6. Weather information

6.1 General

The prevailing winds tend to be easterly to south easterly. Although calmer conditions occur during the winter months, they may become very difficult during the summer months when the sea breeze augments the prevailing south easterlies.

As a general rule high windage vessels will not be moved when the wind speed exceeds 25 knots especially when coupled with a flood tide.

A tropical cyclone watch message is issued when a cyclone or potential cyclone is expected to affect conditions in the area within the next 48 hours and is reviewed every three hours.

A tropical cyclone warning message is issued when a cyclone or potential cyclone is expected to affect conditions in the area within the next 24 hours and is reviewed every three hours.

Weather charts, satellite images, warnings and reports may be polled by fax – 1800 630 100 and from the Australian <u>Bureau of Meteorology</u>.

Alternatively the following telephone numbers offer the listed information service.

1300 360 427	tropical cyclone information
1300 360 427	coastal marine warning
1300 878 6264	current tsunami threat

6.2 Cyclone procedures

The Mackay region is particularly exposed to risks posed by tropical cyclones. It is imperative all mariners prepare for the possibility of one of these cyclones crossing the coast in their region during this period. The Mackay region is also exposed to severe local storms which can form with minimal warning and cause major damage to the local maritime industry. (For example, the devastating storm at Airlie Beach in February 2008).

In addition, the major commercial shipping ports of Mackay and Hay Point are particularly exposed to the prevailing weather and sea conditions with limited protection from a tropical cyclone and other extreme weather events.

<u>Extreme Weather Event Contingency Plans (Cyclone Procedures)</u> have been developed for the Mackay Region and are on the MSQ Website.

The prime intent of this plan is for masters to be aware of an approaching weather event and be prepared to take the necessary action to avoid the damaging impact to ships and the environment.

6.3 Tidal information

Hay Point is a standard Port in the Queensland Tide Tables. NQBP and MSQ have installed tide measurement systems in the following locations:

Hay Point Tug harbour tide board and gauge (MSQ & NQBP); and

Beacon #2 – Hay Point Channel (MSQ).

The boards refer to LAT and show the actual tide height above LAT. Maritime Safety Queensland provides tidal predictions for pilotage areas. The tidal times and heights for standard Queensland ports are available in the Queensland Official Tide Tables and Boating Guide and may be accessed at the <u>Bureau of Meteorology</u> website.

Tidal stream predictions for standard Queensland ports are available upon request through the Regional Harbour Master's Office.

6.3.1 Tidal information – tsunami effects

The Northwest and East coasts of Australia are bordered by active tectonic plates which are capable of generating a tsunami that could reach the coastline 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.