

## Singapore Maritime Week 2008 Line-up

**Singapore Maritime Week 2008** offers a total of 19 events: seven \*MPA-organised activities and 12 non-MPA organised activities.

\*Singapore Nautical Run  
East Coast Park (10 Oct, 7.15am to 10am)

8th MARTECH Conference and Exhibition  
Singapore Polytechnic, LT1A & The Concourse (13-14 Oct, 9am to 5pm)

\*Reopening of Singapore Mariners' Club Apartments  
Maritime House (13 Oct, 10am to 12.30pm)

SMF Networking Reception  
Raffles Hotel, Bar & Billiard Ballroom (13 Oct, 7pm to 9pm)

7th Annual Marine Money Asia Week  
St Regis Hotel (14 Oct, 9am to 7pm)

Seatrade Sustainability Seminar  
PSA Building, 40th floor (14 Oct, 9.30am to 12.30pm)

Lloyd's Register Golf Invitational  
Raffles Country Club (14 Oct, 1pm onwards)

A Maritime Nexus for Young Maritime Professionals  
Crazy Elephant, Clarke Quay (14 Oct, 6.30pm to 9pm)

\*15<sup>th</sup> Singapore International Bunkering Conference (SIBCON) Speakers' Dinner  
Shangri-La Hotel, Waterfall Terrace (14-15 Oct, 7pm to 9.30pm)

\*15<sup>th</sup> Singapore International Bunkering Conference (SIBCON) 2008  
Shangri-La Hotel, Island Ballroom (15-16 Oct, 9am to 5pm)

Lloyd's List Asia Awards and Gala Dinner  
Marina Mandarin Hotel, Ballroom (15 Oct, 6.30pm to 12.30pm)

BIMCO Masterclass Workshop on Agency  
M Hotel (15-17 Oct, 9am to 6pm)

4th International Conference and Exhibition on Ballast Water Management (ICBWM 2008)  
Raffles Town Club, Dunearn Room (16-17 Oct, 9am to 5.30pm)

\*2nd Singapore Maritime Lecture  
Raffles Hotel, The Ballroom (16 Oct, 3pm to 5.30pm)

SSA 23rd Anniversary Gala Dinner  
Swissotel the Stamford, Raffles Ballroom (16 Oct, 6pm to 11pm)

\*Joint Oil Spill Exercise 2008  
(17 Oct, 8am to 1pm)

3rd International Ship Management Conference on Resolving Shipping's Image Crisis  
St Regis Hotel (17 Oct, 9am to 5pm)

\*From Lighthouses to Electronic Charts: An Exhibition  
VivoCity, Central Court A (17-19 Oct, 10am to 9.30pm)

Sailability Singapore Regatta  
Raffles Marina (18 Oct, 9am to 5pm)

### **Singapore Maritime Week: Facts and figures**

	<b>2006 (25-29 Sep)</b>	<b>2007 (18-28 Sep)</b>	<b>2008 (10-19 Oct)</b>
Total participants	<b>2900</b>	<b>4500</b>	<b>6000 (expected)</b>
Overseas participants	<b>725</b>	<b>750</b>	<b>1000 (expected)</b>
Participant profile	<b>CXO level, senior and middle management</b>	<b>CXO level, senior and middle management</b>	<b>CXO level, senior and middle management, general public</b>

### **Details on Singapore Mariners' Club Apartments**

Singapore Mariners' Club Apartments is ideally located at 120 Cantonment Road adjacent to the Central Business District and port grounds. It is designed to offer affordable and comfortable accommodation to seafarers of all nationalities during their stay in the Singapore port.

Each of the 46 air-conditioned apartments comprises a well-furnished living room (32" LCD TV with cable TV channels), a bedroom, a dining room, and a bathroom. The rates for these apartments ranging from 520-630 sq ft are: single at S\$95; double at S\$110; triple at S\$120.

The Singapore Mariners' Club functions very much like a one-stop service centre to serve seafarers' needs in port. Seafarers receive discounts at the Mariners' Corner Restaurant and Bar (which serves western cuisine and local dishes) and also gain access to the suite of facilities and amenities within the Club:

- A 24-hour reception (phonecards for purchase; tele-guide information service; money changing; postal service; and sale of souvenirs);
- Seafarers' Lounge (a relaxation area for pool playing, TV viewing; wireless broadband internet access is available);
- Games Room (equipped with jackpot machines);
- Gleneagles Maritime Medical Centre (with medical and dental services including 24-hour in-port and out-port emergency services); and
- International telephone and telefax service.

### **MPA's seafarer welfare efforts**

MPA also organises sporting and recreational related activities for seafarers throughout the year such as the International Sports Week for Seafarers. This is an annual week-long event where seafarers gather for a friendly competition in sports activities. It promotes goodwill among seafarers of different nationalities and backgrounds.

The line up of activities in 2008 includes the following:

- i) International Sports Week for Seafarers (12-17 May 2008);
- ii) International Bowling Tournament (14 Mar, 15 Aug 2008);
- iii) Singapore Cup Futsal Tournament for Seafarers (23 to 25 2008);
- iv) Sightseeing Tours for Seafarers (11 Feb, 11 July, 23 Nov 2008);
- v) Outings to Tiger Beer Brewery (on a monthly basis).

MPA works closely with unions such as Singapore Maritime Officers' Union (SMOU) and Singapore Organisation of Seamen (SOS) on seafarer well-being initiatives.

MPA administers a whole range of welfare schemes: conciliation services, educational grants for registered seamen, group insurance scheme for seafarers, long service retirement award, financial assistance schemes, special relief fund, Singapore seafarers' fund, and repatriation of seamen.

### Details on “From Lighthouses to Electronic Charts – An Exhibition”

The Straits of Malacca and Singapore is visibly one of the world's busiest sea lanes with about a third of global trade and half of the world's oil flowing through it. Last year alone, 50,000 vessels passed through it in addition to the 128,568 vessels that called at the port of Singapore. To maintain navigational safety in the Straits of Malacca and Singapore, MPA works closely with the other littoral states, Malaysia and Indonesia, and the international maritime community, with the help of state-of-the art hardware.

From 17-19 Oct, MPA will be putting up an exhibition ‘From Lighthouses to Electronic Charts’, presenting the public an opportunity to learn about Singapore’s maritime and hydrographic heritage.

This three-day free exhibition at VivoCity provides a glimpse of nautical charts and aids to navigation used from the 19<sup>th</sup> to 21<sup>st</sup> century. It also traces Singapore’s contribution to navigational safety in the Straits of Malacca and Singapore. Some aids to navigation include the following:

#### Lighthouse models and visuals

The founding of modern Singapore in 1819 by Sir Stamford Raffles paved the way for Singapore to become a modern port. In the 1840s and 1850s, Singapore had gained increasing importance as the main shipping channel between the Indian Ocean and the South China Sea. During this time, aids to navigation such as lighthouses became critical. Mariners relied on them to sail safely in and around Singapore waters.

While the original light source for lighthouses was a multi-wick oil lamp, the present lighthouse equipment consists of a main and standby rotating beacon, each producing 110,000 candelas [unit for measuring the intensity of light] reaching 37 kilometres (or about 20 nautical miles). A remote monitoring system checks the condition of the lighthouse and reports the information to a base station located on the mainland.



To assist the safe passage of vessel through the Singapore Strait, the first Singapore lighthouse, **Horsburgh Lighthouse** (pictured left), was built in 1851 at the eastern approaches to the Singapore Strait on Pedra Branca. The lighthouse was used to mark a major natural hazard to ships travelling between Singapore and East Asia. It was aptly named after James Horsburgh, British Hydrographer.

#### Beacon and buoy models and visuals

To further aid navigation, beacons and buoys serving as seamarks were used. Lanterns were fitted to beacons and buoys to allow safe and efficient navigation of vessels at night.



A **beacon** (pictured left) is a small fixed visual mark on land or in the water. It performs the following navigational functions: mark a landfall position; mark an obstruction or a danger; indicate a channel or waterway's lateral limits; indicate a waterway's turning point or junction; mark the entrance of a traffic separation scheme; and form part of a leading/range line.

Although a buoy serves a similar purpose to a beacon, it is a floating aid. It is used in locations where it is impractical to establish a fixed aid because of high damage risk. This could be because of water depth, seabed conditions or cost and hazard shifts over time such as sand banks and unstable wrecks.

### Lanterns over the years

In pre 1930s to 1970s, gas lanterns using acetylene gas were commonly used. They were fitted to short range aids to navigation such as beacons and buoys to allow safe and efficient navigation of vessels at night.

In early 1970s, electric lanterns using incandescent (filament) lamps as a light source were introduced to replace acetylene gas lanterns in early 1970s.

From 2002, improved solar power technology and high efficiency of LED (light emitting diode) led to the development of self-contained LED lanterns. With solar-powered LED lighting, there is no need for large battery systems and large solar panels.



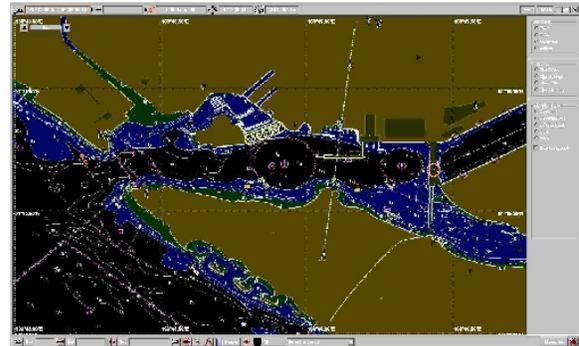
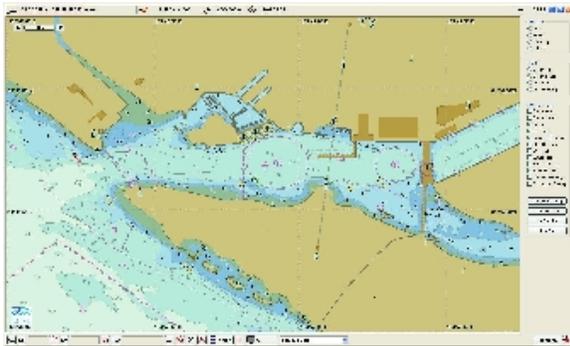
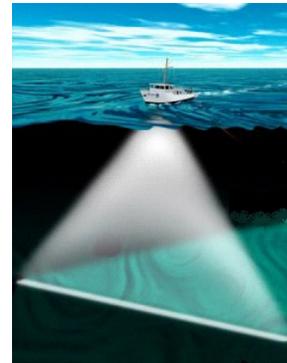
This **self-contained LED lantern** (pictured above), introduced in 2002, represents a marked improvement from the gas and electric lanterns of the 1930s and 1980s. These self contained lanterns, requiring minimal maintenance, resulted in major cost savings.

## Equipment used in hydrographic survey



The **sextant** (pictured left) is adapted from one of the oldest forms of navigation. It is used to determine the angle between the horizon and a celestial body such as the Sun, the Moon, or a star. It is used in celestial navigation to determine latitude and longitude. A basic instrument to mariners, it is generally not used in the current age.

Currently, MPA uses the **multibeam sonar system** (pictured right), fitted to vessels, to survey Singapore waters. The multibeam sonar system maps more than one location on the ocean floor and provides a three dimensional, high-resolution view of the seabed. This is a marked improvement of the conventional single beam echo sounders used in Singapore from the 1970s. The multibeam sonar system was introduced by MPA in 2001.



Electronic Chart Display and Information System (ECDIS), introduced here in 2003, plays a useful role in enabling mariners to chart and keep their course in busy waterways such as the Malacca and Singapore Straits. It is a powerful, electronic navigational system that prompts the watch-keeper to make course alterations should there be navigational hazards in the proximity. It also provides anti-collision warnings.

**Tender Buoy (not at the exhibition)**



**Panduan** (pictured above) is a vessel (buoy tender) used by MPA to lift and lay buoys (floating devices used as seamarks).

Length: 26.2metres  
Breadth: 7.6metres  
Depth: 3.5metres  
Capacity: 12 persons  
Gross Tonnage: 186  
Estimated Speed: 12 knots (1 knot = 1.852 km/h)

### Growth of the Singapore maritime industry

The maritime workforce has grown by an impressive 12 percent over the past year to 108,000 and contributes about seven percent direct value add to Singapore's gross domestic product (GDP).

The Singapore maritime industry has seen strong growth in the past few years. 2007 statistics show that we have registered impressive (double-digit) growth in shipping tonnage of vessel arrivals, container throughput, bunker sales, and ships registered under the Singapore flag. This year, we crossed the one billion gross tons shipping tonnage in the month of August. This is four months ahead compared to four years ago when the billionth figure was achieved in Dec in 2004.

Below is the port performance from January to June this year. Vessel arrivals in terms of shipping tonnage reached 803.23 million gross tons (GT), a 13.7 percent increase over the same period last year. Container traffic in 2007 hit 15.03 million Twenty-Foot Equivalent Units (TEUs), an 11.5 per cent increase. The total cargo tonnage handled climbed 13.2 per cent to reach 268.13 million tonnes. The total volume of bunkers sold reached 17.36 million tones, up by a 13.2 percent.

#### Singapore's port performance

Key port indicators	Jan-June 2008	Year on year increase
Vessel arrivals	803.23 million GT	(↑13.7%)
Container throughput	15.03 million TEUs	(↑11.5%)
Cargo throughput	268.13 million tonnes	(↑13.2%)
Bunker sales	17.36 million tonnes	(↑13.2%)

As for the total tonnage of ships under the Singapore flag (Singapore Registry of Ships), it grew by some 13.7 per cent year on year to reach 41.8 million GT as at end June 2008.

Key port indicators	Jan – June 2007	Jan – June 2008	Year on year increase
Singapore Registry of Ships (as at end of the period)	36.77 million GT	41.8 million GT	(↑13.7%)