6 Weather information

6.1 General

The prevailing weather in the Whitsunday region is E to SE with the strongest winds blowing from March to May. November to March is considered to be the 'wet' season. North/easterly winds tend to prevail from September through to November.

'Bullets' is the local name for gusty winds that are created by the funnelling effect some of the higher land masses have on the surface winds. These 'bullets' can sometimes double the strength of the wind and catch vessels unawares, particularly in some of the north facing anchorages.

Cyclones affect the Queensland coast in the summer months. While Coral Sea cyclones are generally unpredictable in their movements they typically form in the Coral Sea and move in a direction between west and south towards the coast, either crossing the coast or re-curving to the southeast before reaching the Great Barrier Reef. Those that pass north of the Whitsunday Group bring the area strong southeast winds; those that pass south bring northwest winds.

Weather charts, satellite images, warnings and reports may be obtained from the Australian Bureau of Meteorology website.

6.1.1 Extreme Weather Event Contingency Plan

The Whitsunday region is also subject to "extreme weather events" of similar intensity to a cyclone. These "extreme weather events" can impact the area at very short notice. Maritime Safety Queensland has issued an Extreme Weather Event Contingency Plan for the Mackay Region which includes the Whitsunday area. This plan addresses cyclones as well as other extreme weather events. A copy of this plan is available on the Queensland Government website.

The overall objective of this plan is to provide for the safety of vessels and their operation during extreme weather events. Personal safety is of prime importance at all times.

An extreme weather event may require the evacuation of the port, part of a port, a harbour or boat harbour. The Regional Harbour Master may close the Whitsunday Pilotage Area in an extreme weather.

6.1.2 Cyclone procedures - Coral Sea Marina

Link to Cyclone procedures for Coral Sea Marina

6.1.3 Cyclone procedures — Port of Airlie Marina

Link to Cyclone procedures for Port of Arlie Marina

6.2 Tidal information

Generally the ebb tide flows NW and the flood tide flows SE but the tidal flows can be unpredictable amongst the Whitsunday Islands where the general flow is interrupted. Care should be taken when navigating in narrows as the tidal flows can be dangerous due to very strong currents, overfalls and eddies.

| Heights in metres above datum (LAT) | | | | | | |
|---|-----|------|------|-----|------|------|
| Place | HAT | MHWS | MHWN | MSL | MLWN | MLWS |
| Hayman Island 20° 03'S 148° 53'E | 4·1 | 3.3 | 2.6 | 1.9 | 1·3 | 0.6 |
| Shute Harbour 20° 17'S 148° 47'E | 4.3 | 3.3 | 2.5 | 1.9 | 1.2 | 0.5 |
| East Repulse Island 20° 35'S 148° 53'E | 5.7 | 4.5 | 3⋅5 | 2.6 | 1.7 | 0.8 |

Table 19 - Tidal information

The tidal times and heights for standard Queensland ports are available in the Queensland Tide Tables and are also available on the <u>Bureau of Meteorology</u> website as is the actual height of tide at Shute Harbour.

6.2.1 Tidal information — Tsunami effects

The north, west and east coasts of Australia are bordered by active tectonic plates which are capable of generating a tsunami that could reach the coast-line within two to four hours. The resultant change in swell height could have an adverse effect on a vessel with a minimum under keel clearance navigating within or close to port areas.

The <u>Joint Australian Tsunami Warning Centre</u> (JATWC) has been established to monitor earthquake activity that may lead to a tsunami forming. Warnings are currently issued for the Pacific Ocean region by the 'Pacific Tsunami Warning Centre' (PTWC) in Hawaii and for the Indian Ocean region by the 'Japan Meteorological Agency' (JMA). Mariners are advised to take heed of such warnings, plan their bar crossings and tend their mooring or anchorages accordingly.