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Admiralty List of Radio Signals Volume 1 (ALRS Vol 1). See website below for further information.

Website:	www.amver.com
email:	amvermsg@amver.org

# 10.3 The Great Barrier Reef and Torres Strait Vessel Traffic Service - REEFVTS

- 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 Chapter V Regulation 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).
- Australia's Navigation Act 2012 gives the general power to make regulations to implement SOLAS (s339) and the related power to make Australian Marine Orders (s342). The laws about mandatory ship reporting are based on these powers.
- 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.
- 4. The purpose of REEFVTS is to enhance navigational safety in Torres Strait and the Inner Route of the Great Barrier Reef thereby minimising the risk of a maritime accidents, and therefore avoid the pollution and damage to the marine environment. REEFVTS also provides the ability to assist with quick response in the event of any safety or pollution incident.

# 10.3.1 System Overview

- 1. REEFVTS is manned 24 hours a day by personnel operating from a centre located in Townsville.
- 2. REEFVTS provides both an information service throughout the area and in specific areas

navigational assistance services. In summary, the services delivered include:

- Ship Traffic Information (STI) REEFVTS predicts ship encounters and this information is sent to individual ships as STI, usually through Inmarsat C messaging. STI is specific for each individual vessel and there are no general broadcasts
- Maritime Safety Information (MSI) -Information that is relevant to the ships location and intended movement is provided.
- Navigational Assistance REEFVTS may contact a ship if there is information available to REEFVTS which may help onboard decision making such as where the ship is heading into shallow water or deviating from a planned route.
- 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 (e.g. a faulty navigational aid) they should advise REEFVTS so they may pass that information on to other mariners.

# 10.3.2 REEFVTS Area

- 1. Nautical paper charts Aus 4620, 4635 and 490 provide details of the REEFVTS Area.
- 2. The REEFVTS Area is defined as:

(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

(c) the outer edge of the Great Barrier Reef, as bounded by a line:

(i) starting from the outer edge of the Reef at latitude  $10^{\circ}40'.00$  S, longitude  $144^{\circ}00'$  E; and

(ii) then running SE to latitude 21° 00' S, longitude 152° 40' E; and

(iii) then running E to latitude 21° 00′ S, longitude 152° 55′ E; and

(iv) then running SSE to latitude 23°42'.00 S, longitude 153°45'.00 E; and

(v) then running SSW to latitude 24°30'.00 S, longitude 153°35'.00 E; and

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(vi) then running W to the intersection of latitude  $24^{\circ}$  30'.00 S with the Australian coast at the low water line.

# 10.3.3 Mandatory Reporting Requirement

- The following categories of ships are required to report to REEFVTS:
  - a) all ships of 50 metres or greater length overall

b) all oil tankers, liquefied gas carriers, chemical tankers or ships coming within the INF Code, regardless of length

c) ships which are towing or pushing or being towed or pushed where the length of the tow exceeds 150 metres, or a vessel described in a) or b) is involved.

- 2. Other vessels transiting the REEFVTS area may report on a voluntary basis.
- 3. SOLAS Regulation V/11 does not apply to any warship, naval auxiliary, or any ship owned or

operated by government; however SOLAS does state that "such ships are encouraged to participate in ship reporting systems".

 Mariners are referred to AMSA Marine Orders Part 56 for details of their obligations under REEFREP. This is available on the AMSA website.

Website:	www.amsa.gov.au
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# 10.3.4 Communicating with REEFVTS

- A VHF radio network is available along the Queensland coast and Torres Strait to communicate with REEFVTS. REEFVTS keeps a listening watch at all times on the VHF working Channels 11 and 14. See REEFVTS VHF Channel overview.
- The relationship between VHF Channels and associated Mandatory Reporting Points are dependent on a ship's posi-tion in relation to the area of that Reporting Point (see table).

Name of Reporting Point and	VHF Working Channel	Name of Reporting Point and Aus	VHF Working Channel
Aus chart designation		chart designation	
Bramble (A)	14	Bowling North (S)	14
Daru (B)	14	Townsville (N) (S1)	14
Twin (C)	14	Townsville (S) (S2)	14
Booby (D)	14	Bowling South (T)	14
Thursday Island (D1)	14	Abbot Point (T1)	14
Endeavour (E)	14	Blossom (U)	14
Alpha North (F)	14	Molle (southbound) (V)	11
Alpha South (G)	14	Cid Harbour (V1)	11
Shortland (H)	14	Shaw (northbound) (W)	11
Hannibal (I)	14	Edward (X)	11
Inset (J)	14	Creal (Y)	11
Heath (K)	11/14	Mackay (Y1)	11
Pipon (L)	11	Hay Point (NE) (Y3)	11
Two Isles (M)	11	Hay Point (S) (Y4)	11
Cape Flattery (M1)	11	High Peak (Z)	11
Gubbins East (N)	11	Swain (Z1)	11
Gubbins West (O)	11	Archer (Z2)	14
Grafton Passage (P)	11	Sandy Cape (Z3)	14
Cairns (P1)	11	Port Alma (Z4)	14
Barnard (Q)	11	Gladstone (N) (Z5)	14
Mourilyan (Q1)	11	Gladstone (E) (Z6)	14
Palm Passage (R)	14	Bundaberg (W) (Z7)	14
Lucinda (R1)	14	Bundaberg (E) (Z8)	14

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**REEFVTS VHF Channel overview** 

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#### Inmarsat C Messaging

- 3. 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.
- Inmarsat C terminals must be logged into the Pacific Ocean Region (POR)

#### **Other Communications**

5. 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

Telephone:	+61 1300 721 293
Fax:	+61 7 4721 0633
email:	reefvts@vtm.qld.gov.au

6. 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.

# 10.4 REEFVTS Reports

- 1. The Master is responsible for ensuring the following reports are provided to REEFVTS:
  - Pre-Entry Position Report
  - Entry Report
  - Route Plan Report
  - Final Report
- 2. Additional Reports which may be sent include:
  - Route Deviation Report
  - Intermediate Position Reports
  - Defect Reports
- 3. Below is the reporting codes reference table:

ID	Message type (PER, ER, RP, FR, DR, IP, or IR)	
Α	Ship name, call sign and IMO number	A/HAPPY SAILOR/ ABCD/1234567
в	Date and time (UTC)	B/010200UTC
С	Current position Either the name of the mandatory reporting point, or the current position (latitude and longitude)	C/1036S/14144E
F	Speed The planned speed of the ship in knots and tenths of a knot	F/13
н	Date, time (UTC) and point of entry to REEFVTS Area Either the name of the first mandatory reporting point entering the Area, or the position (latitude and longitude) of entry	H/010400UTC/BOOBY
J	Pilot Is a coastal pilot on-board? (State yes or no) If yes, give the pilot's last name and seafarer ID	J/NO or J/YES/BROWN/987654
к	Date, time (UTC) and point of exit from area Either the name of the last mandatory reporting point leaving the Area, or the position (latitude and longitude) of exit	K/042100UTC/SANDY CAPE
L	<b>Route information</b> Usually a Route Plan Report. If not, the name of the next two mandatory reporting points, or the course if the ship is not tracking between mandatory reporting points	L/INNER ROUTE DEEP DRAUGHT or L/ALPHA NORTH VIA VARZIN PASSAGE/ HANNIBAL
М	<b>Communication methods</b> Primary Inmarsat C details: Inmarsat Mobile Number (IMN), manufacturer and model (for Pre Entry reports). Ship's satellite phone number (for Entry Reports)	M/423456789/JRC/JUE- 85C or M/870773123456

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•	Description	
0	Draught	O/FORE 11.5/AFT 11.3
	Fore and aft, in metres and decimetres	
Р	Cargo on-board	P/BULK CHEMICALS/ DG YES
	Give the normal name of cargo and state whether it is classified as hazardous (yes	
	or no).	
	Note: If required, this information may be given by non-voice means before the first	
	REEFVTS report	
Q	Defects, damage, deficiencies or other limitations	Include details as required
	Describe details of any damage, failure or breakdown:	
	(i) collision, grounding, fire, explosion, structural failure, flooding, cargo shifting;	
	(ii) failure or breakdown of steering gear, propulsion plant, electrical generating	
	system, essential shipboard navigational equipment	
R	Pollution/dangerous goods lost overboard	Include details as required
	Give brief details of the type of pollution (oil, chemicals and so on) or dangerous	
	goods lost overboard. State the ship's position	
U	Ship type, length (metres) and gross tonnage	U/TANKER/180/28000
	Give details of the ship, including ship type, length (metres) and gross tonnage	
х	Remarks	Include details as required
	Give any additional information which would help the navigational safety of shipping	
	in the REEFVTS Area; for example, abnormal weather; faulty navigational aid; or any	
	Dangerous Goods (DG), Harmful Substances (HS) or Marine Pollution (MP) incident	
	reports	

# 10.4.1 Pre-Entry Position Report

- A Pre-Entry Position Report is required at least 2 hours prior to entering the REEFVTS area or departing from a port within the REEFVTS area.
- 2. The purpose of a pre-entry report is to advise REEFVTS of the ship intentions (e.g. 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.
- 3. The following message fields are required:

Mandatory fields: A, B, C, H, K, M

# 10.4.2 Entry Report

 An Entry Report is required when a ship enters the REEFVTS area or departs from a port within the REEFVTS area. Masters are encouraged to provide a route plan with the Entry Report. However, it is understood that this may not be possible until a pilot boards. 2. The following message fields are required:

Mandatory fields: A, B, C, F, J, K, L, O, P, Q, U, X

# 10.4.3 Route Plan Report

- If a route plan is not included in the entry report, then it must be provided within 1 hour of entering the REEFVTS area or departing from a port within the REEFVTS area. More information on standard routes and associated chartlets for the Inner Route and Great North East Channel are detailed in the REEFVTS User Guide.
- 2. The following message fields are required

Mandatory fields: A, B, C, F, K, L

 Route plan details are to be provided by one or more of the following methods:

#### **Standard Route Plan**

4. Most ships use this method. Predefined routes have been established based on the name of the route (e.g. Inner Route, Great North East Channel), the ship's draft (e.g. deep, moderate or shallow), and the name of any alternative legs intended to be taken that vary from the standard route To accompany Australian Notice to Mariners 993/2014

#### **Mandatory Reporting Points**

5. Route plans can be provided by reporting at Mandatory Reporting Points as the vessel progresses through the REEFVTS area. When a vessel reports, the next two Mandatory Reporting Points need to be advised. Where there are two or more routes between Mandatory Reporting Points, the planned (e.g. Alpha North to Hannibal via Varzin Passage). The mandatory reporting points and their locations are listed in Marine Order 56, which is available on the AMSA website.

#### Waypoints

6. The use of non-standard routes is accommodated by providing a list of the planned waypoints for the transit - either the latitude or longitude of the planned waypoints, the Mandatory Reporting Point names, or a combination of both.

#### 10.4.4 Final Report

- A final report is required when exiting the REEFVTS area, or when arriving at a port within the REEFVTS area.
- 2. The following message fields are required:

Mandatory fields: A, B, C

# 10.4.5 Intermediate Position Reports

- In most cases, a ship's position is being tracked by sensors. Therefore intermediate position reports at the mandatory reporting points are not required.
- If the ship's position is not being tracked by sensors, a brief position report must be given as advised by REEFVTS, until sensor data is obtained, at which time intermediate position reports will no longer be required.
- 3. The following message fields are required:

Mandatory fields: A, B, C, F

#### **10.4.6 Route Deviation Report**

 If the ship deviates from the Route 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.  A new route plan report is to be sent to REEFVTS as per 10.4.3.

# 10.4.7 Defect Report

- Reports must be provided immediately if a ship suffers damage, failure or breakdown which affects the ship safety.
- 2. The following message fields are required:

Mandatory fields:	A, B, C, F
Additional fields: (if appropriate)	Q, R, X

 The requirement to report all marine incidents including defects and deficiencies using form 'AMSA 18' and form 'AMSA 19' remains.

#### 10.4.8 Additional Information

 For more information the REEFVTS User Guide should be consulted for a more detailed description. Copies of the REEFVTS User Guide are available online, hardcopies from AMSA or can be requested via email.

Websites:	www.amsa.gov.au
	www.msq.qld.gov.au
email:	reefvts@amsa.gov.au



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Block for Chart Aus 238 (75.2 x 166.1 mm) © Commonwealth of Australia 2014



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Block for chart Aus 644

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(137-6 x 82-2mm)



#### To accompany Australian Notice to Mariners 1006/2014

Block for chart Aus 121

(182.7 x 199.5mm)

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