## Marine meteorological services for ships - NAVTEX meteorological messages

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Apart from the GMDSS meteorological messges, which was outlined in the previous issue, the Hong Kong Observatory also issues Marine Weather Forecast and Tropical Cyclone Warning for Shipping for ships cruising in the South China Sea and the western North Pacific via NAVTEX (Navigational Telex).

NAVTEX is an international broadcast system for disseminating meteorological and navigational information by the coastal radio stations for ships plying over the seas. It was developed to provide a low-cost, simple, and automated means for receiving the information aboard at seas. It uses an international medium frequency of 518 kHz for delivery of meteorological and navigational warnings and forecasts, as well as urgent marine safety information such as search and rescue information to ships. In Hong Kong, the coastal radio stations for NAVTEX broadcast is operated by the Marine Department. The broadcast range is about 700 km .

The Hong Kong Observatory issues Marine Weather Forecast twice every day. It contains warnings of gale force winds or above when necessary, a synopsis of significant weather system as well as the 24 -hour weather forecasts for the ten marine areas as shown in the map below.


Moreover, when a tropical cyclone is located within the Hong Kong Area of Responsibility ( $10^{\circ}$ to $30^{\circ} \mathrm{N}$ and $105^{\circ}$ to $125^{\circ} \mathrm{E}$ ), the Hong Kong Observatory will issue the Tropical Cyclone Warning for Shipping at 3-hourly intervals, giving detailed
information on the location, intensity and forecast movement of the tropical cyclone, and also the associated wind and wave conditions.

Both the Marine Weather Forecast and the Tropical Cyclone Warning for Shipping are printed out automatically by means of narrow-band direct-printing telegraphy on the bridge of a ship through the on board NAVTEX receiver.


NAVTEX receiver in a Hong Kong Voluntary Observing Ship

