q(9) 15s (20° 03'.5 S 148° 26'.6 E), has been damaged.

**Chart temporarily affected - Aus 268**

**206(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - South Channel - Scientific instrument**

Former Notice - 673(T)/2010 is cancelled  
Maritime Safety Queensland Notice 186(T)/2011 (AA518650)

A special light buoy, *Fl(5)Y.20s*, exists in position 23° 53'.78 S 151° 30'.22 E.

Mariners are not to use this buoy as a mooring.

**Chart temporarily affected - Aus 246****209(T)/2011 AUSTRALIA - QUEENSLAND - Port Alma - Depth information**

Former Notice - 1019(T)/2009 is cancelled  
Maritime Safety Queensland Notice 182(T)/2011 (AA518652)

Available depths as at 23 February 2011:

<i>Berth</i>	<i>Metres</i>
Balaclava Leads	7.6
Kazatch Leads	7.0
Eupatoria Leads	7.9
Shell Point Leads	7.0
Swing Basin	5.8
Berth No 1	9.2
Berth No 2	9.2
Berth No 3	9.2

\* Indicates revised entry.

**Chart temporarily affected - Aus 265****212(T)/2011 AUSTRALIA - QUEENSLAND - Bird Island to Groper Point - Nav aids**

Former Notice - 1132(T)/2010 is cancelled  
Maritime Safety Queensland Notices 254(T)/2010, 894(T)/2010, 147(T)/2011 (AA461978, AA498765, AA517390)

The south cardinal light beacon (20° 05'.76 S 148° 52'.59 E) has been destroyed; a south cardinal light buoy, *Q(6)+LFl.15s*, exists in position 20° 05'.79 S 148° 52'.63 E.

The light beacon, *Fl.G.4s* (20° 04'.25 S 148° 53'.45 E), has been damaged.

The light beacon, *Fl.G.2.5s* (20° 04'.33 S 148° 53'.77 E), has been damaged.

The light buoy, *Fl.G.6s* (20° 03'.86 S 148° 54'.23 E), is off station.

**Chart temporarily affected - Aus 252 - Aus 254 - Aus 825****221(T)/2011 AUSTRALIA - QUEENSLAND - South Barnard Islands - Light buoys off station**

Maritime Safety Queensland Notice 143(T)/2011 (AA517194)

The special light buoys, *Fl.Y.2.5s* (17° 45'.40 S 146° 08'.93 E and 17° 45'.73 S 146° 09'.19 E), are off station.

**Chart temporarily affected - Aus 258 - Aus 829****222(T)/2011 AUSTRALIA - QUEENSLAND - Cairns - Trinity Inlet - Wreck**

Maritime Safety Queensland Notice 146(T)/2011 (AA517387)

A dangerous wreck exists in position 16° 55'.40 S 145° 47'.18 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 263****223(T)/2011 AUSTRALIA - QUEENSLAND - Dugong Island - Wreck**

Maritime Safety Queensland Notice 164(T)/2011 (AA518402)

A wreck exists in position 10° 31'.31 S 143° 13'.97 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 376 - Aus 837 - Aus 839**

**267(T)/2011 AUSTRALIA - QUEENSLAND - Bowen - Light buoy off station**

Former Notice - 213(T)/2011 is cancelled  
Maritime Safety Queensland Notice 217(T)/2011 (AA520692)

The light buoy, *Fl.R.4s* (20° 02'.39 S 148° 15'.70 E), is off station

**Chart temporarily affected – Aus 268****317(T)/2011 AUSTRALIA - QUEENSLAND - Whitehaven Bay - Lagoon Rock - Light beacon destroyed**

Maritime Safety Queensland Notice 240(T)/2011 (AA522334)

The west cardinal light beacon, *Q(9)15s* (20° 16'.03 S 149° 02'.48 E), has been destroyed.

**Chart temporarily affected - Aus 252 - Aus 253 - Aus 824 - Aus 825****369(T)/2011 AUSTRALIA - QUEENSLAND - Brisbane River - Shafston Reach - Harbour works**

Maritime Safety Queensland Notices 291(T)/2011, 299(T)/2011 (AA525636, AA525940)

Harbour works are in progress between positions 27° 27'.87 S 153° 02'.31 E and 27° 28'.25 S 153° 02'.43 E.

An exclusion zone marked by special light buoys, *Fl.Y.3s*, exists in an area bounded by the following positions:

27° 28'.26 S 153° 02'.42 E  
27° 28'.05 S 153° 02'.38 E  
27° 27'.87 S 153° 02'.29 E.

All vessels associated with the works will display appropriate lights and shapes and will monitor VHF Ch 13.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 238****372(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - Scarborough - Shoaling**

Former Notice - 1252(T)/2010 is cancelled  
Maritime Safety Queensland Notice 303(T)/2011 (AA526146)

Shoaling with a least depth of 2.0m exists within the entrance channel, 75m north of beacon No4 in the vicinity of 27° 11'.25 S 153° 06'.17 E. A least depth of 1.6m exists 10m from the toeline between beacon No6 and No8.

Shoaling with a least depth of 1.5m exists within the internal western channel, close to the marina berths in the vicinity of 27° 11'.64 S 153° 06'.28 E.

Shoaling with a least depth of 0.7m exists within the internal channel, approaching the eastern boat ramp.

The depth at the toe of the eastern boat ramp is dry and a least depth of 0.5m exists at the toe of the western boat ramp.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 236****373(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - North Banks - Scientific instruments**

Former Notices - 128(T)/2010, 312(T)/2011 are cancelled  
Maritime Safety Queensland Notice 295(T)/2011 (AA525823)

Special light buoys, *Fl(5)Y.20s*, exist in positions:

26° 53'.93 S 153° 16'.89 E  
27° 00'.93 S 153° 15'.38 E.

Mariners are not to use these buoys as moorings.

**Chart temporarily affected - Aus 235 - Aus 236****378(T)/2011 AUSTRALIA - QUEENSLAND - Cairns - Light beacon damaged**

Maritime Safety Queensland Notice 277(T)/2011 (AA525895)

C11 light beacon, *Fl.G.4s* (16° 52'.14 S 145° 48'.53 E), has been damaged.

**Chart temporarily affected - Aus 262 - AX 63262****415(T)/2011 AUSTRALIA - QUEENSLAND - Boyne River - Shoaling**

*Former Notice* - 58(T)/2011 is cancelled  
Maritime Safety Queensland Notice 342(T)/2011 (AA527129)

Shoaling exists within the entrance and approach channel to Boyne River (23° 56'.5 S 151° 21'.3 E).

No8 port beacon (23° 56'.32 S 151° 21'.31 E) has been temporarily altered to a starboard beacon and renamed No7.

A special light buoy, *Fl. Y.2-5s*, exists in position 23° 55'.61 S 151° 22'.08 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 246**

**417(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Bushy Islet - Scientific instrument**

*Date* - Until 15 December 2012  
Maritime Safety Queensland Notice 348(T)/2011 (AA527653)

A special light buoy, *Fl. Y.3s*, exists in position 23° 50'.78 S 151° 20'.49 E.

**Chart temporarily affected - Aus 245**

**418(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Anchorage area**

*Former Notice* - 315(T)/2011 is cancelled  
Maritime Safety Queensland Notice 318(T)/2011 (AA526389)

A small craft anchorage exists within an area bounded by the following positions:

23° 45'.0 S 151° 09'.8 E  
23° 45'.0 S 151° 10'.0 E  
23° 46'.4 S 151° 10'.4 E  
23° 46'.4 S 151° 10'.0 E.

Mooring buoys exist within the area.

Permission must be obtained from Gladstone Port Corporation prior to anchoring or mooring within the area.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 245**

**419(T)/2011 AUSTRALIA - QUEENSLAND - Emu Point - Lights altered**

Maritime Safety Queensland Notice 327(T)/2011 (AA528237)

The leading lights (23° 15'.00 S 150° 49'.43 E) have been temporarily altered to *Iso. Y.2s & Q. Y.*

**Chart temporarily affected - Aus 247 - Aus 819 - Aus 820**

**422(T)/2011 AUSTRALIA - QUEENSLAND - Whitsundays - Spitfire Rock - Light beacon destroyed**

*Former Notice* - 1190(T)/2010 is cancelled  
Maritime Safety Queensland Notice 930(T)/2010, 345(T)/2011 (AA500617, AA527139)

The west cardinal light beacon (20° 28'.59 S 149° 01'.70 E) has been destroyed.

**Chart temporarily affected - Aus 252 - Aus 254 - Aus 824**

**470(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - North Passage Island to Redcliffe Island - Scientific instruments**

*Date* - Until 30 June 2013  
Maritime Safety Queensland Notice 376(T)/2011 (AA531285)

Subsurface scientific instruments exist in positions:

23° 45'.91 S 151° 10'.93 E	23° 45'.81 S 151° 11'.11 E
23° 45'.33 S 151° 10'.48 E	23° 45'.23 S 151° 10'.66 E
23° 42'.44 S 151° 08'.84 E	23° 42'.34 S 151° 09'.05 E
23° 41'.39 S 151° 08'.20 E	23° 41'.29 S 151° 08'.41 E.

**Chart temporarily affected - Aus 245 - Aus 819**

**519(T)/2011 AUSTRALIA - QUEENSLAND - Burnett River - Dredging operations; pipeline**

Maritime Safety Queensland Notice 448(T)/2011 (AA534723)

A pipeline is being laid between positions 24° 46'.20 S 152° 22'.90 E and 24° 46'.24 S 152° 22'.81 E. The western end of the pipeline will be marked by special light buoys *Fl. Y.*

The dredge *Everglade* is conducting dredging operations in the area bounded by the following positions:

24° 46'.40 S 152° 22'.75 E  
 24° 46'.19 S 152° 22'.70 E  
 24° 46'.07 S 152° 22'.73 E  
 24° 46'.13 S 152° 22'.80 E  
 24° 46'.40 S 152° 22'.84 E

The dredge will display appropriate lights and shapes and will monitor VHF Ch 16 and UHF Ch 25.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 242**

**522(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone Harbour - Hamilton Point - Harbour works northwestwards**

*Date* - Until 30 June 2011

Maritime Safety Queensland Notice 444(T)/2011 (AA534374)

Construction of a barge ramp (23° 47'.39 S 151° 12'.66 E) is in progress.

All hazards to navigation will display appropriate lights.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 245**

**566(T)/2011 AUSTRALIA - QUEENSLAND - Lucinda - Exclusion zone**

*Former Notice* - 320(T)/2011 is cancelled

Maritime Safety Queensland Notice 495(T)/2011 (AA537225)

A 200m exclusion zone exists around the Bulk Sugar Terminal (18° 31'.25 S 146° 23'.17 E); including the mooring dolphins. A 100m exclusion zone exists around either side of the trestle leading to the wharf from the mainland.

**Chart temporarily affected - Aus 259 - Aus 267**

**609(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Clinton Channel - Light buoys**

Maritime Safety Queensland Notice 519(T)/2011 (AA539248)

Special light buoys, *Fl. Y.2.5s*, exist in positions 23° 49'.25 S 151° 14'.37 E and 23° 49'.60 S 151° 14'.95 E.

**Chart temporarily affected - Aus 244 - Aus 245**

**610(T)/2011 AUSTRALIA - QUEENSLAND - Hamilton Point to Friend Point - Dredging operations**

*Date* - Until 15 December 2011

Maritime Safety Queensland Notice 517(T)/2011 (AA539251)

Dredging operations are being conducted in an area bounded by the following positions:

23° 45'.10 S 151° 10'.65 E  
 23° 45'.10 S 151° 10'.15 E  
 23° 47'.50 S 151° 11'.60 E  
 23° 47'.83 S 151° 12'.46 E  
 23° 47'.95 S 151° 13'.30 E.

A 50m exclusion zone exists around all dredging plants.

Dredge spoil will be deposited at East Bank spoil ground (23° 52'.55 S 151° 28'.50 E).

The dredges will monitor VHF Ch 13 and Ch 16.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 245 - Aus 246**

**648(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - Bramble Bay - Bridge construction**

*Former Notice* - 465(T)/2011 is cancelled

*Date* - Until 21 July 2011

Maritime Safety Queensland Notices 171(T)/2008, 164(T)/2009, 166(T)/2009, 756(T)/2010, 393(T)/2011, 568(T)/2011 (AA323151, AA395818, AA396377, AA492668, AA532382, AA540981)

Construction of the Houghton Highway Bridge is in progress in position 27° 17'.01 S 153° 03'.89 E (WGS84 datum).

A falsework bridge exists to the east of the existing bridge. The seaward limit of the falsework bridge will be marked by lights, Q.Y.

Nav aids exist as follows:

<i>Position</i>	<i>Remarks</i>
27° 15'.84 S 153° 04'.62 E	port beacon
27° 15'.95 S 153° 04'.75 E	starboard buoy
27° 15'.97 S 153° 04'.74 E	port buoy
27° 16'.56 S 153° 04'.29 E	lit starboard buoy, <i>Fl.G.2.5s</i>
27° 16'.60 S 153° 04'.26 E	lit port buoy, <i>Fl.R.2.5s</i>
27° 16'.57 S 153° 04'.11 E	lit starboard buoy, <i>Fl.G.2.5s</i>
27° 16'.59 S 153° 04'.09 E	lit port buoy, <i>Fl.R.2.5s</i>

Works to remove temporary lit piles adjacent to the channel in Hays Inlet (27° 15'.82 S 153° 04'.70 E) are in progress. The channel will be closed to traffic until 21 July 2011.

Mariners should navigate with caution in the area.

**Chart temporarily affected – Aus 236****651(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Obstruction**

*Date* - Until 26 August 2011

Maritime Safety Queensland Notice 542(T)/2011 (AA539769)

Anchorage N5 (23° 49'.2 S 151° 29'.0 E) is closed due to a lost anchor.

**Chart temporarily affected – Aus 819****653(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Barney Point - Harbour works**

*Former Notice* - 521(T)/2011 is cancelled

*Date* - Until 31 July 2011

Maritime Safety Queensland Notice 547(T)/2011 (AA539941)

Harbour works are in progress at Barney Point Wharf. An exclusion zone exists in within an area bounded by the following positions:

23° 50'.13 S 151° 16'.00 E  
 23° 50'.10 S 151° 16'.21 E  
 23° 50'.18 S 151° 16'.45 E  
 23° 50'.23 S 151° 16'.29 E.

The barges *PMG 150* and *Swissco 58* have deployed 4 anchors marked by light buoys. They will display appropriate lights and symbols and will monitor VHF Ch 13 and Ch 16.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 244 – Aus 245****662(T)/2011 AUSTRALIA - QUEENSLAND - Albatross Bay - Scientific instrument**

*Former Notice* - 729(T)/2009 is cancelled

Maritime Safety Queensland Notice 576(T)/2011 (AA541254)

A special light buoy, *Fl(5)Y.20s*, exists in position 12° 41'.29 S 141° 41'.07 E.

Mariners are not to use this buoy as a mooring.

**Chart temporarily affected – Aus 4 – Aus 701**

**698(T)/2011 AUSTRALIA - QUEENSLAND - Point Danger to Point Lookout - Scientific instruments***Former Notice - 605(T)/2011 is cancelled*

Maritime Safety Queensland Notice 600(T)/2011 (AA543503)

Special light buoys, *Fl(5)Y.20s*, exist in positions:

28° 10'.85 S 153° 34'.56 E

27° 57'.95 S 153° 26'.57 E

27° 29'.29 S 153° 37'.93 E.

Mariners are not to use these buoys as moorings.

**Chart temporarily affected – Aus 230 – Aus 813 – Aus 814****702(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Hamilton Point to Friend Point - Light buoys***Former Notice - 654(T)/2011 is cancelled*

Maritime Safety Queensland Notice 609(T)/2011 (AA543879)

Light buoys exist in the following positions:

<i>Number</i>	<i>Position</i>	<i>Characteristic</i>
PIC1	23° 47'.28 S 151° 12'.25 E	<i>Fl.G.2.5s</i>
PIC2	23° 47'.59 S 151° 12'.41 E	<i>Fl.R.2.5s</i>
PIC3	23° 47'.16 S 151° 12'.11 E	<i>Fl.G.2.5s</i>
PIC4	23° 47'.37 S 151° 12'.18 E	<i>Fl.R.2.5s</i>
PIC5	23° 46'.95 S 151° 11'.98 E	<i>Fl.G.2.5s</i>
PIC6	23° 47'.11 S 151° 11'.85 E	<i>Fl.R.2.5s</i>
PIC7	23° 46'.85 S 151° 11'.79 E	<i>Fl.Y.2.5s</i>
PIC8	23° 46'.86 S 151° 11'.53 E	<i>Fl.R.2.5s</i>
PIC9	23° 46'.76 S 151° 11'.64 E	<i>Fl.G.2.5s</i>
PIC10	23° 46'.61 S 151° 11'.25 E	<i>Fl.R.2.5s</i>
PIC11	23° 46'.52 S 151° 11'.42 E	<i>Fl.G.2.5s</i>
PIC12	23° 46'.28 S 151° 11'.06 E	<i>Fl.R.2.5s</i>
PIC13	23° 46'.21 S 151° 11'.19 E	<i>Fl.G.2.5s</i>
PIC14	23° 46'.05 S 151° 10'.91 E	<i>Fl.R.2.5s</i>
PIC15	23° 45'.95 S 151° 11'.11 E	<i>Fl.G.2.5s</i>
PIC16	23° 45'.73 S 151° 10'.69 E	<i>Fl.R.2.5s</i>
PIC17	23° 45'.68 S 151° 10'.91 E	<i>Fl.G.2.5s</i>
PIC18	23° 45'.44 S 151° 10'.50 E	<i>Fl.R.2.5s</i>
PIC19	23° 45'.40 S 151° 10'.65 E	<i>Fl.Y.2.5s</i>
PIC20	23° 45'.09 S 151° 10'.29 E	<i>Fl.Y.2.5s</i>
PIC21	23° 45'.18 S 151° 10'.49 E	<i>Fl.G.2.5s</i>

**Chart temporarily affected – Aus 245****757(T)/2011 AUSTRALIA - QUEENSLAND - Laguna Quays - Lights unlit; light beacons damaged***Former Notice - 444(T)/2010 is cancelled*

Maritime Safety Queensland Notice 686(T)/2011 (AA546594)

Light beacons marking the entrance to Laguna Quays (20° 36'.03 S 148° 41'.21 E) may be damaged or unlit.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 252****758(T)/2011 AUSTRALIA - QUEENSLAND - Laguna Quays - Shoaling***Former Notice - 1052(T)/2006 is cancelled*

Maritime Safety Queensland Notice 685/2011 (AA546595)

Shoaling exists within the entrance channel to Laguna Quays (20° 36'.03 S 148° 41'.21 E).

Mariners are advised to seek local knowledge prior to transiting the marina entrance and to navigate with caution in the area.

**Chart temporarily affected - Aus 252**

**759(T)/2011 AUSTRALIA - QUEENSLAND - Pioneer Rocks - Light beacon unlit***Former Notice - 474(T)/2011 is cancelled*

Maritime Safety Queensland Notice 663(T)/2011 (AA545484)

The isolated danger light beacon, *Fl(2)6s 5m* (20° 13'.57 S 148° 45'.46 E), is unlit; an isolated danger light buoy, *Fl(2)6s*, exists in situ.

**Chart temporarily affected - Aus 252 - Aus 253 - Aus 824 - Aus 825****760(T)/2011 AUSTRALIA - QUEENSLAND - Airlie Beach - Muddy Bay - Wreck**

Maritime Safety Queensland Notice 672(T)/2011 (AA545716, AA545830)

A stranded wreck marked by a special light buoy, *Fl.Y.3s*, exists in position 20° 15'.44 S 148° 43'.55 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 252 - Aus 253 - Aus 268****812(T)/2011 AUSTRALIA - QUEENSLAND - Brisbane River - Outer Bar Reach - Light buoy repositioned**

Maritime Safety Queensland Notice 724(T)/2011 (AA548558)

No20 port lateral light buoy (27° 21'.32 S 153° 10'.75 E) has been repositioned to 27° 21'.42 S 153° 10'.68 E.

**Chart temporarily affected – Aus 237****819(T)/2011 AUSTRALIA - QUEENSLAND - Hay Point - Shoaling**

Maritime Safety Queensland Notice 704(T)/2011 (AA547516)

Shoaling exists in an area south of berth 1 in an area bounded by the following positions:

21° 15'.89 S 149° 18'.85 E

21° 16'.30 S 149° 19'.40 E

21° 16'.40 S 149° 19'.09 E

21° 15'.95 S 149° 18'.80 E

21° 15'.90 S 149° 18'.79 E.

**Chart temporarily affected – Aus 249 – Aus 250 – AX 0249E****826(T)/2011 AUSTRALIA - QUEENSLAND - Mourilyan - Depth information***Former Notice - 766(T)/2011 is cancelled*

Maritime Safety Queensland Notice 702(T)/2011 (AA547518)

Available depths as at 29 July 2011:

	<i>Metres</i>
Departure Channel	9.6
Inner Channel	9.6
Swing Basin	6.7
Sugar Berth	10.1

\* Indicates revised entry.

**Chart temporarily affected – Aus 258****871(T)/2011 AUSTRALIA - QUEENSLAND - Arkwright Point - Scientific instrument***Former Notice - 110(T)/2011 is cancelled*

Maritime Safety Queensland Notice 53(T)/2011 (AA514094)

A special light buoy, *Fl(5)Y.20s*, exists in position 26° 33'.81 S 153° 10'.96 E.

Mariners are not to use the buoy as a mooring.

**Chart temporarily affected - Aus815**

**872(T)/2011 AUSTRALIA - QUEENSLAND - Bait Reef - Light beacon destroyed**

Maritime Safety Queensland Notice 750(T)/2011 (AA549635)

The starboard lateral beacon (19° 48'.52 S 149° 03'.77 E) has been destroyed; a special buoy exists in situ.

**Chart temporarily affected - Aus254 - Aus825****873(T)/2011 AUSTRALIA - QUEENSLAND - Cairns - Depth information**

*Former Notice - 827(T)/2011 is cancelled*

Maritime Safety Queensland Notice 787(T)/2011 (AA552125)

Available depths as of 24 August 2011:

	<i>Metres</i>	<i>Remarks</i>
* Entrance Channel	8.3	
Crystal Swing Basin at:		
360 metre diameter	7.4	
380 metre diameter	6.8	
Swing Basin at:		
310 metre diameter	8.7	
320 metre diameter	8.0	
Marlin Marina	3.3	
Berths:		
No 1	8.5	
No 2	8.5	
No 3	8.4	
No 4	8.4	
No 5	7.1	
No 6	7.1	between 500 metres and 550 metres
No 6	7.4	between 550 metres and 600 metres
No 7	10.0	
No 8	10.1	
No 10	9.3	
No 12	10.5	
Smiths Creek 1	4.7	

\* Indicates revised entry.

**Chart temporarily affected - Aus262 - Aus263 - Aus264 - Aus830****916(T)/2011 AUSTRALIA - QUEENSLAND - Pumicestone Channel - Elimbah Creek - Beacon destroyed**

Maritime Safety Queensland Notice 811(T)/2011 (AA553624)

The special beacon (27° 01'.20 S 153° 05'.55E) has been destroyed; a special light buoy, *Fl. Y. 3s*, exists in situ.

**Chart temporarily affected - Aus 235 - Aus 236****918(T)/2011 AUSTRALIA - QUEENSLAND - Gneering Shoals - Obstruction**

*Former Notice - 870(T)/2011 is cancelled*

Maritime Safety Queensland Notices 783(T)/2011; 828/2011 (AA551902, AA553382)

A lost anchor and cable exists in position 26° 39'.56 S 153° 16'.53 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 235 - Aus 815**

**919(P)/2011 AUSTRALIA - QUEENSLAND - Burnett River - Nav aids; shoaling**

*Former Notice* - 520(P)/2011 is cancelled

Maritime Safety Queensland Notice 208(T)/2011, 435(T)/2011 (AA520626, AA533810, AA554621, AA554622, AA554633)

Port lateral light buoys, *Fl.R.4s*, exist in situ for light beacons as follows:

<i>No</i>	<i>Position</i>
16	24° 45'.36 S 152° 23'.77 E
18	24° 45'.53 S 152° 23'.28 E
20	24° 45'.76 S 152° 23'.00 E
22	24° 45'.84 S 152° 22'.94 E.

Starboard lateral light buoys, *Fl.G.4*, exist in situ for light beacons as follows:

<i>No</i>	<i>Position</i>
19	24° 45'.61 S 152° 23'.05 E
23	24° 45'.82 S 152° 22'.83 E.

No27, 29 and 31 special light buoys have been temporarily withdrawn. Special light buoys, *Fl.Y.2-5s*, exist in the following positions:

24° 46'.36 S 152° 22'.85 E
24° 46'.25 S 152° 22'.81 E
24° 46'.15 S 152° 22'.77 E
24° 46'.12 S 152° 22'.73 E
24° 46'.04 S 152° 22'.74 E
24° 45'.97 S 152° 22'.76 E.

The starboard lateral light beacon No37, (24° 47'.88 S 152° 22'.28 E), has been altered to a port lateral light beacon, *Fl.R.2.5s*.

The starboard lateral light beacon No41, (24° 49'.32 S 152° 22'.22 E), has been altered to a port lateral light beacon, *Fl.R.6s*.

Buoy No32 (24° 49'.40 S 152° 22'.20 E) has been withdrawn.

Two starboard lateral light buoys have been established in the following positions

<i>Position</i>	<i>Light characteristic</i>
24° 49'.22 S 152° 22'.18 E	<i>Fl.G.3s</i>
24° 48'.78 S 152° 21'.70 E	<i>Fl.G.5s.</i>

All other buoys and beacons now have relevant day marks and lights affixed, nav aids will be renumbered shortly.

Shoaling with a least depth of *0.5m* exists in the vicinity of light beacon No41 (24° 49'.32 S 152° 22'.21 E).

Shoaling, with a least depth of *0.2m*, exists in the vicinity of 24° 46'.55 S 152° 22'.90 E.

*Note:* a new edition of Aus 242 is in production.

**Chart which will be affected - Aus 242****920(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Barney Point to Grahams Creek - Dredging operations**

*Former Notice* - 523(T)/2011 is cancelled

Maritime Safety Queensland Notice 846(T)/2011 (AA554339)

Dredges and support vessels are conducting dredging operations between Barney Point (23° 50'.0 S 151° 16'.5 E) and Grahams Creek (23° 44'.5 S 151° 10'.0 E).

A 50m exclusion zone exists around all dredges associated with the operations.

All vessels will display appropriate lights and shapes and will monitor VHF Ch 13 and Ch 16.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 244 - Aus 245 - Aus 819**

**924(T)/2011 AUSTRALIA - QUEENSLAND - Dudgeon Point - Scientific instruments**

Date - Until 29 February 2012

Maritime Safety Queensland Notice 799(T)/2011 (AA552293)

Scientific instruments marked by special light buoys, Q.Y, exist in positions:

21° 14'.35 S 149° 16'.01 E

21° 14'.15 S 149° 17'.53 E

21° 11'.39 S 149° 15'.23 E.

**Chart temporarily affected - Aus 249 - Aus 250 - Aus 823 - AX 0249E – AX 0823E**

**926(T)/2011 AUSTRALIA - QUEENSLAND - Cape Bowling Green - Scientific instrument**

Former Notice - 114(T)/2008 is cancelled

Date - Until 30 June 2013

Australian Institute of Marine Science (AA546309)

A subsurface scientific instrument, depth 10m, exists in position 19° 18'.37 S 147° 37'.20 E.

**Chart temporarily affected - Aus 826 - Aus 827**

**1020(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - Wynnum - Wreck; light buoy**

Maritime Safety Queensland Notice 871/2011 (AA556300)

A wreck marked by a special light buoy, *Fl.Y.2-5s*, exists in position 27° 25'.90 S 153° 10'.73 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 236**

**1021(T)/2011 AUSTRALIA - QUEENSLAND - Brisbane River - Fisherman Islands - Harbour works; light buoys**

Former Notice - 1123(T)/2010 is cancelled

Date - Until 31 December 2013

Maritime Safety Queensland Notices 905(T)/2011, 922(T)/2011, 934(T)/2011 (AA557690, AA559085, AA559073)

Works associated with the construction of berth 11 and 12 are in progress.

The barge *Maeve Anne* is conducting piling operations in position 27° 21'.49 S 153° 10'.83 E and has deployed three anchors westward marked by special buoys.

A no wash zone exists between special light buoy, *Fl.Y.2-5s* (27° 21'.14 S 153° 10'.87 E), and No22 light buoy (27° 21'.54 S 153° 10'.60 E) which been altered to a special light buoy, *Fl.Y.2-5s*.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 237**

**1022(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - Bramble Bay - Light beacon destroyed**

Maritime Safety Queensland Notice 923(T)/2011 (AA559083)

The port lateral light beacon, *Fl.R.3s No4* (27° 20'.80 S 153° 06'.71 E), has been destroyed; a light buoy exists in situ.

**Chart temporarily affected - Aus 236**

**1024(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - Scarborough - Dredging operations**

Date - Until 29 February 2012

Maritime Safety Queensland Notice 919(T)/2011 (AA559121)

The dredge *Ruby* is conducting dredging operations in the waterways and marina (27° 11'.5 S 153° 06'.0 E).

The dredge will display appropriate lights and shapes. It will monitor VHF Ch 16 and can be contacted on 0418 451 183.

Deep draft vessels are advised to contact the dredge before passing.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 236**

**1027(T)/2011 AUSTRALIA - QUEENSLAND - Hay Point - Depth information***Former Notice - 820(T)/2011 is cancelled*

Maritime Safety Queensland Notice 894(T)/2011 (AA557518)

The available depth for the navigation channel in Hay Point tug harbour is 5.3m.

Lesser depths exist close to the outer edge of the channel and at the southern end of the tug berths.

Mariners are advised to keep to the centre of the channel when approaching and leaving the tug berths.

**Chart temporarily affected - Aus 249 - Aus 250****1030(T)/2011 AUSTRALIA - QUEENSLAND - Mackay - Depth information***Former Notice - 821(T)/2011 is cancelled*

Maritime Safety Queensland Notice 921(T)/2011 (AA558853)

Available depths as at 27 September 2011:

<i>Remarks</i>	<i>Metres</i>
Entrance Channel	8.8
* Swing Basin	8.7
* Berth No 1	10.8
* Berth No 3	12.7
* Berth No 3 & 4 composite	12.4
* Berth No 4	10.7
* Berth No 5	12.4

\* Indicates new or revised entry.

Caution: Lesser depths may occur in berthing pockets but are not considered to have an impact on shipping.

**Chart temporarily affected - Aus 250****1031(T)/2011 AUSTRALIA - QUEENSLAND - Airlie Beach - Muddy Bay - Harbour works**

Maritime Safety Queensland Notice 898(T)/2011 (AA557519)

Piling operations are in progress in the vicinity of position 20° 16'.19 S 148° 43'.64 E. A light, Q.Y, has been established on the outer most pile.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 268****1032(T)/2011 AUSTRALIA - QUEENSLAND - Cape Edgecumbe to Abbot Point - Scientific instruments**

Maritime Safety Queensland Notice 948(T)/2011 (AA559162)

Special light buoys, *Fl.Y.5s*, exist in positions:

19° 55'.92 S 148° 13'.61 E  
 19° 54'.39 S 148° 08'.93 E  
 19° 51'.29 S 148° 03'.34 E.

**Chart temporarily affected - Aus 255 - Aus 825 - Aus 826****1033(T)/2011 AUSTRALIA - QUEENSLAND - Townsville - Ross River - Marina established**

Maritime Safety Queensland (AA558958 - AA558962)

A marina exists in an area bounded by the following positions:

19° 15'.53 S 146° 50'.62 E  
 19° 15'.70 S 146° 50'.50 E  
 19° 15'.70 S 146° 50'.19 E.

*Note:* A block update for Aus 256 and Aus 257 will be issued on receipt of survey data.

**Chart temporarily affected - Aus 256 - Aus 257**

**1034(T)/2011 AUSTRALIA - QUEENSLAND - Townsville - Harbour works***Date* - Until 30 June 2013

Maritime Safety Queensland Notice 946(T)/2011 (AA559067)

Harbour works at berths 8 (19° 15'.11 S 146° 49'.96 E) and 10 (19° 15'.05 S 146° 49'.85 E) are in progress and the berths are closed to shipping.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 257****1036(T)/2011 AUSTRALIA - QUEENSLAND - Magnetic Island - Scientific instruments***Date* - Until 30 September 2012

Maritime Safety Queensland Notice 954(T)/2011 (AA559338)

Scientific instruments marked by special light buoys, *Fl. Y. 3s*, exist in positions:

19° 09'.32 S 146° 52'.57 E

19° 09'.34 S 146° 52'.56 E

19° 09'.40 S 146° 52'.53 E.

**Chart temporarily affected - Aus 256****1037(T)/2011 AUSTRALIA - QUEENSLAND - Cairns - Marlin Marina - Harbour works**

Maritime Safety Queensland Notice 936(T)/2011 (AA559219)

Works associated with the construction of G finger jetty (16° 55'.06 S 145° 46'.90 E) are in progress.

Mariners are advised that during the works some piles may be unlit and to navigate with caution in the area.

**Chart temporarily affected - Aus 262 - Aus 263 - AX 63262****1042(T)/2011 AUSTRALIA - QUEENSLAND - Karumba - Depth information***Former Notice* - 985(T)/2011 is cancelled

Maritime Safety Queensland Notice 943(T)/2011 (AA559067)

Available depths as at 3 October 2011:

<i>Berth</i>	<i>Metres</i>
* Entrance Channel	3.6
Mobil/Trinity Wharf	6.3
Raptis Wharf	5.3
Ruby Marine Wharf	5.3
Gulf Freight Services Wharf	6.2
Karumba Cold Stores Wharf	6.2
Seaswift/Shell Wharf	6.2
Karumba Livestock Loading Wharf	5.4
Gulf Freight Services Ramp/Wharf	4.6
Pasminco Export Wharf	4.2

\* Indicates revised entry.

**Chart temporarily affected - Aus 6****1091(T)/2011 AUSTRALIA - QUEENSLAND - Hay Point - Scientific instruments**

Maritime Safety Queensland Notice 1018(T)/2011 (AA562002)

Special light buoys, *Q. Y*, exist in positions 21° 16'.04 S 149° 18'.09 E and 21° 24'.90 S 149° 20'.17 E.

**Chart temporarily affected - Aus 249 - Aus 250 - AX 0249E**

**1142(T)/2011 AUSTRALIA - QUEENSLAND - Gold Coast Seaway - Shoaling***Former Notice* - 910(T)/2011 is cancelled

Maritime Safety Queensland Notice 1070(T)/2011 (AA565511)

Available depths as at 24 October 2011:

*Metres*

Centre line leads (255°)	4.8
Southern approach leads (291°)	3.9

A shoal area, with a least depth of 3.9m, is drifting northwards immediately east of the southern break wall towards the centreline leads.

Mariners are advised to navigate with caution when using the southern approach leads as breaking waves may be experienced when seas rise above 1.5m.

**Chart temporarily affected - Aus 230****1143(T)/2011 AUSTRALIA - QUEENSLAND - Gold Coast Seaway - Dredging operations***Former Notice* - 909(T)/2011 is cancelled*Date* - Until 28 February 2012

Maritime Safety Queensland Notice 1072(T)/2011 (AA565512)

The dredge *Port Frederick* is conducting dredging operations at the entrance to the Gold Coast Seaway (27° 56'.0 S 153° 26'.0 E).

The dredge will be operating between the entrance and Surfers Paradise beach (28° 00'.0 S 153° 26'.0 E) during the operations.

The dredge will monitor VHF Ch 16 and Ch 67.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 230 - Aus 814****1145(T)/2011 AUSTRALIA - QUEENSLAND - Brisbane River - Petrie Bight - Harbour works***Former Notice* - 203(T)/2011 is cancelled*Date* - Until 16 December 2011

Maritime Safety Queensland Notice 1024(T)/2011 (AA562438)

Remediation works on Howard Smith Wharves (27° 27'.75 S 153° 02'.13 E) are in progress.

A barge and support vessels are on site and will display appropriate lights and shapes. The barge has deployed three anchors, marked by special light buoys. The support vessel will monitor VHF Ch 13.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 238****1150(T)/2011 AUSTRALIA - QUEENSLAND - Percy Isles - South Island - Wreck**

Maritime Safety Queensland Notice 1074(T)/2011 (AA565504)

A wreck exists in position 21° 48'.18 S 150° 23'.70 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 822 - Aus 823 - AX 0822E - AX 0823E**

**1151(T)/2011 AUSTRALIA - QUEENSLAND - Hay Point - Depth information**

*Former Notice* - 1090(T)/2011 is cancelled

Maritime Safety Queensland Notice 1055(T)/2011 (AA564549)

Available depths as at 27 October 2011:

	<i>Metres</i>
* HPS Berth No 1	16.0
HPS Berth No 2	16.4
DBCT Berth No 1	17.8
DBCT Berth No 2	17.6
DBCT Berth No 3	18.1
DBCT Berth No 4	17.5

\* Indicates revised entry.

**Chart temporarily affected - Aus 249 - Aus 250 - AX 0249E****1154(T)/2011 AUSTRALIA - QUEENSLAND - Cairns - Trinity Inlet - Smiths Creek - Wreck**

Maritime Safety Queensland Notice 1021(T)/2011 (AA562436)

A wreck marked by a special light buoy, *Fl.Y.2-5s*, exists in position 16° 57'.51 S 145° 46'.26 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 264****1156(T)/2011 AUSTRALIA - QUEENSLAND - Thursday Island - Light beacon destroyed**

Maritime Safety Queensland Notice 1026(T)/2011 (AA565110)

The light beacon, *Fl.Y.2-5s* (10° 34'.88 S 142° 11'.91 E (WGS84 datum)), has been destroyed.

**Chart temporarily affected - Aus 293 - Aus 299****1199(T)/2011 AUSTRALIA - QUEENSLAND - Brisbane River - Shafston Reach to Bulimba Reach - Harbour works**

*Date* - Until 23 December 2011

Maritime Safety Queensland Notice 1082(T)/2011 (AA565897)

Refurbishment works are in progress and will be progressively conducted in the following positions:

27° 28'.48 S 153° 02'.39 E  
 27° 27'.69 S 153° 03'.07 E  
 27° 28'.41 S 153° 03'.26 E.

The location of the piling barge will be promulgated on VHF Ch 13 by Brisbane Harbour.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 238****1201(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - Ship to ship transfer**

*Date* - Until 15 January 2012

Maritime Safety Queensland Notice 1139(T)/2011 (AA568104)

Ship to ship transfer of LPG will be conducted at STS1 anchorage (27° 17'.25 S 153° 16'.56 E). An exclusion zone (1850 metres radius) exists around transfer operations.

**Chart temporarily affected - Aus 236**

**1203(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Depth information***Former Notice - 1085(T)/2011 is cancelled*

Maritime Safety Queensland Notice 1100(T)/2011 (AA566568)

Available depths as at 8 November 2011:

	<i>Metres</i>
<i>Sea Channels:</i>	
Wild Cattle Cutting	16.1
Boyne Island Cutting	16.3
Boyne Island Extension Channel	9.0
Golding Cutting	16.1
South Bypass Channel	7.4
Gatcombe Channel	16.3
Gatcombe Bypass Channel	13.4
<i>Inner Channels:</i>	
* Auckland Channel	15.8
Auckland Bypass Channel	6.8
Clinton Channel	16.0
Clinton Bypass Channel	10.6
Clinton Swing Basin	10.6
Targinie Channel	10.6
Targinie Swing Basin East	10.6
Targinie Swing Basin West	9.0
<i>Berths:</i>	
Boyne Smelter Wharf	15.0
South Trees East Wharf	13.8
South Trees West Wharf	13.0
Barney Point Wharf (east approach)	13.5
Barney Point Wharf (west approach)	11.5
Barney Point Wharf	15.0
Auckland Point No 1 Wharf	11.3
Auckland Point No 2 Wharf	11.3
Auckland Point No 3 Wharf	11.4
Auckland Point No 4 Wharf	11.3
Clinton No 1 Wharf	19.2
Clinton No 2 Wharf	18.4
Clinton No 3 Wharf	18.6
Clinton No 4 Wharf	19.1
Fishermans Landing Wharf No 1	13.6
Fishermans Landing Wharf No 2	13.3
Fishermans Landing Wharf No 4	11.4
Fishermans Landing Wharf No 5	11.4

\* Indicates new or revised entry.

**Chart temporarily affected - Aus 244 - Aus 245 - Aus 246****1204(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Rich Rocks - Light buoy**

Maritime Safety Queensland Notice 1078(T)/2011 (AA565735)

A special light buoy, *Fl. Y. 4s*, exists in position 23° 49'.92 S 151° 16'.55 E.**Chart temporarily affected - Aus 244 - Aus 245****1205(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Hamilton Point - Light buoys**

Maritime Safety Queensland Notice 1081(T)/2011 (AA565736)

Special light buoys, *Fl. Y. 2-5s*, exist in positions 23° 48'.00 S 151° 13'.31 E and 23° 47'.72 S 151° 12'.88 E.**Chart temporarily affected - Aus 245**

**1206(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Pipelines***Former Notice* - 1148(T)/2011 is cancelled*Date* - Until 31 December 2012

Maritime Safety Queensland Notices 1115(T)/2011, 1132(T)/2011 (AA567581, AA567881)

Submarine pipelines, marked by unlit orange buoys and lit special buoys, exist between;

23° 46'.87 S 151° 10'.14 E

23° 46'.69 S 151° 10'.70 E

23° 46'.68 S 151° 11'.06 E

23° 46'.94 S 151° 11'.59 E

23° 47'.06 S 151° 11'.96 E

and

23° 47'.06 S 151° 11'.96 E

23° 46'.77 S 151° 11'.65 E

and

23° 46'.56 S 151° 10'.03 E

23° 46'.65 S 151° 10'.71 E

23° 46'.64 S 151° 10'.88 E

23° 46'.56 S 151° 11'.12 E

23° 46'.38 S 151° 11'.38 E

and

23° 46'.18 S 151° 09'.95 E

23° 45'.49 S 151° 10'.34 E

23° 45'.40 S 151° 10'.55 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 244 - Aus 245****1208(T)/2011 AUSTRALIA - QUEENSLAND - Hay Point - Diving operations***Date* - Until 23 December 2011

Maritime Safety Queensland Notice 895(T)/2011 (AA557517)

Diving operations are in progress in the vicinity of the HPS berths (21° 15'.68 S 149° 18'.76 E).

MV *Investigator* is onsite and will display appropriate shapes and will monitor VHF Ch 14 and Ch 16.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 249 - Aus 250****1209(T)/2011 AUSTRALIA - QUEENSLAND - Hay Point - Diving operations***Former Notice* - 1028(T)/2011 is cancelled*Date* - Until 23 December 2011

Maritime Safety Queensland Notice 1127(T)/2011 (AA567837)

Diving operations are in progress in the vicinity of the DBCT berths (21° 14'.96 S 149° 18'.31 E).

MV *Shadows* is onsite and will display appropriate shapes and will monitor VHF Ch 14 and Ch 16.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 249 - Aus 250****1210(T)/2011 AUSTRALIA - QUEENSLAND - Airlie Beach - Abel Point - Obstructions**

Maritime Safety Queensland Notice 1123(T)/2011 (AA567586)

Underwater obstructions, marked by special buoys, exist in the following positions:

20° 15'.87 S 148° 42'.60 E

20° 15'.88 S 148° 42'.60 E

20° 15'.87 S 148° 42'.56 E.

**Chart temporarily affected - Aus 268**

**1211(T)/2011 AUSTRALIA - QUEENSLAND - Bowen - Obstruction**

Maritime Safety Queensland Notice 1101(T)/2011 (AA566565)

An obstruction, least depth *0.2m*, exists in position 20° 01'.33 S 148° 15'.39 E.**Chart temporarily affected - Aus 268****1212(T)/2011 AUSTRALIA - QUEENSLAND - Abbot Point - Scientific instruments**

Maritime Safety Queensland Notice 1120(T)/2011 (AA567591)

Special light buoys, *Fl. Y. 4s*, exist in the following positions:

19° 55'.80 S 148° 07'.80 E  
 19° 52'.79 S 148° 05'.99 E  
 19° 50'.39 S 148° 02'.38 E  
 19° 53'.42 S 148° 01'.19 E  
 19° 49'.20 S 148° 00'.60 E  
 19° 52'.81 S 147° 58'.20 E.

**Chart temporarily affected - Aus 255 - Aus 826****1213(T)/2011 AUSTRALIA - QUEENSLAND - Townsville - Depth information***Former Notice - 1092(T)/2011 is cancelled*

Maritime Safety Queensland Notice 1089(T)/2011 (AA565906)

Available depths as at 4 November 2011:

	<i>Metres</i>	<i>Remarks</i>
Sea Channel	11.7	
* Platypus Channel	11.5	
<i>Outer Harbour:</i>		
Arrival Channel	7.0	
Departure Channel	10.8	
<i>Inner Harbour:</i>		
Harbour	11.5	
<i>Berths:</i>		
No 1	11.7	
No 2	11.6	
No 3	11.8	
No 4	10.2	
	9.0	Arrival to departure from 0 mark
	9.5	Arrival to departure from 5 mark
	10.1	Arrival to departure from 10 mark
No 7	10.6	
Between No 7 and No 8	9.8	Seaward of 0 mark at No 7
No 8	9.3	
No 9	11.7	
Between No 9 and No 10	10.4	Seaward of 0 mark at No 10
No 10	9.3	From 10 mark to seaward dolphin
	8.9	From Ro-Ro ramp to 10 mark
No 11	11.4	
Ross River Channel	-	No declared depth
Ross River	-	No declared depth
Ross Creek	-	No declared depth

\* Indicates revised entry.

**Chart temporarily affected - Aus 256 - Aus 257****1267(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - Bramble Bay - Hays Inlet - Obstructions**

Maritime Safety Queensland Notice 1147(T)/2011 (AA569506)

Obstructions exist at the entrance to Hays Inlet (27° 15'.84 S 153° 04'.79 E). The channel is closed to navigation.

**Chart temporarily affected - Aus 236**

**1269(T)/2011 AUSTRALIA - QUEENSLAND - Bundaberg - Depth information***Former Notice* - 1083(T)/2011 is cancelled

Maritime Safety Queensland Notice 1174(T)/2011 (AA569377)

Available depths as at 21 November 2011:

	<i>Metres</i>
Sea Reach	7.9
Middle Reach	7.9
Inner Reach	7.9
* Swing Basin	6.6
Oil Berth	8.3
* BST Berth	10.6
Deep draught departure channel	7.9m

\* Indicates revised entry.

**Chart temporarily affected - Aus 242 - Aus 243****1270(T)/2011 AUSTRALIA - QUEENSLAND - Bundaberg - Burnett River - Rocky Reach - Obstruction**

Maritime Safety Queensland Notice 1180(T)/2011 (AA569479)

An obstruction marked by a special light buoy, *Fl.Y.2-5s*, exists in position 24° 47'.87 S 152° 21'.91 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 242****1272(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - North Passage Island - Light buoys**

Maritime Safety Queensland Notice 1176(T)/2011 (AA569485)

Special light buoys, *Fl.Y.2-5s*, exist in the following positions:

23° 45'.50 S 151° 10'.29 E

23° 45'.42 S 151° 10'.27 E

23° 45'.42 S 151° 10'.46 E

23° 45'.34 S 151° 10'.41 E.

**Chart temporarily affected - Aus 245****1275(T)/2011 AUSTRALIA - QUEENSLAND - Hay Point to Bailey Islet - Scientific instruments***Former Notice* - 374(T)/2011 is cancelled

Maritime Safety Queensland Notice 1190(T)/2011 (AA569630)

Special light buoys, *Fl(5)Y.20s*, exist in positions:

21° 16'.28 S 149° 18'.56 E

21° 02'.36 S 149° 32'.70 E.

Mariners are not to use these buoys as moorings.

**Chart temporarily affected - Aus 249 - Aus 250 - Aus 251 - AX 0249E****1276(T)/2011 AUSTRALIA - QUEENSLAND - Abbot Point - Scientific instrument***Date* - Until 1 March 2012

Maritime safety Queensland Notice 1181(T)/2011 (AA569386)

A special light buoy, *Fl.Y.4s*, exists in position 19° 51'.33 S 148° 03'.53 E.**Chart temporarily affected - Aus 255**

**1277(T)/2011 AUSTRALIA - QUEENSLAND - Abbot Bay - Clark Shoal - Drilling operations**

*Date* - Until 31 December 2011

Maritime Safety Queensland Notice 1179(T)/2011 (AA569387)

Jack-up barges *Sealift 1* and *Sealift 2* and support vessels are conducting drilling operations in an area bounded by the following positions:

19° 53'.45 S 148° 02'.51 E  
 19° 52'.22 S 148° 02'.45 E  
 19° 50'.41 S 148° 03'.44 E  
 19° 50'.46 S 148° 03'.59 E  
 19° 52'.18 S 148° 04'.41 E  
 19° 52'.60 S 148° 03'.52 E  
 19° 53'.16 S 148° 03'.09 E.

All vessels will display appropriate lights.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 255****1278(T)/2011 AUSTRALIA - QUEENSLAND - Cape Bowling Green - Light buoy off station**

*Date* - Until 31 January 2012

Australian Institute of Marine Science (AA568494)

The isolated danger light buoy, *Fl(2)5s* (19° 18'.07 S 147° 37'.04 E), has been temporarily withdrawn.

**Chart temporarily affected - Aus 826 - Aus 827****1279(T)/2011 AUSTRALIA - QUEENSLAND - Townsville - Ross River - Harbour works**

*Former Notice* - 930(T)/2011 is cancelled

*Date* - Until 31 December 2012

Maritime Safety Queensland Notices 413/2011, 418/2011, 694(T)/2011, 819(T)/2011, 1187(T)/2011 (AA533266, AA533290, AA547521, AA553394, AA569520)

Harbour works associated with the construction of the Townsville Port Access Road Bridge are in progress.

Works on the middle pier structure of the bridge are in progress. The width of the river between the middle and northern pier will be progressively restricted. Light beacons mark the construction area.

Piles have been established to protect the construction area on the southern side. *Fl.R.4.3s* lights have been established on three of the series of piles to indicate the southern extremity of the navigable channel within the works area.

A starboard lateral light buoy, *Fl.G.3s*, exists in position 19° 16'.15 S 146° 50'.11 E.

The area between the middle and southern pier will remain closed till the completion of the works.

Vessels must not pass another vessel within the construction area where the width of the river has been reduced.

The maximum air draught of vessels permitted to transit the bridge area is 6m.

The maximum beam of vessels permitted to transit the bridge area is 8.5m.

Mariners must advise the construction site foreman of the intent to transit through the construction area by mobile phone on 0420372093 or 0427036506. Mariners must also announce their approach to the bridge on VHF Ch 16 to all vessels using the river and make necessary passing arrangements.

Priority should be given to a vessel transiting the channel in the direction of tidal flow. The give way vessel should stem the tide at a safe distance from the restricted area.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 257**

**1283(T)/2011 AUSTRALIA - QUEENSLAND - Cairns - Trinity Inlet - Obstruction**

Maritime Safety Queensland Notice 1175(T)/2011 (AA569466)

An obstruction marked by a special light buoy, *Fl. Y. 3s*, exists in position 16° 57'.01 S 145° 47'.58 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 263 - Aus 264**

**1284(T)/2011 AUSTRALIA - QUEENSLAND - Cairns - Trinity Inlet - Wreck**

Maritime Safety Queensland Notice 1172(T)/2011 (AA569462)

A wreck marked by a special light buoy, *Fl. Y. 3s*, exists in position 16° 56'.69 S 145° 47'.02 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 263 - Aus 264**

**1285(T)/2011 AUSTRALIA - QUEENSLAND - Cooktown - Light beacon destroyed**

Maritime Safety Queensland Notice 1206(T)/2011 (AA570050)

No3 light beacon (15° 27'.32 S 145° 15'.20 E) has been destroyed; a special light buoy, *Fl. Y. 3s*, exists in situ.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 270**

**1321(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - Brisbane River - Depth information***Former Notice - 1265(T)/2011 is cancelled*

Brisbane Port Corporation (AA572523)

Available depths and under keel clearances (UKC) at 15 December 2011:

<i>Berth</i>	<i>Metres</i>	<i>Remarks</i>
Fisherman Islands No10	13.9	
* Fisherman Islands No9	13.9	
Fisherman Islands No8	14.0	
Fisherman Islands No7	14.0	
Fisherman Islands No6	14.1	
Fisherman Islands No5	14.0	
Fisherman Islands No4	13.9	
Fisherman Islands No3	14.0	
* Fisherman Islands No2	14.0	
* Fisherman Islands No1	13.9	
Fisherman Islands Grain and Woodchip	13.2	
* Caltex Fisherman Islands	14.6	
Fisherman Islands Coal	14.0	
Fisherman Islands General Purpose	11.5	
BP Luggage Point	14.0	
Caltex Products	9.8	
Cement Australia Co Wharf	9.8	
BP Products	10.8	
Shell	10.9	
Pacific Terminals	10.8	
Incitec North	10.0	
* Incitec South	10.0	
* Pinkenba 1	10.4	
* Pinkenba 2	10.4	
Riverside Marina	-	
Sugar Terminal	9.7	
Cairncross Fitting Out Wharf	8.0	
Cairncross Breasting Wharf	6.3	
Brisbane Naval Wharf	-	
Maritime No3	5.6 (not maintained)	
* Maritime No2	8.6	
Maritime No1	9.1	
Hamilton No4	10.0	
* Hamilton No1	8.9	
* Brisbane Cruise Ship Terminal	8.9	

	<i>Metres</i>	<i>UKC/Remarks</i>
<i>Moreton Bay :</i>		
North East Channel	5.5	1.5
* North West Channel	14.8	2.3 (280m width)
North West Bypass Channel	9.2	1.6
Spitfire Channel	15.0	1.5 (600m width)
East Knoll Bypass Channel	6.9	1.4
East Channel	15.0	1.5 (300m width from western side)
Main Channel (M8 - M9)	10.0	1.8
Entrance Channel (E5 - EBCN)	14.7	1.5

<i>Brisbane River :</i>		
Entrance Beacons and Bar Cutting	14.0	1.46
Fisherman Islands Swing Basin	13.2	1.3
Pelican Banks Reach to Hamilton Reach	9.0	0.6 / 0.9 (draft/tide)
Cement Australia Swing Basin	9.0	0.6 / 0.9 (draft/tide)
Pinkenba Swing Basin	9.0	0.6 / 0.9 (draft/tide)
* Hamilton Swing Basin	9.0	0.6 / 0.9 (draft/tide)

\* Indicates new or revised entry.

**Chart temporarily affected – Aus 235 – Aus 236 – Aus 237 – Aus 238 – Aus 814 – Aus 815**

**1322(T)/2011 AUSTRALIA - QUEENSLAND - Moreton Bay - Coochiemudlo Island - Wreck**  
Maritime Safety Queensland Notice 1220(T)/2011 (AA571709)

A wreck marked by a special light buoy, *Fl. Y. 3s*, exists in position 27° 34'.51 S 153° 19'.92 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 236**

**1323(T)/2011 AUSTRALIA - QUEENSLAND - Pumicestone Channel - Ningi Creek - Beacons destroyed**  
Maritime Safety Queensland Notice 1221(T)/2011 (AA571614)

The port lateral beacons (27° 03'.50 S 153° 07'.25 E and 27° 03'.58 S 153° 06'.54 E) have been destroyed.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 236**

**1324(T)/2011 AUSTRALIA - QUEENSLAND - Mooloolaba - Shoaling; dredging operations**  
Maritime Safety Queensland Notices 1238(T)/2011, 1241(T)/2011 (AA571938, AA572340)

Shoaling with a least depth of *1m* exists between positions 26° 40'.74 S 153° 07'.95 E, 26° 40'.73 S 153° 07'.94 E and 26° 40'.75 S 153° 07'.91 E.

The dredge *Navua* is conducting dredging operations at the entrance to Mooloolah River (26° 40'.75 S 153° 07'.90 E).

The dredge will monitor VHF Ch 12, Ch 16 and UHF Ch 25.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 235**

**1325(T)/2011 AUSTRALIA - QUEENSLAND - Gladstone - Dredging operations**

*Date* - Until 20 January 2012

Maritime Safety Queensland Notice 1235(T)/2011 (AA571773)

The dredge *Brisbane* is conducting dredging operations in and around the main channels of Gladstone harbour.

The dredge will display appropriate lights and shapes and will monitor VHF Ch 13 and 16.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 244 – Aus 245 – Aus 246**

**1327(P)/2011 AUSTRALIA - QUEENSLAND - Victor Island - Mooring buoys to be established**

*Date* - On or about 15 January 2012

Maritime Safety Queensland Notice 1240(T)/2011 (AA572201, AA572259, AA572260)

Mooring buoys will be established as follows:

21° 19'.97 S 149° 23'.04 E	21° 19'.98 S 149° 23'.29 E
21° 20'.00 S 149° 23'.58 E	21° 20'.14 S 149° 22'.85 E
21° 20'.14 S 149° 23'.08 E	21° 20'.22 S 149° 23'.34 E
21° 20'.37 S 149° 22'.62 E	21° 20'.38 S 149° 22'.84 E
21° 20'.43 S 149° 23'.12 E	21° 20'.57 S 149° 22'.39 E
21° 20'.59 S 149° 22'.65 E	21° 20'.63 S 149° 22'.90 E
21° 20'.78 S 149° 22'.46 E	21° 20'.83 S 149° 22'.69 E
21° 20'.98 S 149° 22'.23 E	21° 21'.02 S 149° 22'.48 E
21° 21'.16 S 149° 22'.00 E	21° 21'.22 S 149° 22'.27 E.

**Chart which will be affected – Aus 249 – Aus 823 – AX 0249E – AX 0823E**

**1331(T)/2011 AUSTRALIA - TORRES STRAIT - Adolphus Channel to Goods Island - AIS trial***Former Notice* - 1218(T)/2011 is cancelled*Date* - Until 30 June 2012

Australian Maritime Safety Authority (AA567095, AA572149, AA572150)

AIS units have been attached to nav aids as follows:

<i>MMSI</i>	<i>Position (WGS84 datum)</i>	<i>Type</i>	<i>Remarks</i>
995031033	10° 28'.43 S 142° 22'.61 E	Real	Alert Patches north cardinal light buoy
995031038	10° 29'.77 S 142° 27'.08 E	Synthetic	East Strait Island rear light
995031022	10° 30'.16 S 142° 21'.51 E	Real	Herald Patches starboard lateral light buoy
995031023	10° 33'.91 S 142° 09'.13 E	Real	Goods Island rear light
995036032	10° 40'.20 S 142° 37'.80 E	Virtual	Quetta Rock.

**Chart temporarily affected – Aus 292 – Aus 293 – Aus 296 – Aus 299 – Aus 376 – Aus 700 – Aus 839**

## NORTHERN TERRITORY

**950(T)/2004 AUSTRALIA - NORTHERN TERRITORY - Troubadour Shoals - Scientific instruments.**  
*Former Notice* - 849(T)/2002 is cancelled  
 MetOcean (A113058).

Scientific instruments, marked by white floats, exist in positions (WGS 84) as follows:

11° 32'.76 S 128° 14'.54 E  
 11° 32'.46 S 128° 14'.43 E  
 11° 09'.78 S 128° 10'.90 E  
 11° 09'.88 S 128° 10'.70 E  
 10° 25'.46 S 128° 13'.59 E  
 10° 25'.49 S 128° 13'.32 E  
 9° 49'.63 S 128° 10'.18 E  
 9° 49'.62 S 128° 09'.92 E  
 9° 38'.27 S 128° 07'.50 E  
 9° 38'.27 S 128° 07'.19 E

\* Indicates new or revised position.

Mariners are not to use the buoys as a mooring.

**Chart temporarily affected - Aus 309 - Aus 311 - Aus 315 - AX 70309.**

**223(T)/2009 AUSTRALIA - TIMOR SEA - Sahul Banks - Navaid; racon non operational**  
*Former Notice* - 671(T)/2008 is cancelled  
 Modec Management Services (AA384494)

A lit riser turret mooring exists in position 10° 52'.50 S 126° 34'.19 E. The racon is non operational.

**Chart temporarily affected - Aus 312 - AX 0312F - AX 4721F - Aus 4721(INT 721) - AU311126**

**173(T)/2011 AUSTRALIA - NORTHERN TERRITORY - Darwin - Depth information**  
*Former Notice* - 767(T)/2010 is cancelled  
 Darwin Port Corporation (AA516379)

Available depths as at 28 January 2011:

<i>Berths</i>	<i>Metres</i>
DLNG	13.1 (12.1 in Turning Basin)
LNG 1-2	10.8
* East Arm 0-100m	11.5
* East Arm 100-200m	12.4
* East Arm 200-300m	12.4
* East Arm 300-400m	12.6
* East Arm 400-500m	12.8
* East Arm 500-600m	13.4
East Arm 600-700m	11.8
* Bulk Solids Wharf	12.4
* Bulk Liquids Wharf	11.4
No 2 Fort Hill East	11.2
No 2 Fort Hill West	10.5
No 3 Stokes Hill East	4.7
No 3 Stokes Hill West	5.0
No 4 Stokes Hill East	1.9
No 4 Stokes Hill Middle	-0.2
No 4 Stokes Hill West	3.4
Fishermans Wharf East	2.1
Fishermans Wharf West	0.7
Perkins VBPS	-0.7

\*Indicates new or revised entry.

**Chart temporarily affected - Aus 24 - Aus 27 - Aus 28**

**324(T)/2011 AUSTRALIA - NORTHERN TERRITORY - Apsley Strait - Light buoys off station and unlit**  
Department of Lands and Planning (AA523799)

Light buoys in Apsley Strait between positions 11° 51'.61 S 130° 35'.09 E and 11° 17'.03 S 130° 17'.90 E are off station and unlit.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 22 - Aus 23 - Aus 309 - Aus 722 - AX 0309F - AX 72309 - AX 72722**

**617(T)/2011 AUSTRALIA - NORTHERN TERRITORY - Cape Wessels - Hulk westnorthwestward**  
HMAS *Melville* (AA539627, AA539628)

A partially submerged 25m fishing vessel is moored in position 10° 41'.56 S 135° 43'.08 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 442**

**1161(T)/2011 AUSTRALIA - NORTHERN TERRITORY - Darwin - Frances Bay - Mooring buoy**

*Former Notice* - 939(T)/2011 is cancelled

*Date* - Until 30 November 2011

Darwin Port Corporation Notice 84(T)/2011 (AA565562)

A lit yellow cylindrical mooring buoy, Q.Y, exists in position 12° 28'.35 S 130° 51'.47 E.

**Chart temporarily affected - Aus 24 - Aus 26 - Aus 28 - AX 72026**

**1164(T)/2011 AUSTRALIA - TIMOR SEA - Melville Island - Seismic survey northwestwards**

*Date* - Until 23 December 2011

Eni Australia (AA564956)

MV *Veritas Viking II*, towing eight 4800m cables, and support vessels are conducting a survey in an area bounded by the following positions:

10° 13'.26 S 128° 52'.82 E  
10° 03'.71 S 128° 49'.44 E  
10° 00'.02 S 129° 02'.39 E  
10° 00'.01 S 129° 15'.00 E  
10° 04'.22 S 129° 16'.38 E  
10° 13'.26 S 128° 52'.82 E.

**Chart temporarily affected - Aus 310 - Aus 311 - AX 0310F - AX 0311F - AX 4721F - Aus 4721 (INT 721)**

**1333(T)/2011 AUSTRALIA - TIMOR SEA - Osborn Passage - Drilling and pipelay operations**

*Former Notice* - 120(T)/2011 is cancelled

*Date* - Until 29 June 2012

PTTEP Australasia Pty Ltd (AA353657, AA353658, AA571901, AA571902)

Drill rig *Ensco 109* is conducting drilling operations in position 12° 40'.20 S 124° 32'.22 E. A 500m exclusion zone exists around the drill rig.

MV *Sapura-3000* and MV *Rockwater-2* are conducting pipelay operations between the following positions:

12° 40'.34 S 124° 32'.37 E  
12° 30'.08 S 124° 25'.09 E  
and  
12° 32'.49 S 124° 26'.63 E  
12° 31'.50 S 124° 27'.56 E.

The FPSO *Montara Venture* will be established mid 2012 in position 12° 39'.59 S 124° 32'.69 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 314 – Aus 319 – Aus 4721 (INT 721) – Aus 4722 (INT 722) – AX 0314F – AX 0319F – AX 4721F – AX 4722F**

## WESTERN AUSTRALIA

**729(T)/2006 WESTERN AUSTRALIA - Albany - Light beacon; light buoy.**

List of Lights Vol K/2006 - 1803.7

Albany Port Authority (A198134).

The No 7 light beacon has been removed; a starboard lateral spar light buoy, *Fl.G.1.5s*, exists in situ.

**Chart temporarily affected - Aus 109.**

**1034(T)/2007 AUSTRALIA - WESTERN AUSTRALIA - Dampier - Depth information**

Former Notice - 705(T)/2007 is cancelled

Dampier Port Authority Notice 48/2007 (AA295909)

Available depths as at 7 November 2007:

	<i>Metres</i>
East Intercourse Island	20.0
Ell Layby berth	19.3
PPT1	17.2
PPT2	18.0
PPT3	18.0
PPT4	18.0
PPT5	18.0
Service Wharf	6.7
* Mermaid Mariner Supply Base Channel	5.4
* Berthing pocket	7.2
* Indicates revised entry.	

**Chart temporarily affected - Aus 57 - Aus 58 - Aus 59**

**1052(T)/2008 AUSTRALIA - WESTERN AUSTRALIA - Yampi Sound - Parakeet Channel - Comber Rock - Buoy off station**

Department for Planning and Infrastructure (AA362535)

The isolated danger buoy (16° 06'.44 S 123° 39'.61 E (WGS84 datum)) is off station.

**Chart temporarily affected – Aus 40 – Aus 732 – Aus 733**

**451(T)/2009 AUSTRALIA - WESTERN AUSTRALIA - Geraldton - Light buoy off station**

Geraldton Port Authority (AA397386)

The port lateral light buoy, *Fl(4)R.10s* (28° 42'.70 S 114° 34'.50 E (WGS84 datum)), is currently in position 28° 42'.64 S 114° 34'.55 E.

Vessels passing close to the south of the light buoy will have a least depth of 8.1m

**Chart temporarily affected - Aus 81 - Aus 751**

**518(T)/2009 AUSTRALIA - WESTERN AUSTRALIA - Geographe Bay - Scientific instrument**

Former Notice - 1260(T)/2006 is cancelled

Department for Planning and Infrastructure WA (AA400740)

A scientific instrument exists in position 33° 36'.7 S 115° 13'.7 E (WGS84 datum).

**Chart temporarily affected - Aus 334 - Aus 335 - Aus 755 - Aus 756 – AX 0334E – AX 0755E - AU434115**

**792(T)/2009 AUSTRALIA - WESTERN AUSTRALIA - Perth Canyon - Scientific instruments westwards**

Date - Until 1 November 2012

CSIRO (AA414960)

Subsurface scientific instruments, suspended 20m below the surface, exist in positions:

31° 55'.30 S 115° 00'.60 E	32° 03'.20 S 115° 04'.96 E
31° 59'.00 S 115° 14'.00 E	31° 46'.23 S 114° 56'.60 E
31° 43'.16 S 115° 01'.80 E	31° 41'.60 S 115° 07'.00 E
31° 38'.80 S 115° 11'.75 E	31° 37'.60 S 115° 14'.75 E

**Chart temporarily affected – Aus 334 – Aus 754 – AX 0334E – AX 0754E – AX 66002 - AU332114 - AU432115 - AU433115**

**911(T)/2009 AUSTRALIA - WESTERN AUSTRALIA - Dampier - Obstruction**

Date - Until 31 January 2010

Port of Dampier Notice 22/2009 (AA420011)

An obstruction is marked by two special light buoys, Q, in positions:

20° 32'.00 S 116° 44'.50 E

20° 31'.51 S 116° 45'.03 E

**Chart temporarily affected – Aus 57 – Aus 58 – Aus 741****76(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Barrow Island - Scientific instruments**

Date - Until 31 December 2011

Department of Transport WA Notice 103A/2009 (AA446956)

Scientific instruments marked by special light buoys, *Fl(5)Y.20s*, exist in the following positions (WGS84 datum):

20° 46'.79 S 115° 29'.29 E 20° 47'.04 S 115° 29'.78 E

20° 47'.39 S 115° 29'.94 E 20° 48'.58 S 115° 28'.59 E

20° 49'.01 S 115° 30'.83 E 20° 49'.53 S 115° 29'.20 E

20° 49'.95 S 115° 30'.35 E 20° 53'.06 S 115° 30'.78 E

20° 54'.36 S 115° 32'.25 E.

**Chart temporarily affected - Aus 62 - Aus 742 - Aus 743 - AU421115****85(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Binningup - Offshore works; exclusion zone**

Date - Until 13 January 2012

Department of Transport WA Notice 2/2010 (AA448304)

Works associated with the installation of submarine pipelines are in progress in the following area:

33° 07'.53 S 115° 41'.39 E (WGS84 datum)

33° 07'.52 S 115° 40'.51 E

33° 08'.07 S 115° 40'.50 E

33° 08'.08 S 115° 41'.38 E.

An exclusion zone marked by special light buoys exists within the area.

A barge and support vessels are on site and can be contacted on VHF Ch 12 and Ch 16.

**Chart temporarily affected - Aus 115 - Aus 334 - Aus 335 - Aus 755 – AX 0334E – AX 0755E - AU434115****139(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Barrow Island - Scientific instruments**

Date - Until 31 January 2012

Department for Transport WA Notice 9A/2010 (AA451302)

Scientific instruments marked by special light buoys, *Fl(5)Y.20s*, exist in the following positions:

20° 47'.8 S 115° 28'.3 E

20° 48'.3 S 115° 28'.9 E

20° 49'.4 S 115° 30'.6 E.

**Chart temporarily affected - Aus 62 - Aus 742 - Aus 743 - AU421115****337(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Esperance - Depth information***Former Notice* - 616(T)/2008 is cancelled

Esperance Ports Sea and Land (AA461996)

Available depths as of 23 March 2010:

<i>Location</i>	<i>Metres</i>
Berth No 1	13.2
Berth No 2	13.3
Berth No 3	18.2
Swing Basin	12.9/14.5
Entrance Channel	18.5

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 119 - AU5119P1**

**524(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Mullaloo to Warnbro Sound - Scientific instruments***Former Notice - 461(T)/2010 is cancelled*

Department of Transport WA (AA465142)

Special light buoys, *Fl. Y.5s*, exist in positions:

31° 45'.85 S 115° 43'.29 E	31° 47'.37 S 115° 42'.39 E
31° 47'.89 S 115° 41'.75 E	31° 52'.11 S 115° 42'.81 E
31° 52'.52 S 115° 43'.46 E	31° 53'.14 S 115° 43'.78 E
31° 53'.58 S 115° 44'.25 E	31° 53'.88 S 115° 44'.90 E
31° 55'.73 S 115° 44'.85 E	31° 56'.33 S 115° 44'.84 E
31° 58'.67 S 115° 44'.79 E	31° 59'.26 S 115° 44'.65 E
31° 59'.76 S 115° 44'.59 E	32° 01'.39 S 115° 43'.78 E
32° 01'.58 S 115° 44'.62 E	32° 01'.45 S 115° 34'.29 E
32° 04'.79 S 115° 37'.42 E	32° 05'.69 S 115° 37'.54 E
32° 08'.65 S 115° 38'.57 E	32° 20'.97 S 115° 44'.00 E.

Mariners are not to use these buoys as moorings.

**Chart temporarily affected - Aus 112 - Aus 116 - Aus 117 - Aus 334 - Aus 754 - Aus 755 – AX 0334E – AX 0754E – AX 0755E – AX 63112 – AX 66002 – AX 70117 - AU432115 - AU433115****629(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Dampier Archipelago - Scientific instruments northwestwards***Former Notice - 523(T)/2004 is cancelled*

MetOcean Engineers (AA472066)

Scientific instruments exist as follows:

<i>Position (WGS84 datum)</i>	<i>Remarks</i>
19° 36'.38 S 116° 07'.53 E	lit buoy, <i>Fl(5)Y.20s</i>
19° 36'.51 S 116° 07'.63 E	5 poly floats

**Chart temporarily affected - Aus 327****722(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Port Hedland - Depth information***Former Notice - 1080(T)/2009 is cancelled*

Port Hedland Port Authority Notice 5/2010 (AA477996)

Available depths as at 31 March 2010:

<i>Berth</i>	<i>Metres</i>
PHPA berth 1	12.0
PHPA berth 2	11.2
PHPA berth 3	12.2
BHP Billiton Nelson Point berth A	18.0
* BHP Billiton Nelson Point berth B	17.5
BHP Billiton Finucane Island berth C	17.9
* BHP Billiton Finucane Island berth D	19.2
Anderson Point berth 1	19.1
* Anderson Point berth 2	19.7

\* Indicates revised entry.

**Chart temporarily affected - Aus 52 - Aus 54 - AU5XXX52****936(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Dampier - Shoaling***Former Notice - 570(T)/2010 is cancelled*

Dampier Port Authority Notice 34/2010 (AA490752)

Shoaling, with least depth *3m*, exists at the Mermaid Supply Base between the berths and the slip in the area with a declared depth of 4m (20° 37'.94 S 116° 45'.22 E (WGS84 datum)).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 59 - AU5XXX58**

**1088(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Barrow Island - Ant Point - Anchorage northeastwards**  
Department of Transport WA Notice 89/2010 (AA497019)

An anchorage with a 300m radius swinging circle exists in position 20° 42'.2 S 115° 29'.8 E (WGS84 datum).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 62 - Aus 742**

**1142(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Irvine Island - Scientific instruments**

*Former Notice - 768(T)/2010 is cancelled*

*Date - Until 31 October 2011*

Department of Transport Notice 112/2010 (AA497996)

Scientific instruments exist as follows:

<i>Position</i>	<i>Remarks</i>
16° 04'.4 S 123° 33'.8 E	lit buoy, <i>Fl(5)Y.20s</i>
16° 04'.9 S 123° 33'.3 E	lit buoy, <i>Fl(5)Y.20s</i>
16° 05'.7 S 123° 32'.5 E	lit buoy, <i>Fl(5)Y.20s</i>
16° 06'.0 S 123° 33'.2 E	subsurface.

Mariners are not to use these buoys as moorings.

**Chart temporarily affected - Aus 40 - Aus 732 - Aus 733**

**1402(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Cape Lambert - Dredging operations**

*Date - Until 30 June 2012*

Department of Transport WA (AA509635)

Dredging operations are in progress between 20° 33'.33 S 117° 13'.12 E and 20° 34'.50 S 117° 11'.59 E.

The dredge material will be deposited within the following areas:

Area 1

20° 31'.38 S 117° 12'.58 E  
20° 31'.66 S 117° 13'.00 E  
20° 30'.83 S 117° 13'.64 E  
20° 30'.54 S 117° 13'.22 E.

Area 2

20° 29'.37 S 117° 14'.25 E  
20° 29'.66 S 117° 14'.67 E  
20° 28'.82 S 117° 15'.31 E  
20° 28'.53 S 117° 14'.89 E.

Area 3

20° 26'.30 S 117° 20'.54 E  
20° 26'.29 S 117° 21'.63 E  
20° 25'.81 S 117° 21'.13 E  
20° 25'.81 S 117° 20'.54 E.

All vessels will monitor VHF Ch 19 and display appropriate lights and shapes.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 55 - Aus 56 - Aus 740 - Aus 741**

**1405(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - Montebello Islands - Mooring buoy off station northeastwards**

*Former Notice - 571(T)/2010 is cancelled*

MV *Mermaid Achiever* (AA471498, AA471499), Woodside Energy Ltd (AA471473, AA509630)

The lit mooring buoy (19° 35'.08 S 116° 03'.42 E (WGS84 datum)) is off station.

**Chart temporarily affected - Aus 327**

**1408(T)/2010 AUSTRALIA - WESTERN AUSTRALIA - North West Cape - Scientific instrument northwards**

Date - Until 18 December 2011

Fugro Survey Pty Ltd (AA509619 - AA509621)

A special light buoy, *Fl(5)Y.20s*, exists in position 20° 10'.51 S 113° 49'.45 E.**Chart temporarily affected - Aus 329****121(T)/2011 INDIAN OCEAN - Sumatera - Scientific instruments westwards**

Former Notice - 1458(T)/2009 is cancelled

JAMSTEC (AA514619)

Scientific instruments, Triton buoys, exist as follows:

Number	Position
17	5° 01'.97 S 94° 58'.60 E
18	1° 36'.18 S 90° 04'.44 E
19	8° 04'.05 S 95° 07'.40 E.

**Chart temporarily affected – Aus 4070 (INT 70) – Aus 4071 (INT 71)****124(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Barrow Island - Scientific instrument**

Date - Until 31 December 2011

Department of Transport WA (AA511737, AA514503, AA514504)

A scientific instrument marked by a special light buoy, *Fl(5)Y.20s*, exists in position 20° 50'.14 S 115° 30'.46 E.**Chart temporarily affected – Aus 62 – Aus 742 – Aus 743****278(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Comet Bay - Scientific instrument**

Date - Until 31 August 2012

CSIRO (AA520991, AA520995)

A subsurface scientific instrument exists in position 32° 23'.97 S 115° 44'.10 E.

**Chart temporarily affected – Aus 755 – AX 0755E – AX 66002****382(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Browse Island - Scientific instrument**

MetOcean Engineers (AA524835)

A subsurface scientific instrument exists in position 13° 56'.34 S 123° 16'.66 E.

**Chart temporarily affected - Aus 319 - Aus 320 - AX 0319F****390(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Montebello Islands to Barrow Island - Lit mooring buoys**

Former Notice - 69(T)/2011 is cancelled

Date - Until 29 November 2011

Chevron Australia Pty Ltd (AA511777, AA526014)

Lit yellow mooring buoys, *Fl.Y.10s*, exist in positions (WGS84 datum):

21° 05'.94 S 115° 30'.83 E	20° 49'.32 S 115° 30'.67 E
21° 02'.44 S 115° 29'.06 E	20° 49'.01 S 115° 30'.82 E
20° 57'.75 S 115° 28'.07 E	20° 48'.56 S 115° 28'.60 E
20° 54'.52 S 115° 32'.33 E	20° 48'.38 S 115° 28'.94 E
20° 54'.37 S 115° 32'.23 E	20° 48'.04 S 115° 28'.52 E
20° 54'.09 S 115° 27'.74 E	20° 47'.36 S 115° 30'.34 E
20° 53'.07 S 115° 30'.78 E	20° 47'.36 S 115° 29'.92 E
20° 51'.73 S 115° 28'.09 E	20° 47'.28 S 115° 30'.63 E
20° 51'.62 S 115° 31'.96 E	20° 47'.10 S 115° 30'.02 E
20° 51'.56 S 115° 29'.54 E	20° 47'.01 S 115° 29'.80 E
20° 50'.29 S 115° 30'.19 E	20° 46'.79 S 115° 29'.29 E
20° 50'.12 S 115° 30'.25 E	20° 44'.16 S 115° 29'.06 E
20° 49'.96 S 115° 30'.35 E	20° 44'.00 S 115° 29'.16 E
20° 49'.92 S 115° 30'.35 E	20° 37'.86 S 115° 35'.18 E
20° 49'.85 S 115° 30'.40 E	20° 33'.34 S 115° 34'.33 E
20° 49'.53 S 115° 29'.22 E	20° 30'.47 S 115° 33'.86 E.
20° 49'.52 S 115° 28'.54 E	

**Chart temporarily affected - Aus 61 - Aus 62 - Aus 63 - Aus 327 - Aus 328 - Aus 742 - Aus 743**

**432(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Port Walcott - Scientific instruments**

Date - Until 31 October 2011

MetOcean Engineers (AA528772)

Scientific instruments marked by lit buoys, *Fl(5)Y.20s*, exist in positions:

20° 26'.02 S 117° 09'.26 E

20° 34'.49 S 117° 06'.14 E

20° 34'.58 S 117° 06'.18 E.

**Chart temporarily affected - Aus 55 - Aus 327 - Aus 740 - Aus 741****436(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Exmouth Plateau - Scientific instruments**

Date - Until 31 May 2011

MetOcean Engineers (AA528772)

Subsurface scientific instruments exist in positions 20° 14'.21 S 113° 53'.59 E and 20° 23'.61 S 114° 03'.90 E.

**Chart temporarily affected - Aus 329****438(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Fremantle - Depth information***Former Notice - 70(T)/2011 is cancelled*

Fremantle Ports (AA526854)

Available depths as at 12 April 2011:

<i>Berth</i>	<i>Metres</i>
No 1	11.0
No 2	11.0
* No 4	14.6
* No 5	14.6
* No 6	14.6
* No 7	14.6
* No 8	14.6
* No 9	14.6
* No 10	14.6
No 11	10.2
No 12	10.8
C	10.4
D	11.0
E	10.5
F	10.4
G	10.5
H	10.3

\* Indicates new or revised entry.

Maximum draft of vessels using inner harbour berths must be obtained by contacting the Harbour Master's office.

**Chart temporarily affected - Aus 113****493(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Bunbury - Light beacon destroyed**

Bunbury Port Authority (AA532242)

No3 light beacon (33° 17'.68 S 115° 38'.93 E) has been destroyed; a starboard lateral light buoy, *Iso.G.3s*, exists in situ.**Chart temporarily affected - Aus 115**

**579(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Onslow - Scientific instruments**

Department of Transport WA Notice 79/2011 (AA536980)

Subsurface scientific instruments marked by special light buoys, *Fl. Y.6s*, exist in the following positions:

21° 36'.48 S 115° 04'.31 E	21° 34'.01 S 115° 00'.98 E
21° 34'.22 S 115° 01'.83 E	21° 34'.15 S 115° 03'.42 E
21° 31'.22 S 115° 05'.62 E	21° 31'.62 S 115° 08'.12 E
21° 38'.93 S 114° 55'.54 E	21° 35'.35 S 114° 56'.40 E
21° 30'.45 S 115° 11'.73 E	21° 32'.82 S 115° 04'.61 E
21° 33'.30 S 115° 04'.14 E	21° 31'.81 S 114° 46'.23 E
21° 37'.87 S 114° 41'.40 E	21° 19'.69 S 115° 09'.41 E
21° 19'.59 S 115° 23'.48 E	21° 29'.19 S 115° 12'.91 E
21° 27'.07 S 115° 02'.05 E	21° 29'.00 S 115° 01'.54 E
21° 32'.05 S 115° 03'.16 E	21° 43'.09 S 114° 46'.22 E.

**Chart temporarily affected - Aus 743****581(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Albany - Harbour works***Former Notice* - 633(T)/2010 is cancelled*Date* - Until 30 November 2011

WA Department of Transport (AA537007)

Works associated with the construction of the new marina are in progress (35° 01'.9 S 117° 53'.3 E).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 109****620(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Port Hedland - Dredging operations***Former Notice* - 723(T)/2010 is cancelled*Date* - Until 30 January 2012

Port Hedland Port Authority (AA539585)

Dredging operations are underway in the area bounded by the following positions:

20° 19'.74 S 118° 33'.86 E
20° 19'.47 S 118° 34'.16 E
20° 19'.55 S 118° 34'.39 E
20° 19'.66 S 118° 34'.36 E
20° 19'.92 S 118° 34'.07 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 52 – Aus 53 – Aus 54****622(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Barrow Island - Scientific instruments northwards***Former Notice* - 577(T)/2011 is cancelled*Date* - Until 30 November 2011

MetOcean Engineers, UKHO (AA536573, AA539590)

Scientific instruments exist as follows:

<i>Position (WGS84 datum)</i>	<i>Remarks</i>
19° 49'.29 S 115° 38'.17 E	5 poly floats
19° 49'.35 S 115° 38'.07 E	lit buoy, <i>Fl(5)Y.20s</i>

**Chart temporarily affected – Aus 327 – Aus 328****624(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Geraldton - Oakajee River - Scientific instruments***Former Notice* - 1411(T)/2010 is cancelled*Date* - Until 31 December 2011

MetOcean Engineers (AA539586, AA539587)

Scientific instruments exist as follows:

<i>Position (WGS84 datum)</i>	<i>Remarks</i>
28° 34'.97 S 114° 33'.90 E	lit buoy, <i>Fl(5)Y.20s</i>
28° 35'.51 S 114° 33'.71 E	lit buoy, <i>Fl(5)Y.20s</i>
28° 35'.21 S 114° 34'.55 E	lit buoy, <i>Fl(5)Y.20s</i>

**Chart temporarily affected – Aus 332 – Aus 751**

**776(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Barrow Island - Pipeline infrastructure***Former Notice - 718(T)/2011 is cancelled**Date - Until 10 December 2011*

Department of Transport WA Notice 93/2011 (AA546427)

Works associated with pipeline infrastructure installation are in progress. An exclusion zone marked by special light buoys, Q.Y, exists within an area bounded by the following positions (WGS84 datum):

20° 41'.40 S 115° 23'.71 E

20° 41'.79 S 115° 24'.68 E

20° 41'.00 S 115° 25'.03 E

20° 40'.55 S 115° 24'.08 E.

MV *Carlisle* will monitor VHF Ch 16 and all vessels involved in the operations will display appropriate lights and shapes.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 327 - Aus 328 - Aus 742****878(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Port Geographe - Shoaling**

Department of Transport WA Notice 104/2011 (AA551156)

Shoaling exists within the entrance channel to Port Geographe Marina (33° 37'.79 S 115° 23'.23 E).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus116****941(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Glomar Shoal - Scientific instruments westwards***Former Notice - 574(T)/2011 is cancelled**Date - Until 31 May 2012*

MetOcean Engineers (AA552557)

Scientific instruments marked by special light buoys, *Fl(5)Y.20s*, exist in positions 19° 34'.97S 116° 28'.48E and 19° 35'.05S 116° 28'.47E.

**Chart temporarily affected - Aus 327 - Aus 741****943(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Rankin Bank - Scientific instruments northeastwards***Date - Until 31 August 2012*

MetOcean Engineers (AA552557)

Scientific instruments exist as follows:

*Position Remarks*19° 34'.11 S 116° 09'.06 E *Fl(5)Y.20s*19° 34'.30 S 116° 09'.06 E *Fl(5)Y.20s*

19° 34'.35 S 116° 09'.51 E subsurface.

**Chart temporarily affected - Aus 327****944(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Fremantle - Owen Anchorage - Harbour works***Former Notice - 778(T)/2011 is cancelled**Date - Until 31 March 2012*

Department of Transport WA Notice 108/2011 (AA553618)

Works associated with the construction of Port Coogee Marina are in progress (32° 06'.00 S 115° 45'.55 E).

An exclusion zone is marked by a silt curtain and special light buoys, Q.Y.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 117 - AX 70117**

**988(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Barrow Island - Scientific instrument***Former Notice* - 434(T)/2011 is cancelled*Date* - Until 30 November 2011

Department of Transport WA Notice 112/2011 (AA556389)

A special light buoy, *Fl(5)Y.20s*, exists in position 20° 47'.63 S 115° 29'.12 E.**Chart temporarily affected – Aus 62 – Aus 742****1045(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Dampier Archipelago - Platform installation; mooring buoys northwards***Date* - Until 31 December 2011

Australian Maritime Safety Authority (AA558773 - AA558775)

SSCV *Hermod* is moored in position 19° 35'.07 S 116° 07'.75 E and has deployed anchors marked by buoys within a 2000m radius.

Unlit orange mooring buoys exist in positions 19° 29'.5 S 116° 07'.9 E and 19° 28'.9 S 116° 07'.8 E.

**Chart temporarily affected - Aus 327****1098(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Cape Londonderry - Scientific instruments northeastwards***Date* - Until 30 September 2012

MetOcean Engineers (AA561014)

Scientific instruments exist as follows:

<i>Position (WGS84 datum)</i>	<i>Remarks</i>
13° 07'.66 S 128° 11'.59 E	subsurface
12° 56'.11 S 128° 23'.90 E	subsurface
12° 52'.69 S 128° 32'.04 E	subsurface
12° 52'.25 S 128° 31'.25 E	subsurface
12° 51'.97 S 128° 30'.79 E	subsurface
12° 51'.84 S 128° 30'.58 E	subsurface
12° 48'.03 S 128° 25'.46 E	<i>Fl(5)Y.20s</i>
12° 47'.66 S 128° 25'.83 E	<i>Fl(5)Y.20s</i>
12° 47'.64 S 128° 25'.06 E	subsurface
12° 47'.26 S 128° 25'.43 E	<i>Fl(5)Y.20s</i> .

**Chart temporarily affected – Aus 315 – Aus 318 – AX 0315F****1101(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Port Hedland - Scientific instruments***Former Notice* - 1044(T)/2011 is cancelled*Date* - Until 31 March 2012

MetOcean Engineers (AA561014)

Scientific instruments exist as follows:

<i>Position</i>	<i>Remarks</i>
20° 15'.45 S 118° 33'.68 E	<i>Fl(5)Y.20s</i>
20° 15'.42 S 118° 33'.76 E	5 poly floats
20° 15'.41 S 118° 33'.32 E	<i>Fl(5)Y.20s</i>
20° 13'.60 S 118° 30'.63 E	5 poly floats
20° 10'.62 S 118° 30'.50 E	5 poly floats
20° 08'.33 S 118° 23'.50 E	<i>Fl(5)Y.20s</i>
20° 08'.07 S 118° 23'.87 E	5 poly floats
20° 08'.05 S 118° 24'.15 E	5 poly floats
20° 08'.02 S 118° 24'.10 E	<i>Fl(5)Y.20s</i>
20° 07'.85 S 118° 23'.72 E	<i>Fl(5)Y.20s</i> and 5 poly floats
20° 07'.79 S 118° 23'.84 E	<i>Fl(5)Y.20s</i>

**Chart temporarily affected – Aus 52 – Aus 53 – Aus 54 – Aus 739 – Aus 740**

**1165(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Coulomb Point to Cape Boileau - Scientific instruments***Former Notice* - 1204(T)/2010 is cancelled

Date - Until 31 December 2012

Woodside Energy Ltd (AA565081, AA565082)

Scientific instruments marked by buoys exist in positions:

17° 20'.69 S 122° 04'.90 E	17° 23'.33 S 122° 07'.52 E
17° 25'.04 S 122° 06'.42 E	17° 27'.95 S 122° 07'.80 E
17° 29'.46 S 122° 07'.86 E	17° 30'.11 S 122° 06'.06 E
17° 31'.39 S 122° 07'.72 E	17° 32'.95 S 122° 08'.29 E
17° 33'.94 S 122° 06'.34 E	17° 34'.95 S 122° 07'.28 E
17° 35'.24 S 122° 09'.03 E	17° 41'.59 S 122° 10'.04 E.

**Chart temporarily affected - Aus 324****1221(T)/2011 AUSTRALIA - TIMOR SEA - Sahul Banks to Joseph Bonaparte Gulf - Seismic survey***Former Notice* - 1099(T)/2011 is cancelled

Date - Until 31 January 2012

Albers Group (AA559972, AA567338)

MV *Voyager Explorer* is conducting a survey in the areas bounded by the following positions:

## Area 1

12° 46'.43 S 126° 03'.27 E	12° 47'.77 S 127° 20'.05 E
13° 21'.00 S 127° 20'.03 E	13° 21'.63 S 126° 36'.05 E
13° 11'.15 S 126° 17'.13 E	13° 03'.17 S 126° 05'.98 E

## Area 2

13° 41'.18 S 127° 47'.93 E	13° 40'.63 S 128° 23'.40 E
13° 49'.57 S 128° 31'.38 E	14° 29'.30 S 128° 38'.40 E
14° 29'.90 S 128° 05'.57 E	13° 47'.13 S 127° 24'.50 E

## Area 3

10° 55'.69 S 125° 49'.04 E	11° 01'.37 S 126° 08'.82 E
11° 21'.55 S 126° 04'.40 E	11° 15'.34 S 125° 40'.64 E.

## Area 4

12° 04'.86 S 125° 19'.74 E	11° 39'.82 S 126° 11'.16 E
12° 18'.70 S 126° 47'.08 E	12° 29'.13 S 126° 35'.71 E
12° 28'.40 S 126° 22'.76 E	12° 22'.10 S 126° 08'.80 E
12° 33'.72 S 125° 44'.63 E	12° 10'.94 S 125° 20'.44 E.

**Chart temporarily affected - Aus 312 - Aus 314 - Aus 315 - Aus 318 - Aus 319 - Aus 726 - Aus 727 - Aus 728 - AX 0312F - AX 0314F - AX 0315F - AX 0319F - AX 4721F - AX 4722F - Aus 4721 (INT 721) - Aus 4722 (INT 722)****1222(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Montebello Islands - Seismic survey northwards**

Date - Until 31 January 2012

Chevron Australia Pty Ltd (AA567493)

MV *Ramform Explorer*, towing ten 6000m cables, and support vessel MV *Nautika Pride* and MV *No Limit* are conducting a survey in an area bounded by the following positions:

20° 00'.49 S 115° 12'.76 E
19° 39'.04 S 115° 12'.74 E
19° 37'.10 S 115° 16'.37 E
19° 37'.14 S 115° 22'.11 E
19° 39'.87 S 115° 26'.92 E
19° 58'.50 S 115° 26'.99 E
20° 03'.42 S 115° 17'.78 E.

**Chart temporarily affected - Aus 327 - Aus 328 - AX 4723F - Aus 4723 (INT 723)****1223(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Exmouth Plateau - Mooring buoys***Former Notice* - 1166(T)/2011 is cancelled

Date - Until 29 February 2012

Aus coast Warnings 268/2011, 286/2011 (AA564674, AA566986, AA567015), Hess Exploration Australia Pty Ltd (AA565581)

Four lit mooring buoys, Q, exist within a 2M radius of positions 20° 04'.57 S 113° 49'.55 E and 20° 28'.7 S 114° 03'.5 E.

**Chart temporarily affected - Aus 328 - Aus 329**

**1290(T)/2011 INDIAN OCEAN - Perth to Christmas Island - Survey operations**

Date - Until 10 January 2012

Department of Transport Notice 144/2011 (AA569776), EGS Survey Pty Ltd (AA569613 - AA569615)

MV *EGS Explorer* is conducting survey operations with a towed array between the following positions:

31° 48'.55 S 115° 30'.10 E	31° 49'.78 S 115° 25'.39 E
31° 49'.52 S 115° 12'.10 E	31° 45'.22 S 114° 58'.18 E
31° 44'.42 S 114° 54'.20 E	31° 41'.77 S 114° 50'.79 E
31° 40'.93 S 114° 43'.17 E	31° 35'.28 S 114° 30'.65 E
31° 24'.91 S 114° 14'.44 E	27° 40'.00 S 111° 08'.00 E
22° 42'.00 S 110° 06'.00 E	21° 07'.00 S 110° 00'.00 E
20° 20'.00 S 108° 58'.00 E	13° 56'.00 S 106° 25'.00 E
13° 23'.00 S 106° 35'.00 E	10° 22'.00 S 105° 50'.00 E
9° 45'.00 S 105° 28'.00 E	8° 14'.00 S 105° 08'.00 E

The vessel will display appropriate lights and shapes and will monitor VHF Channel 16.

**Chart temporarily affected - Aus 334 - Aus 400 - Aus 608 - Aus 754 - Aus 4708 (INT 708) - Aus 4709 (INT 709) - Aus 4723 (INT 723) - Aus 4725 (INT 725) - AX 0334E - AX 0754E - AX 4708F - AX 4723F - AX 66002****1337(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Broome - Scientific instruments**

Former Notice - 977(T)/2010 is cancelled

Date - Until 2 December 2012

Broome Port Authority Notice 29/2011 (AA571726)

Scientific instruments marked by special light buoys exist as follows:

Position	Remarks
17° 59'.53 S 122° 10'.88 E	Fl.Y.2s
18° 03'.60 S 122° 11'.90 E	Fl.Y.2s
18° 01'.87 S 122° 12'.78 E	Fl.Y.2s
18° 00'.66 S 122° 12'.52 E	unmarked
18° 00'.35 S 122° 13'.20 E	unmarked
18° 00'.09 S 122° 12'.93 E	Fl.Y.3s
18° 00'.06 S 122° 12'.93 E	Fl.Y.3s
17° 59'.25 S 122° 13'.96 E	Fl.Y.3s.

**Chart temporarily affected – Aus 50 – Aus 51****1339(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Exmouth Plateau - Seismic survey**

Former Notice - 1103(T)/2011 is cancelled

Date - Until 29 February 2012

TGS-NOPEC (AA570395)

SRV *Viking Vision*, with a 6000m towed array, and support vessel, *Pacific Peacock* are conducting a survey in an area bounded by the following positions:

19° 09'.91 S 112° 43'.22 E	19° 09'.92 S 113° 03'.81 E
19° 08'.82 S 113° 03'.74 E	19° 08'.87 S 113° 49'.08 E
19° 21'.01 S 113° 49'.08 E	19° 21'.01 S 113° 21'.94 E
19° 29'.93 S 113° 16'.35 E	19° 29'.92 S 113° 05'.08 E
19° 26'.77 S 113° 05'.08 E	19° 27'.03 S 112° 43'.41 E
19° 09'.91 S 112° 43'.22 E.	

**Chart temporarily affected – Aus 4723 (INT 723) – AX 4723F****1340(T)/2011 AUSTRALIA - WESTERN AUSTRALIA - Thevenard Island - Scientific instruments**

Former Notice - 1224(T)/2011 is cancelled

Date - Until 30 November 2012

MetOcean Engineers (AA572541)

Scientific instruments marked by special light buoys, *Fl(5)Y.20s*, exist in the following positions:

21° 22'.08 S 114° 50'.93 E	21° 28'.41 S 115° 08'.41 E
21° 28'.43 S 115° 08'.51 E	21° 31'.75 S 115° 01'.82 E
21° 31'.84 S 115° 01'.87 E	21° 35'.00 S 115° 01'.28 E
21° 39'.29 S 115° 00'.09 E.	

**Chart temporarily affected – Aus 64 – Aus 328 – Aus 743**

## SOUTH AUSTRALIA

**268(T)/2008 AUSTRALIA - SOUTH AUSTRALIA - Wirrina Cove - Shoaling**  
 Department for Transport, Energy and Infrastructure SA Notice 9/2008 (AA315237, AA315236)

Shoaling, least depth 1.6 m, exists in position 35° 30'.04 S 138° 14'.42 E (WGS84 datum).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 125**

**720(T)/2008 AUSTRALIA - SOUTH AUSTRALIA - Port Adelaide - Shoaling**  
*Former Notice - 240(T)/2006 is cancelled*  
 Department for Transport, Energy and Infrastructure Notice 38/2007 (AA346443)

Silting has resulted in width restrictions being imposed in the main channel of the Port Adelaide River between No 40 beacon (34° 47'.86 S 138° 30'.79 E) and No 41 beacon (34° 48'.52 S 138° 30'.77 E).

Mariners should avoid the western side of the main channel and navigate with caution in this part of the river as the available navigable channel is now only 90 metres wide measured from the eastern edge.

Mariners intending to transit this section should contact the Manager Marine Operations, Flinders Ports Pty Ltd on (08) 8447 0622 to confirm maximum widths.

**Chart temporarily affected - Aus 137**

**176(T)/2009 AUSTRALIA - SOUTH AUSTRALIA - Wallaroo - Depth information**  
*Former Notice - 1172(T)/2006 is cancelled*  
 Department for Transport, Energy and Infrastructure SA Notice 38/2006 (AA213542)

Available depths as at 12 September 2006:

	<i>Metres (LAT)</i>
* No 1 South Berth	8.7
* No 2 North Berth	8.7
* Indicates new or revised entry.	

**Chart temporarily affected – Aus 777**

**573(T)/2010 AUSTRALIA - SOUTH AUSTRALIA - MacDonnell Sound - Wreck**  
 Department of Transport, Energy and Infrastructure SA Notice 23/2010 (AA470933)

A stranded wreck exists in position 35° 05'.83 S 137° 51'.90 E (WGS84 datum).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 139 - Aus 780**

**1344(T)/2010 AUSTRALIA - SOUTH AUSTRALIA - Cape Jaffa - Wreck westwards**  
 Department of Transport, Energy and Infrastructure Notice 51/2010 (AA506578)

A wreck exists in position 36° 52'.30 S 139° 06'.69 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 347**

**179(P)/2011 AUSTRALIA - SOUTH AUSTRALIA - Port Augusta - Beacons established***Former Notice - 1211(T)/2010 is cancelled*

Department of Transport, Energy and Infrastructure SA Notice 5/2011 (AA516339)

The following beacons have been installed :

<i>Name</i>	<i>Position</i>	<i>Type</i>
Bcn21	32°34.03'S 137°45.91'E	Starboard Lateral beacon
Bcn23	32°33.54'S 137°46.21'E	Starboard Lateral beacon
Bcn24	32°34.05'S 137°45.76'E	Port Lateral light beacon, <i>Fl.R.3s</i>
Bcn25	32°32.90'S 137°46.57'E	Starboard Lateral beacon
Bcn26	32°33.48'S 137°46.07'E	Port Lateral beacon
Bcn27	32°32.58'S 137°46.81'E	Starboard lateral light beacon, <i>Fl.G.5s</i>
Bcn28	32°32.83'S 137°46.51'E	Port Lateral beacon
Bcn29	32°32.34'S 137°46.75'E	Starboard lateral light beacon, <i>Fl.G.2s</i>
Bcn30	32°32.59'S 137°46.71'E	Port Lateral light beacon, <i>Fl.R.5s</i>
Bcn31	32°32.04'S 137°46.35'E	Starboard lateral light beacon, <i>Fl.G.3s</i>
Bcn32	32°32.49'S 137°46.72'E	Port Lateral light beacon, <i>Fl.R.3s</i>
Bcn33	32°32.02'S 137°45.97'E	Starboard lateral light beacon, <i>Fl.G.5s</i>
Bcn34	32°32.33'S 137°46.61'E	Port Lateral beacon
Bcn35	32°31.97'S 137°45.86'E	Starboard lateral light beacon, <i>Fl.G.2s</i>
Bcn36	32°32.10'S 137°46.32'E	Port Lateral light beacon, <i>Q R</i>
Bcn37	32°31.73'S 137°45.71'E	Starboard Lateral beacon
Bcn38	32°32.07'S 137°46.05'E	Port Lateral beacon
Bcn39	32°31.57'S 137°45.76'E	Starboard Lateral beacon
Bcn40	32°32.02'S 137°45.83'E	Port Lateral beacon
Bcn41	32°31.28'S 137°45.87'E	Starboard Lateral beacon
Bcn42	32°31.93'S 137°45.69'E	Port Lateral beacon
Bcn43	32°30.81'S 137°46.07'E	Starboard lateral light beacon, <i>Fl.G.3s</i>
Bcn44	32°31.72'S 137°45.66'E	Port Lateral light beacon, <i>Fl.R.3s</i>
Bcn45	32°30.71'S 137°46.06'E	Starboard Lateral beacon
Bcn46	32°31.34'S 137°45.80'E	Port Lateral beacon
Bcn47	32°30.55'S 137°46.01'E	Starboard lateral light beacon, <i>Fl.G.5s</i>
Bcn48	32°31.15'S 137°45.89'E	Port Lateral beacon
Bcn49	32°30.26'S 137°45.65'E	Starboard lateral light beacon, <i>Fl.G.2s</i>
Bcn50	32°30.96'S 137°45.97'E	Port Lateral beacon
Bcn51	32°30.08'S 137°45.52'E	Starboard Lateral beacon
Bcn52	32°30.81'S 137°46.00'E	Port Lateral beacon
Bcn53	32°29.89'S 137°45.47'E	Starboard Lateral beacon
Bcn54	32°30.72'S 137°46.01'E	Port Lateral beacon
Bcn55	32°29.56'S 137°45.46'E	Starboard lateral light beacon, <i>Fl.G.5s</i>
Bcn56	32°30.63'S 137°45.97'E	Port Lateral beacon
Bcn58	32°30.57'S 137°45.94'E	Port Lateral beacon
Bcn60	32°30.28'S 137°45.62'E	Port Lateral light beacon, <i>Fl.R.5s</i>
Bcn62	32°30.13'S 137°45.48'E	Port Lateral light beacon, <i>Fl.R.2s</i>
Bcn64	32°29.90'S 137°45.42'E	Port Lateral light beacon, <i>Fl.R.5s</i>

Note: Charting area will be updated on rectification of the horizontal datum error in chart Aus 778

**Chart which will be affected - Aus 778****226(T)/2011 AUSTRALIA - SOUTH AUSTRALIA - Port Adelaide - Light beacon destroyed***Former Notice - 180(T)/2011 is cancelled*

HydroSurvey Australia (AA518403)

The rear lead light beacon (34° 46'.71 S 138° 21'.59 E) has been destroyed.

**Chart temporarily affected - Aus 130 - Aus 138 - Aus 781**

**990(P)/2011 AUSTRALIA - SOUTH AUSTRALIA - Thevenard - Yatala Channel - Light beacons to be altered***Date* - On or about 13 October 2011

Department of Transport, Energy and Infrastructure SA Notice 35/2011 (AA556104)

The light beacons will be altered as follows:

<i>No</i>	<i>Position</i>	<i>Characteristic</i>
No21	32° 10'.00 S 133° 37'.94 E	<i>Fl.G.3s</i>
No22	32° 10'.01 S 133° 37'.86 E	<i>Fl.R.3s</i>
No23	32° 09'.66 S 133° 37'.84 E	<i>Fl.G.3s</i>
No24	32° 09'.67 S 133° 37'.77 E	<i>Fl.R.3s</i>
No25	32° 09'.42 S 133° 37'.78 E	<i>Fl.G.3s</i>
No26	32° 09'.42 S 133° 37'.70 E	<i>Fl.R.3s</i>
No27	32° 09'.28 S 133° 37'.82 E	<i>Fl.G.3s</i>
No28	32° 09'.15 S 133° 37'.73 E	<i>Oc.R.6s</i>
No29	32° 09'.17 S 133° 37'.93 E	<i>Oc.G.6s.</i>

**Chart which will be affected – Aus 122****1050(T)/2011 AUSTRALIA - SOUTH AUSTRALIA - Adelaide - Osborne - Dredging operations***Date* - Until 10 December 2011

Department of Transport, Energy and Infrastructure SA Notice 40/2011 (AA559347)

Dredging operations are in progress in the vicinity of position 34° 47'.07 S 138° 30'.78 E.

A floating pipeline marked by white buoys exists between 34° 46'.95 S 138° 30'.77 E and 34° 46'.87 S 138° 30'.80 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 130 - Aus 137****1226(T)/2011 AUSTRALIA - SOUTH AUSTRALIA - Great Australian Bight - Ceduna Terrace - Seismic survey***Former Notice* - 1170(T)/2011 is cancelled*Date* - Until 10 May 2012

NT Shipping Agencies (AA565932)

MV *Ramform Sterling*, and support vessels, *Ocean Dynasty* and *Unlimited*, are conducting a survey in the area bounded by the following positions:

33° 34'.25 S 129° 23'.50 E  
 33° 34'.25 S 130° 45'.00 E  
 34° 29'.50 S 131° 52'.00 E  
 35° 30'.00 S 131° 52'.00 E  
 35° 30'.00 S 129° 23'.50 E.

**Chart temporarily affected - Aus 4727 (INT 727)****1227(T)/2011 AUSTRALIA - SOUTH AUSTRALIA - Great Australian Bight - Ceduna Terrace - Scientific instruments***Date* - Until 30 November 2012

MetOcean Engineers (AA566988)

Subsurface scientific instruments exist in the following positions:

33° 21'.55 S 130° 40'.55 E  
 33° 21'.95 S 130° 39'.26 E  
 34° 28'.50 S 130° 42'.08 E  
 34° 51'.10 S 133° 25'.10 E  
 31° 53'.68 S 130° 38'.99 E.

**Chart temporarily affected - Aus 4727 (INT 727)****1344(T)/2011 AUSTRALIA - SOUTH AUSTRALIA - Gulf St Vincent - Obstruction***Former Notice* - 534(T)/2011 is cancelled

Fugro LADS Corporation (AA534581)

An obstruction is reported to exist in position 34° 42'.37 S 138 15'.94 E.

**Chart temporarily affected – Aus 781**

## VICTORIA

**796(T)/2007 AUSTRALIA - VICTORIA - Port Phillip - South Channel - Obstruction**  
Victorian Notice 103(T)/2007 (AA282029)

An obstruction marked by 3 special light buoys, *Fl.Y.3s*, exists in position 38° 18'.36 S 144° 46'.47 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 143 – Aus 158**

**514(T)/2008 AUSTRALIA - VICTORIA - Western Port - Phillip Island - Shoaling northwards**  
Victorian Notice 64(T)/2008 (AA333884)

Shoaling, least depth *13.4 metres*, exists at position 38° 25'.53 S 145° 13'.90 E extending 100 metres into the shipping channel .

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 150 - Aus 151**

**800(T)/2009 AUSTRALIA - VICTORIA - Port Albert - Shoaling**  
Victorian Notice 63(T)/2009 (AA414814)

Shoaling exists between positions 38° 45'.13 S 146° 42'.66 E and 38° 44'.73 S 146° 40'.32 E (WGS84 datum).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 181 – Aus 182 - AU439146**

**1300(T)/2009 AUSTRALIA - VICTORIA - Anderson Inlet - Shoaling**  
Victorian Notice 150/2009 (AA436349)

Shoaling exists in the outer entrance channel of the Anderson Inlet entrance bar.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 801 - AU439145**

**1301(T)/2009 AUSTRALIA - VICTORIA - Barry Beach - Shoaling**  
*Former Notice - 1002(T)/2004 is cancelled*  
Victorian Notice 149/2009 (AA436347)

Shoaling, with a least depth of *5m*, exists in the Barry Beach Channel (38° 43'.00 S 146° 22'.77 E).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 181 - Aus 182 - AU439146**

**1302(T)/2009 AUSTRALIA - VICTORIA - Port Welshpool - Middle Ground Channel - Beacon destroyed**  
Gippsland Ports (AA433895 - AA433897)

No2 port lateral beacon (38° 42'.36 S 146° 29'.15 E (WGS84 datum)) has been destroyed; a port lateral cylindrical buoy has been established in situ.

**Chart temporarily affected - Aus 181 - AU439146**

**942(T)/2010 AUSTRALIA - VICTORIA - Port Phillip - Geelong - Depth information**

*Former Notice - 465(T)/2009 is cancelled*

Victorian Regional Channels Authority (AA490300, AA490301), Victorian Notice 31(T)/2005, 104(T)/2005 (AA131863, AA203894)

Available depths as at 19 August 2010:

<i>Berth</i>	<i>Metres</i>
Bulk Grain Pier 1	9.0
Bulk Grain Pier 2	11.0
Point Wilson Jetty North	8.6
Point Henry Pier Alcoa	11.6

\* Indicates new or revised entry.

A 8.1m shoal exists in position 38° 07'.336 S 144° 33'.131 E.

**Chart temporarily affected - Aus 153 - Aus 157****1035(T)/2010 AUSTRALIA - VICTORIA - Port Phillip - South Channel - Obstruction**

*Former Notice - 797(T)/2007 is cancelled*

Victorian Notice 92(T)/2010 (AA495912)

An obstruction marked by three isolated danger light buoys, *F(2)4s*, exists in position 38° 19'. 08 S 144° 49'. 61 E

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 143 - Aus 158****1100(T)/2010 AUSTRALIA - VICTORIA - Port Phillip - Port Melbourne - Princes Pier - Harbour works**

*Former Notice - 223(T)/2008 is cancelled*

*Date - Until 30 June 2011*

Victorian Notice 94(T)/2010 (AA496795)

Harbour works associated with the redevelopment of Princes Pier (37°50'.70S 144°55'.54 E) are in progress.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 154 - Aus 155****1153(T)/2010 AUSTRALIA - VICTORIA - Kilcunda - Exclusion zone**

*Date - Until 30 June 2011*

Victorian Notice 99(T)/2010 (AA498000)

An exclusion zone, associated with the desalination project, exists in an area bounded by the following:

<i>Position</i>	<i>Remarks</i>
38° 35'.51 S 145° 30'.43 E	north cardinal light buoy, Q
38° 35'.51 S 145° 30'.13 E	west cardinal light buoy, Q(9)15s
38° 35'.87 S 145° 30'.26 E	west cardinal light buoy, Q(9)15s
38° 36'.23 S 145° 30'.38 E	south cardinal light buoy, Q(6)+LFI.15s
38° 36'.23 S 145° 30'.63 E	south cardinal light buoy, Q(6)+LFI.15s
38° 36'.04 S 145° 30'.85 E	east cardinal light buoy, Q(3)10s
38° 35'.85 S 145° 31'.07 E	
38° 35'.52 S 145° 30'.73 E.	

Only authorised vessels are permitted entry.

**Chart temporarily affected - Aus 150 - Aus 801****1217(T)/2010 AUSTRALIA - VICTORIA - Western Port - West Head - Light buoy off station**

West Head Gunnery Range (AA501498)

The special light buoy (38° 31'.1 S 145° 01'.0 E) is off station.

**Chart temporarily affected - Aus 150 - Aus 801 - AU439145**

**1291(T)/2010 AUSTRALIA - VICTORIA - Ninety Mile Beach - Obstructions**

*Former Notice* - 458(T)/2007 is cancelled  
Victorian Notice 51(T)/2007 (AA242065)

Suspended well heads exists within a 300m radius of position 38° 37'.65 S 146° 53'.75 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 357 - AU439146**

**1354(T)/2010 AUSTRALIA - VICTORIA - Corner Inlet - Shoaling**

*Former Notice* - 1213(T)/2008 is cancelled  
Victorian Notice 128(T)/2008 (AA368471)

Shoaling exists along the northern bank of the main entrance in the vicinity of position 38° 50'.9 S 146° 34'.8 E (WGS84 datum).

Mariners are advised to navigate along the Lighthouse Point directional light centreline of 277° when transiting the area.

**Chart temporarily affected - Aus 181 - Aus 802**

**77(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - Port Melbourne - Appleton Dock - Harbour works**

*Date* - Until 31 August 2011  
Victorian Notice 2(T)/2011 (AA512223)

Works associated with the remediation of berths B to D are in progress (37° 49'.07 S 144° 55'.20 E).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 154**

**128(T)/2011 AUSTRALIA - VICTORIA - Cape Duquesne to Port Campbell - Scientific instruments**

*Date* - Until 31 July 2012  
Cardno (AA514821)

Scientific instruments marked by special light buoys, *Fl(5)Y.20s*, exist in positions 38° 21'.75 S 141° 14'.47 E and 38° 43'.06 S 142° 46'.79 E.

**Chart temporarily affected – Aus 348 – Aus 349 – Aus 787**

**183(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - River Yarra - Light beacon removed**

*Date* - Until 18 March 2011  
Victorian Notice 24(T)/2011 (AA516346)

The light beacon *No 49* is temporarily removed. A temporary light, *Fl.Y.2s*, has been established in position 37° 49'.272 S 144° 54'.766 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 154**

**232(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - River Yarra - South Wharf - Harbour works**

*Date* - Until 18 April 2011  
Victorian Notice 38(T)/2011 (AA518656)

Harbour works are in progress in the vicinity of position 37° 49'.29 S 144° 54'.71 E.

Special spar light buoys, *Fl.Y.3s*, exist in the following positions:

- 37° 49'.27 S 144° 54'.76 E
- 37° 49'.27 S 144° 54'.72 E
- 37° 49'.27 S 144° 54'.67 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 154**

**448(T)/2011 AUSTRALIA - BASS STRAIT - Platforms; pipeline**

*Former Notice* - 1424(T)/2010 is cancelled

*Date* - Until 31 July 2012

McDermott Australia Pty Ltd (AA527057)

*DB30, Emerald Sea, Miclyn Endurance* and support vessels are conducting works to platforms and pipelines in the area bounded by 38° 11'.0 S to 38° 15'.0 S and 148° 00'.0 E to 148° 36'.0. Vessels are advised not to enter the area and a 2M safety zone exists around the vessels involved in the works.

Vessels can be contacted on VHF Ch 16.

**Chart temporarily affected - Aus 357 - Aus 487****584(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - Light buoys withdrawn**

*Date* - Until 30 June 2011

Victorian Notice 80(T)/2011 (AA537371)

T5 light buoy (37° 58'.87 S 144° 55'.69 E) and T6 light buoy (37° 58'.86 S 144° 55'.08 E) have been temporarily withdrawn.

**Chart temporarily affected - Aus 155****669(T)/2011 AUSTRALIA - VICTORIA - Barwon Heads - Light unlit**

Victorian Notice 84(T)/2011 (AA542083)

The light, *Fl.3s* (38° 17'.08 S 144° 29'.89 E), is unlit.

**Chart temporarily affected – Aus 143 – Aus 349 – Aus 788****672(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - Patterson River - Shoaling**

Victorian Notice 87(T)/2011 (AA541943)

Shoaling, with a least depth of *0.5m*, exists within the entrance to Patterson River (38° 04'.41 S 145° 07'.17 E).

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 143****723(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - Great Ship Channel - Shoaling**

Victorian Notice 89(T)/2011 (AA543561)

Shoaling, with a least depth of *16.7m*, exists in position 38° 18'.04 S 144° 37'.69 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 144 – Aus 158****781(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - South Channel - Shoaling; light buoy established**

*Former Notice* - 670(T)/2011 is cancelled

Victorian Notices 85(T)/2011, 93(T)/2011 (AA541373, AA544723)

Shoaling, with a least depth of *11.5m*, exists in position 38° 19'.78 S 144° 54'.00 E. An east cardinal light buoy, *VQ(3)5s*, exists in position 38° 19'.76 S 144° 54'.05 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 143 - Aus 158****839(T)/2011 AUSTRALIA - VICTORIA - Corner Inlet - Bentley Point - Light beacon destroyed**

Victorian Notice 100/2011 (AA549261)

The light beacon, *Fl.G.3s 7M* (38° 46'.52 S 146° 29'.51 E (WGS84 datum)), has been destroyed.

**Chart temporarily affected – Aus 181**

**884(T)/2011 AUSTRALIA - VICTORIA - Corner Inlet - Midge Channel - Beacon destroyed**  
Victorian Notice 104(T)/2011 (AA550572)

The starboard lateral beacon (38° 41'.78 S 146° 39'.11 E) has been destroyed; a starboard lateral buoy exists in situ.

**Chart temporarily affected - Aus181**

**991(T)/2011 AUSTRALIA - VICTORIA - Port Campbell - Lights unlit**

*Date* - Until 18 October 2011  
Victorian Notice 113(T)/2011 (AA556905)

The lights, *Q.Bu.7m 4M* (38° 37'.27 S 142° 59'.48E) and *Iso.Bu.4s 12m 4M* (38° 37'.19 S 142° 59'.60E) are unlit.

**Chart temporarily affected – Aus 141**

**993(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - Port Melbourne - River Yarra - Depth information**

*Former Notice* - 446(T)/2011 is cancelled  
Victorian Notices 55(T)/2011, 57(T)/2011, 112/2011 (AA526917, AA526947, AA556512)

Available depths as at 16 September 2011:

<i>Berth</i>	<i>Metres</i>
Maribyrnong No1	9.6
Southern approaches to Maribyrnong No1 (north of 37° 49'.2 S)	10.0

**Chart temporarily affected - Aus1 54**

**1109(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - Swan Bay - Harbour works**

*Date* - Until 9 December 2011  
Victorian Notice 118(T)/2011 (AA561578)

Works associated with the reconstruction of the jetty (38° 13'.65 S 144° 39'.23 E) are in progress.

All hazards to navigation will display appropriate lights and shapes.

The light, *Fl.5s 2M* (38° 13'.68 S 144° 39'.31 E), will be unlit during the works.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 143 – Aus 158**

**1110(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - Patterson River - Harbour works**

*Former Notice* - 535(T)/2011 is cancelled  
*Date* - Until 28 February 2012  
Victorian Notice 119(T)/2011 (AA561577)

Replacement of tidal gates at Whalers Cove (38° 04'.20 S 145° 08'.05 E) are in progress. Navigation through the gates will be reduced to one lane. A traffic light management system will be in place for vessels entering or exiting the lakes at the tide gates between Patterson River and Whalers Cove.

All hazards to navigation will display appropriate lights and be marked by buoys.

Mariners are advised to navigate with caution in these areas.

**Chart temporarily affected – Aus 143**

**1171(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - South Channel - Shoaling**

Victorian Notice 127(T)/2011, 128(T)/2011 (AA565638, AA565639)

South cardinal light buoys, *VQ(6)+LFl.10s*, exist in positions 38° 18'.22 S 144° 44'.36 E and 38° 19'.09 S 144° 48'.71 E. Shoaling with a least depth of *14.9m* exists north of a line joining the positions and a least depth of *15.2m* to the south.

A south cardinal light buoy, *VQ(6)+LFl.10s*, exists in position 38° 18'.27 S 144° 45'.65 E. Shoaling with least depth *13.4* exists to the north of the position.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 144 - Aus 158**

**1293(T)/2011 AUSTRALIA - VICTORIA - Corner Inlet - Franklin Channel - Light buoy off station**  
Victorian Notice 131(T)/2011 (AA569173)

No1 light buoy (38° 45'.43 S 146° 24'.78 E) is off station.

**Chart temporarily affected - Aus 181**

**1346(T)/2011 AUSTRALIA - VICTORIA - Port Phillip - South Channel - Exclusion zones**  
Victorian Notice 146(T)/2011 (AA571787)

As a result of shoaling, exclusion zones exists in the areas bounded by the following positions:

38° 17'.50 S 144° 39'.08 E  
38° 17'.50 S 144° 39'.45 E  
38° 17'.56 S 144° 39'.45 E  
38° 17'.55 S 144° 39'.08 E,

and

38° 17'.65 S 144° 41'.13 E  
38° 17'.88 S 144° 42'.27 E  
38° 17'.90 S 144° 42'.27 E  
38° 17'.67 S 144° 41'.13 E,

and

38° 17'.99 S 144° 42'.65 E  
38° 18'.01 S 144° 42'.72 E  
38° 18'.02 S 144° 42'.72 E  
38° 18'.00 S 144° 42'.65 E,

and

38° 17'.80 S 144° 42'.85 E  
38° 18'.14 S 144° 44'.52 E  
38° 18'.17 S 144° 44'.51 E  
38° 17'.83 S 144° 42'.84 E,

and

38° 18'.18 S 144° 45'.07 E  
38° 18'.37 S 144° 46'.35 E  
38° 18'.38 S 144° 46'.35 E  
38° 18'.19 S 144° 45'.07 E.

**Chart temporarily affected – Aus 144 – Aus 158**

**1347(P)/2011 AUSTRALIA - VICTORIA - Port Phillip - South Channel - Light beacon to be established**

*Date* - On or about 12 December 2011

Victorian Notices 143/2011, 145(T)/2011 (AA571850, AA571851)

A light beacon, *Fl(3)R.10s No22*, exists in position 38° 19'.642 S 144° 54'.207 E; charts will be updated in Edition 1/2012.

**Chart which will be affected – Aus 143 – Aus 158**

## TASMANIA

**91(T)/2010 AUSTRALIA - TASMANIA - Georges Bay - Wreck**

*Former Notice* - 1204(T)/2009 is cancelled  
Marine and Safety Tasmania Notice M3/2010 (AA447779)

A stranded wreck exists in position 41° 16'.24 S 148° 20'.07 E, with a floating line marked by a white poly-float leading to an anchor in position 41° 16'.20 S 148° 20'.13 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 169**

**529(T)/2010 AUSTRALIA - TASMANIA - Frederick Henry Bay - Whale Rock - Light beacon destroyed**

Marine and Safety Tasmania M56/2010 (AA468779)

The isolated danger light beacon (42° 52'.77 S 147° 35'.88 E) has been destroyed.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 171 - Aus 796 - AU443147**

**1416(T)/2010 AUSTRALIA - TASMANIA - Round Hill Point - Pipeline**

Marine and Safety Tasmania Notice M119/2010 (AA508866)

A pipeline is being laid between positions 41° 03'.92 S 145° 56'.67 E and 41° 03'.74 S 145° 56'.67 E.

**Chart temporarily affected - Aus 163 - Aus 799**

**442(T)/2011 AUSTRALIA - TASMANIA - Stony Head - Scientific instrument northwards**

*Date* - Until 31 October 2011  
Cardno (AA527770)

A special light buoy, *Fl(5)Y.20s*, exists in position 40° 30'.02 S 146° 55'.77 E.

**Chart temporarily affected - Aus 799**

**582(T)/2011 AUSTRALIA - TASMANIA - River Derwent - New Town Bay - Wreck**

Marine and Safety Tasmania (AA537008, AA537009)

A wreck exists in position 42° 50'.68 S 147° 19'.08 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 172**

**780(T)/2011 AUSTRALIA - TASMANIA - D'Entrecasteaux Channel - Huon Island - Scientific instrument**

*Former Notice* - 495(T)/2011 is cancelled  
*Date* - Until 15 November 2011  
Marine and Safety Tasmania Notice M100/2011 (AA544717)

A scientific instrument marked by a light buoy, *Oc. 15s*, exists in position 43° 19'.32 S 147° 07'.79 E.

**Chart temporarily affected - Aus 173 - Aus 795**

**838(T)/2011 AUSTRALIA - TASMANIA - D'Entrecasteaux Channel - Great Taylors Bay - Marine farm***Date* - Until 31 December 2011

Marine and Safety Tasmania Notice M103/2011 (AA549297, AA549521)

The marine farm limits have been altered and are bounded by the following positions:

43° 22'.54 S 147° 08'.61 E  
 43° 23'.12 S 147° 09'.48 E  
 43° 23'.71 S 147° 08'.66 E  
 43° 23'.08 S 147° 07'.85 E.

Special light buoys, *Fl.Y.6s*, mark the corners of the marine farm.**Chart temporarily affected – Aus 173 – Aus 795****946(T)/2011 AUSTRALIA - TASMANIA - Hobart - Prince of Wales Bay - Harbour works***Date* - Until 31 March 2012

Marine and Safety Tasmania Notice M117/2011 (AA554803)

Harbour works associated with the construction of a new marina are in progress in an area bounded by the coast and special light buoys in the following positions:

42° 49'.75 S 147° 18'.15 E  
 42° 49'.68 S 147° 18'.12 E  
 42° 49'.63 S 147° 18'.14 E  
 42° 49'.57 S 147° 18'.22 E.

The barge will display appropriate lights and anchors deployed by the barge will be marked by orange light buoys.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 172****947(T)/2011 AUSTRALIA - TASMANIA - Pirates Bay - Light unlit***Date* - Until 30 November 2011

Marine and Safety Tasmania Notice M120/2011 (AA554978)

The light, *F.Bu (43° 02'.03 S 147° 56'.75E)*, is unlit.**Chart temporarily affected - Aus 796 - Aus 797****1052(T)/2011 AUSTRALIA - TASMANIA - River Derwent - Cornelian Bay - Wreck**

Marine and Safety Tasmania Notice M127/2011 (AA559312)

A wreck exists in position 42° 51'.32 S 147° 19'.36 E.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected - Aus 171 - Aus 172****1229(T)/2011 AUSTRALIA - TASMANIA - Frederick Henry Bay - Scientific instruments***Date* - Until 20 March 2012

Marine and Safety Tasmania Notice M141/2011 (AA567987)

Scientific instruments marked by special conical light buoys exist as follows:

<i>Position</i>	<i>Characteristic</i>
42° 56'.2 S 147° 37'.2 E	<i>Iso.4s</i>
42° 58'.2 S 147° 34'.0 E	<i>Oc.3s.</i>

**Chart temporarily affected - Aus 171 - Aus 796**

**1291(T)/2011 AUSTRALIA - TASMANIA - Adventure Bay to Pitt Water - Scientific instruments**

Date - Until 30 March 2013

Marine and Safety Tasmania Notice M150/2011 (AA570022)

Subsurface scientific instruments exist in the following positions:

43° 31'.43 S 147° 17'.77 E	43° 27'.49 S 147° 13'.39 E
43° 18'.05 S 147° 23'.62 E	43° 14'.53 S 147° 47'.71 E
43° 06'.26 S 147° 41'.81 E	43° 05'.12 S 147° 29'.17 E
43° 02'.37 S 147° 28'.49 E	42° 57'.96 S 147° 33'.29 E
42° 57'.85 S 147° 33'.84 E	42° 57'.73 S 147° 34'.44 E
42° 57'.62 S 147° 34'.99 E	42° 57'.49 S 147° 35'.60 E
42° 57'.39 S 147° 36'.19 E	42° 57'.26 S 147° 36'.79 E
42° 57'.15 S 147° 37'.41 E	42° 57'.14 S 147° 39'.22 E
42° 57'.04 S 147° 38'.01 E	42° 56'.98 S 147° 39'.67 E
42° 56'.42 S 147° 32'.59 E	42° 55'.81 S 147° 40'.74 E
42° 55'.80 S 147° 34'.87 E	42° 55'.42 S 147° 36'.65 E
42° 55'.36 S 147° 40'.76 E	42° 55'.12 S 147° 31'.82 E
42° 54'.92 S 147° 40'.78 E	42° 54'.64 S 147° 33'.74 E
42° 54'.47 S 147° 40'.80 E	42° 54'.33 S 147° 30'.50 E
42° 54'.19 S 147° 35'.44 E	42° 53'.86 S 147° 37'.19 E
42° 53'.71 S 147° 32'.59 E	42° 52'.87 S 147° 34'.22 E
42° 52'.60 S 147° 36'.25 E	42° 52'.35 S 147° 32'.09 E
42° 53'.23 S 147° 31'.15 E	42° 51'.82 S 147° 30'.91 E
42° 51'.80 S 147° 33'.36 E	42° 51'.70 S 147° 34'.84 E
42° 51'.40 S 147° 36'.01 E	42° 51'.06 S 147° 32'.08 E
42° 50'.90 S 147° 36'.92 E	42° 50'.73 S 147° 35'.11 E
42° 50'.69 S 147° 33'.58 E	42° 49'.79 S 147° 36'.18 E
42° 49'.17 S 147° 34'.70 E	42° 48'.72 S 147° 32'.46 E
42° 48'.72 S 147° 34'.04 E	42° 48'.43 S 147° 29'.38 E
42° 48'.43 S 147° 29'.59 E	42° 48'.43 S 147° 29'.80 E
42° 48'.43 S 147° 30'.02 E	42° 48'.41 S 147° 33'.19 E
42° 48'.29 S 147° 31'.42 E	42° 48'.25 S 147° 29'.27 E
42° 48'.25 S 147° 29'.48 E	42° 48'.25 S 147° 29'.69 E
42° 48'.25 S 147° 29'.91 E	42° 48'.25 S 147° 30'.13 E
42° 48'.07 S 147° 29'.69 E	42° 48'.07 S 147° 29'.91 E
42° 48'.07 S 147° 30'.13 E	42° 47'.99 S 147° 28'.66 E
42° 47'.87 S 147° 29'.80 E	42° 47'.87 S 147° 30'.02 E

**Chart temporarily affected - Aus 171 - Aus 173 - Aus 796****1292(T)/2011 AUSTRALIA - TASMANIA - Flinders Island - Lady Barron - Light unreliable**

Date - Until 20 December 2011

Marine and Safety Tasmania Notice M144/2011 (AA569730)

The light, *F.WRG.48m 10M* (40° 12'.45 S 148° 14.76 E), is unreliable.**Chart temporarily affected - Aus 179 - Aus 800**

## PAPUA NEW GUINEA and SOUTH PACIFIC

**967(P)/2005 PAPUA NEW GUINEA - Madang - Horizontal datum anomaly.**  
AHO (A170008).

A topographic anomaly of between 50 and 80 metres may exist on chart Aus 646 in an E direction.

Mariners using ENC/RNC are advised to navigate with caution when approaching Madang.

A verification survey will be undertaken shortly.

**Chart which will be affected - Aus 646.**

**404(T)/2008 PAPUA NEW GUINEA - Port Moresby - Fish aggregation device southwards**  
*Former Notice - 665(T)/2006 is cancelled*  
Department of Transport and Civil Aviation PNG Notice 8/2004 (AA84295)

A fish aggregation device, marked by a buoy, exists in position 9° 44'.5 S 147° 17'.5 E (datum unknown).

**Chart temporarily affected - Aus 379 - Aus 505 - Aus 4620 (INT 620)**

**66(T)/2011 PAPUA NEW GUINEA - Caution Bay - Harbour works**  
*Date - Until 31 January 2013*  
National Maritime Safety Authority PNG Notice 46/2010 (AA511164)

Works associated with the construction of a jetty are in progress within an area bounded by the following positions:

9° 20'.01 S 146° 58'.80 E  
9° 21'.27 S 146° 59'.22 E  
9° 21'.21 S 146° 59'.84 E  
9° 20'.58 S 146° 59'.61 E  
9° 20'.50 S 147° 00'.43 E  
9° 19'.97 S 147° 00'.23 E.

A 2M exclusion zone exists from the outside this area and a 0.25M exclusion zone exists around all vessels associated with the works.

All hazards to navigation will display appropriate lights.

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 379**

**133(T)/2011 PACIFIC OCEAN - Scientific instruments**  
*Former Notice - 1471(T)/2009 is cancelled*  
JAMSTEC (AA514619)

Scientific instruments, Triton buoys, exist as follows:

<i>Number</i>	<i>Position</i>
4	0° 01'.02 S 155° 57'.35 E
5	1° 58'.97 S 156° 01'.84 E
6	4° 58'.03 S 156° 01'.00 E
9	0° 01'.48 S 146° 59'.98 E.

**Chart temporarily affected – Aus 399 – Aus 4622 (INT 622)**

**283(T)/2011 AUSTRALIA - South Fiji - Light buoy withdrawn**  
*Former Notice - 134(T)/2011 is cancelled*  
Australian Bureau of Meteorology (AA521187)

The light buoy, *Fl. Y.2s* (26° 04'.0 S 176° 00'.0 E), has been temporarily withdrawn.

**Chart temporarily affected – Aus 4602 (INT 602)**

**Chart temporarily affected - Aus 377 - Aus 379 - Aus 505 - Aus 621 - AX 60377**

**429(T)/2011 PAPUA NEW GUINEA - Badila Dabobona Reef - Light beacon altered southeastwards***Date* - Until 31 October 2011

National Maritime Safety Authority PNG Notice 20/2011 (AA527923, AA527924)

The light beacon (10° 23'.60 S 151° 00'.77 E) has been temporarily altered to *Fl(2)10s 7m 4M*.**Chart temporarily affected - Aus 508 - Aus 628****709(P)/2011 PAPUA NEW GUINEA - Eastern Fields - Reef delineation***Date* - On or about 15 July 2011

LADS Flight (AA543779)

Mariners are advised that a survey being undertaken within the Eastern Fields region (10° 05'.0 S 145° 35'.0 E) indicates that the dangers are not in their charted positions. The whole reef system is out of position by up to 1000 metres in a non-uniform direction.

**Chart which will be affected – Aus 377 – Aus 379 – AX 60377****982(T)/2011 PAPUA NEW GUINEA - Port Moresby to Kerema Bay - Seismic survey***Date* - Until 20 December 2011

National Maritime Safety Authority PNG Notice 35/2011 (AA556509)

RV *BGP Prospector* is conducting a survey in an area bounded by the following positions:

9° 23'.23 S 146° 22'.00 E  
 8° 47'.17 S 145° 52'.44 E  
 8° 49'.50 S 145° 49'.37 E  
 8° 34'.01 S 145° 36'.42 E  
 8° 31'.43 S 145° 39'.30 E  
 8° 26'.78 S 145° 35'.35 E  
 8° 19'.98 S 145° 43'.57 E  
 9° 15'.38 S 146° 30'.49 E.

**Chart temporarily affected – Aus 377 – Aus 378 – Aus 379 – AX 60377****983(T)/2011 PAPUA NEW GUINEA - Gulf of Papua - Racon**

National Maritime Safety Authority PNG Notice 36/2011 (AA557392)

The racon (8° 03'.86 S 144° 33'.63 E) is temporarily discontinued.

**Chart temporarily affected – Aus 378 – Aus 502 – Aus 4620 (INT 620) – Aus 4622 (INT 622) – AX 4620F**

**1095(T)/2011 PAPUA NEW GUINEA - Omati River to Caution Bay - Pipeline***Date* - Until 31 July 2012

National Maritime Safety Authority PNG (AA557592, AA557593)

PLV *Semac 1* and *Castoro 10* are conducting pipelay operations between the following positions:

7°36'.10 S 144°08'.04 E	7°36'.59 S 144°08'.18 E
7°37'.09 S 144°08'.26 E	7°40'.49 S 144°08'.01 E
7°43'.57 S 144°10'.92 E	7°44'.70 S 144°11'.35 E
7°46'.28 S 144°10'.89 E	7°49'.67 S 144°11'.36 E
8°09'.15 S 144°31'.18 E	8°09'.44 S 144°34'.88 E
8°08'.59 S 144°48'.02 E	8°08'.62 S 144°49'.19 E
8°08'.45 S 144°50'.87 E	8°07'.98 S 144°59'.39 E
8°08'.01 S 145°00'.68 E	8°07'.68 S 145°04'.67 E
8°07'.38 S 145°10'.09 E	8°07'.41 S 145°11'.37 E
8°07'.26 S 145°12'.21 E	8°07'.04 S 145°16'.19 E
8°07'.92 S 145°18'.27 E	8°09'.26 S 145°21'.41 E
8°09'.45 S 145°22'.20 E	8°09'.77 S 145°22'.92 E
8°10'.59 S 145°24'.58 E	8°14'.18 S 145°33'.60 E
8°24'.96 S 146°08'.58 E	8°30'.05 S 146°13'.34 E
8°35'.60 S 146°16'.55 E	8°36'.15 S 146°16'.92 E
8°38'.99 S 146°18'.49 E	8°39'.65 S 146°18'.92 E
8°43'.36 S 146°21'.05 E	8°50'.44 S 146°26'.08 E
8°52'.17 S 146°27'.33 E	8°52'.68 S 146°27'.59 E
8°53'.21 S 146°27'.93 E	8°53'.65 S 146°28'.36 E
9°04'.07 S 146°35'.80 E	9°12'.34 S 146°48'.35 E
9°18'.40 S 146°53'.09 E	9°19'.16 S 146°56'.35 E
9°20'.36 S 146°57'.58 E	9°19'.89 S 147°00'.09 E

Mariners are advised to navigate with caution in the area.

**Chart temporarily affected – Aus 379 – Aus 398 – Aus 502 – Aus 4620 (INT 620) - AX4620F****1158(T)/2011 PAPUA NEW GUINEA - Gulf of Papua - Works***Date* - Until 31 December 2011

National Maritime Safety Authority PNG Notice 44/2011 (AA565256)

DPB *Lewek Champion* and support vessels are conducting construction works and pipelay operations in an area within a 5M radius of Kumul production platform (8° 03'.86 S 144° 33'.64 E). An exclusion zone exists within the area of the works and pipelay operations.**Chart temporarily affected - Aus 378 - Aus 502****1286(T)/2011 PAPUA NEW GUINEA - Bougainville Island - Lights unlit***Former Notice* - 1159(T)/2011 is cancelled

National Maritime Safety Authority PNG Notices 22/2011, 46/2011, 52/2011 (AA535709, AA565338, AA569723)

The following lights are unlit:

<i>Location</i>	<i>Position</i>
Otua Island (K4886)	6° 27'.50 S 155° 58'.40 E
Takanupeu Island (K4884.4)	6° 08'.86 S 155° 34'.31 E
Dokome Point (K4885.2)	6° 10'.91 S 155° 32'.94 E
Kerekerina Point (K4885)	6° 11'.30 S 155° 33'.56 E
Arawa Bay (K4884.6)	6° 13'.74 S 155° 34'.37 E
Banaru Reef (K4885.7)	6° 08'.30 S 155° 39'.03 E
Moto Reef (K4885.8)	6° 08'.77 S 155° 39'.52 E
Wogoromodo Reef (K4885.6)	6° 10'.12 S 155° 39'.03 E
Cape Laverdy (K4884)	5° 32'.49 S 155° 03'.88 E

**Chart temporarily affected - Aus 399 - Aus 683 - Aus 4622 (INT 622)**

**EAST TIMOR**

**727(T)2006 EAST TIMOR - Dili - Point Laguebada - Light unlit.**  
List of Lights Vol K/2006 - 1368  
OIC DGST (A195686).

The light (8° 32'.90 S 125° 34'.13 E) is unlit.

**Chart temporarily affected - Aus 901.**

**MISCELLANEOUS**

**995(T)/2011 AUSTRALIA - Summer time**  
*Date* - Until 1 April 2012  
Australian Government (AA556406)

Clocks will be advanced one hour at 0200 local time on 2 OCT 2011 and retarded one hour on 1 APR 2012 in the Australian Capital Territory, New South Wales, South Australia, Victoria and Tasmania.

No changes will be made in Queensland, Northern Territory and Western Australia.