

At first sight, condition of the hoses appeared good, but on closer inspection, I am not sure if they could handle 10 Bar.

We discharged with an (initial) pressure of 6.5 Bar at the vessel's manifold and that went fine, until the shore changed tanks without warning the vessel. One of the hoses could not handle the sudden increased pressure of 10 Bar. It was changed and from that time the discharge continued with max. 4 Bar at the ship's manifold.

Formerly being a small fishing harbour, but with a big advantage, no need to dredge extensively to expand the jetties.

In the inner harbour over 10.0 m. water depth.

Large export coal wharf and outside harbour, with over 15.0 m. water depth. Starboard side too and after leaving the berth turned in the basin with the aid of two powerful tugs (in the inner harbour).

Normally only daylight berthing and sailing, but we sailed at 2200 hrs.

Penavico (local Agent) was there when we needed him and gave good service.

Local Chinese chart available.

SHIPMASTER'S REPORT: March 2000

Location: The port of Rizhao is located in position Lat. 35° 22' N, Long. 119° 33' E.

Charts: BA Chart No. 1253 (Scale 1:300,000 and insert Scale 1:40,000).

Sailing Directions: Admiralty List of Sailing Directions NP 32, Chapter 11.15, Supplement 32 S, dated 11-08-98.

Publications: Admiralty Light Lists Volume F No. 3808. There are no applicable entries in the Admiralty Radio Lists.

Documents: For administration purposes, the ports of Lanshan and Rizhao are treated as one port, and our original port of entry clearance for Lanshan was accepted at Rizhao. We did receive several officials on board who seemed to be content to pass the time of day.

Approaches: Vessel arrived from Lanshan just a few miles to the south.

On passage from Lanshan to Rizhao, great care must be taken as there are numerous fish farm structures (pens and nets) scattered over the bay. Some are highly visible with others being marked by spherical black floats. The structures appear to be substantial in size and may cause damage to vessels if they come into contact with them.

From observations during this visit, it would appear that vessels should proceed on a course of 087°(T) from Lanshan Anchorage No. 2, passing north of Cheniushan (Admiralty Light Lists Volume F, No. 3806) and Danianshan to Long. 120° 00' E, before altering course to 000°(T) to pass east of Ping Dao. Rizhao can then be approached from the east on 270°(T).

Our approach from seaward was uncomplicated. A strong westerly set was noted on our arrival as it was during the mid-flood.

Pilotage: With the vessel having draft of 7.2 m., we were expecting to embark the Pilot at Buoy No. 1, but on our approach, the Pilot requested that the ship proceeds towards Buoy No. 4. Two Pilots boarded from a powerful Japanese type tug, requiring the pilot ladder to be prepared 3.0 m. above the water.

The vessel re-entered the NW channel and berthed at Berth No. 2 at the north end on the west side of the wharf. Two tugs assisted in the berthing that was achieved without drama.

Mooring line tie-up was 4-0-2 fore and aft with the springs run first.

The echo sounder showed no less than 5.0 m. below the keel during the passage up the channel, but the Pilots noted that depths decrease markedly just ahead of the ship at the berth.

Berth: The chemical products Berth (Berth No. 2) is at the north end of the solid wharf, with a fenced-off area ensuring that the ship has a clear area alongside.

The manifolds, 15 of them, are of various sizes and are concentrated in one small area connected by underground pipes to the tanks several hundred metres to the east. There are two firefighting towers equipped with foam generating monitors connected to a dedicated pumping station.

The berth has substantial rubber tube fenders on chains placed every 8.0 m. and bollards placed at intervals of 25.0 m.

Cargo: The vessel discharged 8,036 tonnes of Methanol via 1×8 in. flexible hose. The discharge rate was 316 tonnes/hr.

Shore Leave: A minibus from the International Seamen's Club appeared shortly after our arrival. On their return, the crew seemed very pleased with the place.

Seaman's Mission: See "Shore Leave".

General: It is noted that on BA Chart No. 1253, there are notes that an extension to the wharf is under construction. This note was dated 1993. The construction of the structure is now complete (a well-made and laid out structure). There are 10 luffing cranes, two container cranes and one cement loader on the quay.

To the east is a dedicated bulk coal loading pier which was observed to be very busy during our stay, handling very large bulk carriers.

The wharf handles containers and the export of pig iron, coal and cement. There are large holding areas for coal stocks with conveyors, draglines and large railway marshalling facilities available. During our stay, there was constant railway activity (steam/diesel locomotives).

There is work in progress to the west, resulting in another wharf for smaller vessels.

There are at least two dredgers at work in the approach channels and the basin.

The Agent noted that 10 years ago the port was a fishing village that has now grown over a short period into a city. There is a great deal of construction work going on. We counted 47 cranes on the city skyline, and if Lanshan and Rizhao merge, it will be an enormous place.

AGENCY: Rizhao Xianghe Shipping Co Ltd, B2-9th Floor, Ruitai International Trading Plaza, No. 64 Huanghai No. 1 Road, Rizhao City, Shandong 276826, China. Tel: +86 (633) 229 7123, 229 7345, 229 7456. Fax: +86 (633) 229 7234. Email: agency@vip.sina.com

AGENT: Penavico Rizhao, No. 106, 1 Huanghai Road, Rizhao, Shijiu 276826, China. Tel: +86 (633) 833 1486. Fax: +86 (633) 833 1116. Telex: 320021 PENRZ CN. Email: cosarz@penavicz.com Web: www.penavicz.com

SANYA: 18° 14' N 109° 30' E

(See Plan)

RESTRICTIONS: Entry and departure possible day and night. Depth in channel 7.0 m.

PILOTAGE: Compulsory. Pilot boards in Quarantine/Pilot anchorage.

ANCHORAGES: Quarantine/Pilot Anchorage: Depth 20.0–28.0 m. Bottom is mud. Max. size 50,000 d.w.t.

Sheltered Anchorage: Depth 5.0–16.0 m. Bottom is mud and sand. Max. size 50,000 d.w.t.

Loading/Discharging Anchorage: Depth 8.0–16.0 m. Bottom is mud. Max. size 50,000 d.w.t.

VHF: Sanya Radio on Channel 16 (24 hours).

TUGS: 2×248 h.p., 1×400 h.p. and 1×300 h.p.

CRANES: Floating Cranes: Available if notified in advance.

STEVEDORES: Working Hours: As per advanced arrangement with Haikou.

SERVICES: Supply Services: Arranged by Hainan Autonomous Prefecture Sanya Ocean Shipping Supply Corporation.

WEATHER/TIDES: Tidal Range: 0.06–2.26 m.

GENERAL: Warehouse and Open Store Space:

Warehouse 9,034 sq.m.

Store space 51,000 sq.m.

Main Imports and Exports:

Imports: Grain, cement, chemical, fertilisers, coal and steel.

Exports: Salt, sugar, rubber and local products.

REPORT: 1998

Max. Size: Draft 6.0 m., LOA 145 m., beam 18.0 m.

Cargo Handling Facilities: 57 cargo handling machines with lifting capacity up to 36 tonnes.

Loading Rates:

Bulk: 1,500 tonnes per day

Packaged cargo: 500 tonnes per day.

Discharging Rates:

Grain: Up to 3,000 tonnes per day

Coal: Up to 3,000 tonnes per day

Fertiliser: Up to 3,000 tonnes per day

Packaged cargo: 600 tonnes per day.

Fresh Water: Available.

Fuel: Diesel oil available in small quantities.

Stores: Provisions available.

SHANGHAI, including Luhuashan Anchorage:

31° 14' N 121° 28' E

(See Plan)

Also see Jinshan and Yangshan

OVERVIEW: China's largest port, handling most types of cargo. The terminals extend along the Chiang Jiang (Yangtze) River and its tributaries the Huang Pu Jiang and Wusong Rivers. The port area is divided into several main districts including Bao Shan, Fu Xing, Dong Chang, Gao Yang, Hui Shan, Kai Ping, Pudong and Wu Jing.

LOCATION: In eastern China at the mouth of the Chang Jiang River.

CHARTS: Chinese Charts No. 40404, 40405, 40406, 40407, 40410, 40413, 40414 and 40415.

BA Charts No. 1601, 1602, 1603 and 1619.

DOCUMENTS: China Ocean Shipping, Shanghai Branch, as Agent, must submit to Shanghai customs one complete set of cargo manifests covering all cargoes to be discharged at Shanghai (including transit cargoes via Shanghai) for declaration and clearance within 24 hours after completion of the joint inspection. If there is any shortage of cargo manifests such as incomplete cargo manifest or the missing/omitting of some bills of lading, the Agent is forced to bear the penalty (maximum RMB 30,000.00), in accordance with customs law in order to improve the quality of the cargo manifest and other relevant documents from abroad.

In consideration of the above, principals are kindly requested to pay special attention to this matter and ensure that all documents, especially the cargo manifest, made and sent by principals should be perfectly correct otherwise, the Agent will transfer all fines imposed upon them by Shanghai customs to the ship owner or the agents at the loading ports.

Also see "General" before first China port.

ISPS COMPLIANCE: Port is compliant.

MAX. SIZE: Draft in channel 10.5 m. (FW).

Bulk: 180,000 d.w.t., depth 11.0 m.

Containers: Depth 14.2 m. Largest vessel "Shanghai Express" 100,003 d.w.t., LOA 320.38 m., beam 42.88 m.

Gas: 10,000 d.w.t., draft 9.0 m.

Passengers: 80,000 d.w.t., depth 12.0 m. Largest vessel "Superstar Leo", 76,800 g.t., LOA 268 m., beam 32.0 m.

Ro-Ro: Depth 14.0 m.

Tankers: 50,000 d.w.t., LOA 220 m., draft 10.0 m.

Also see "Shipmaster's Report" dated December 2005.

RESTRICTIONS: Vessels may enter and sail throughout 24 hours.

Bridges: Yang Pu airdraft 48.0 m.

Nan Pu airdraft 44.0 m.

Lu Pu airdraft 44.0 m.

Xu Pu airdraft 44.0 m.

Fang Pu airdraft 22.0 m.

PILOTAGE: Compulsory. Pilotage available throughout 24 hours. At the outer pilot station, the Pilots usually only board vessels during two periods daily, so enabling vessels to pass through the shallow waters of the channel approaches at High Water (HW). This results in vessels entering the channel one after another in what looks like a convoy.

Pilots board shallow draft vessels that are not tide-bound outside these time periods.

The pilot ladder to be rigged 0.5 m. above the water.

Pilot Station: Shanghai Port Pilot Administration Station, 19–20th Floor, Jin'an Building, 908 Dongdaming Road, Shanghai, China. Tel: +86 (21) 6595 4488, 6595 9287 (Office). Fax: +86 (21) 6595 5920, 6595 7732. Email: pilots@sh163.net Web: www.sh-pilots.com.cn

Shanghai Port Pilot Station scheduling Division, No. 908 East Daming Road, Shanghai 200082, China. Tel: +86 (21) 6595 9175, 2863, 0064, 4411. Fax: +86 (21) 6595 3149, 1270, 3149, 1270.

Pre-Arrival Notification: Vessels inbound, shall notify the pilot station of their Pilot requirement, 48 and again 24 hours prior to arrival at pilot station.

Vessels outbound shall have their Agent notify the pilot station the afternoon prior to the day of departure.

Vessels requiring a Pilot should listen on VHF channel 69. On confirmation of receipt number provided by the Agent, and notified to the pilot station, Pilot will board and vessel proceeds inwards.

The Agent will contact the Pilotage Service Operations Office from 1400–1500 hrs. to obtain the following day's movements schedule.

Communications: The Pilotage Authority listens on Channel 16 and works on Channels 6, 9, 15 and 27 throughout 24 hours.

Ships waiting in the outer anchorage, or approaching to take a Pilot on board, should monitor the pilotage transit schedules broadcast by the pilot station mother ship. The following day's schedule for transits is broadcast at 1600 hrs and any changes are broadcast at 1100 hrs the following morning. The Agent may also notify the vessel prior to arrival. If the vessel's Master needs to clarify the situation, then contact the pilot station mother ship via VHF.

When vessels are instructed by the pilot station to "Proceed to Buoy No. 1", the vessel should proceed to the Nan Cao (North Channel) Light Vessel instead of Light Buoy No. 1. Light Buoy No. 1 to No. 3 in Nan Cao have been withdrawn and replaced by the Nan Cao Light Vessel. Vessels' Masters should clarify the situation with the pilot station mother ship.

Chiang Jiang Kou (River Yangtze Estuary): The estuary has two branches, Bei Zhi (north branch) Shuidao (channel) and Nan Zhi (south branch), passing either side of the Chong Ming Dao Island. The north branch is very shallow and therefore impassable to most vessels.

Nan Zhi Shuidao: The channel is divided into two channels, Bei or Bei Gang Shuidao (north port channel) and Nan or Nan Gang Shuidao (south port channel) passing either side of two islands, Chang Xing Dao and Heng Sha Dao and a shallow bank Heng Sha. The depth in the Bei or Bei Gang Shuidao is shallow, and is therefore only used by domestic vessels.

Nan or Nan Gang Shuidao: The channel is divided into three passages:

Bei Cao Shuidao (north dredged channel), or called Bei Cao.
Nan Cao Shuidao (south dredged channel), or called Nan Cao.
Nan Gang Zhi Hangdao (south port branched fairway). Jiu Duan Sha Bank is between Bei Cao and Nan Cao.

Navigational light buoys separate the Nan Cao and Nan Gang Zhi Hangdao.

Bei Cao: Consists of the upper part of the Yuan-Yuan-Sha dredged channel and lower part the Chang Jiang Kou deep water fairway that has depth 8.5 m., width 300 m. and sloping bottom (1/60) giving total channel width of 400 m. between the navigational buoys on either side. At the eastern end of the channel, there is the Chang Jiang Kou Light Vessel in position Lat. 31° 06' 05" N, Long. 122° 26' 39" E (Racon O).

Nan Cao: In the Nan Cao, the depth is 5.2 m. and due to the sheltered waters, the majority of Pilots board vessels here if the vessel's draft including height of tide (rising) is permissible to pass through the channel. At the eastern end of the channel, there is the Nan Cao Light Vessel in position Lat. 31° 02' 39" N, Long. 122° 16' 21" E, (Racon N).

Nan Gong Zhi Hangdao: The channel runs along the south shore of the estuary and is only used by small domestic coasters. At the eastern end of the channel, there is the Nan Zhi Light Vessel.

Pilot Station Mother Ship: The vessel is white hulled, length 87 m., and is anchored between Light Buoys No. 5 and No. 6 in Nan Cao, in position Lat. 31° 03' 33" N, Long. 122° 06' 42" E, or between Light Buoy No. 4 (the most eastern buoy in Nan Cao) and Nan Cao Light Vessel in heavy weather.

In calm weather, the vessel shifts eastward and holds position near the Nan Cao Light Vessel or more easterly anchoring in position Lat. 31° 04' 00" N, Long. 122° 22' 00" E, at the mid-point between the eastern ends of the Bei Cao and Nan Cao channels.

Pilot boards in position Lat. 31° 04' 00" N, Long. 122° 24' 00" E.

SWATH Pilot Vessel: A new SWATH (small water-plane area twin hull) pilot vessel "Bai Yu Lan", length 27 m., is limited to daylight services only. The Pilot boards/disembarks in Chang Jiang Kou for vessels bound for/departing from Bei Cao.

The vessel has upper operational limits of Force 8 and wave height of 3.0 m.

Pilot Boarding in Calm to Moderate Weather: In calm weather, ship must arrive at position Lat. 31° 04' 00" N, Long. 122° 24' 00" E, at the appointed time, if delayed more than 10 minutes, the vessel's slot may be cancelled by the Pilotage Authority, especially if the draft is 10.0 m. or more.

Pilot Boarding During Bad Weather: In bad weather the vessel anchors between Light Buoys No. 5 and No. 6 in the Nan Cao Approaches. When proceeding to the boarding area, one hour prior to arrival, the vessel's Master should contact the pilot station mother ship via VHF to confirm current position and thereafter keep in close contact.

If, on passing Long. 122° 27.0' E, the pilot launch has not yet been sighted, confirm the pilot boarding area as the mother ship frequently changes position in bad weather. The Pilot may board a ship for Nan Cao between Light Buoys No. 4 and No. 5, in bad weather or as far in as Buoy No. 9.

During bad weather, the Bei Cao pilotage is suspended. If sea conditions permit, the Pilot may board the vessel near to the Nan Cao Light Vessel, then proceed to the Chang Jiang Kou Light Vessel for Bei Cao.

In heavy weather the Pilot can board vessels bound for Bei Cao via helicopter. The helicopter can carry up to four River Pilots, but is limited to daylight services only.

For vessels other than large container vessels, the Agent must apply and pay for services of the SWATH ship or helicopter. If in daylight the wind is more than Force 6 or wave height more than 2.0 m. in the estuary, then the Agent can apply for the SWATH ship or helicopter service.

If the SWATH ship and helicopter are unable to disembark the Pilot at Chang Jiang Kou in very rough seas, the Pilot will disembark on board (Korea, Japan, Hong Kong etc.). The Agent must make an application to the Pilotage Authority office and obtain authorisation from the Port Authority and Immigration prior to proceeding into international waters.

Transfer of Shanghai Pilots, whose pilotage area includes the lowest section of Yangtze River to Chang Jiang Pilots, whose pilotage area excludes the lowest section of Yangtze River, is in the area between four Light Buoys (No. 35, No. 35-1, No. 34 and No. 36). Shanghai/Chang Jiang Pilotage Transfer Centre arranges a launch or tug for the embarking/disembarking of all Pilots.

Every port Agent shall report vessel's draft correctly so as to help the pilot station assign Pilots.

Also see "Shipmaster's Report" dated December 2005.

ANCHORAGES: Application for Anchorage: Vessels shall prior to arrival off the port, make application for anchorage via electronic means. Contact ship's Agent for further details.

Inner Anchorages: Vessels shall anchor for no more than 72 hours

Jiuduansha Anchorage: Two anchorages for small vessels. For vessels awaiting orders or berth, seeking shelter and awaiting tide to enter or leave the Nancao Channel or Nancao Secondary Channel.

Anchorage No. 1 is located within the joint line linking buoys No. A40 to A42 and the parallel line shifted 1,000 m. abeam southwards.

Anchorage No. 2 is located within the joint line linking buoys No. A42 to A44 and the parallel line shifted 1,000 m. abeam southwards.

Jiangyanansha Dangerous Goods Temporary Anchorage: Anchorage for vessels carrying dangerous goods including oil and chemical tankers, LPG carriers. For vessels awaiting orders or berth, seeking shelter and awaiting tide to enter or leave the Nancao Channel or Nancao Secondary Channel.

Anchorage located between the joint lines linking buoys No. A45 to A44 and buoys No. Q15 to Q16.

Jiangyanansha Temporary Anchorage: Anchorage for vessels including large vessels, awaiting orders or berth, seeking shelter and awaiting tide to enter or leave the Nancao Channel.

Anchorage located between the joint lines linking Buoys No. A47 to A49 and buoys No. Q15 to Q16.

Hengsha East Anchorage: Anchorage for large vessels, awaiting orders or berth, seeking shelter and awaiting tide to enter.

Bounded by the following co-ordinates:

- No.Q1 Light Buoy;
- 31° 16' 27" N, 121° 51' 13" E
- 31° 17' 18" N, 121° 48' 58" E
- 31° 17' 57" N, 121° 49' 21" E
- 31° 17' 44" N, 121° 49' 51" E
- 31° 17' 26" N, 121° 49' 44" E
- 31° 17' 12" N, 121° 50' 36" E
- 31° 17' 23" N, 121° 50' 39" E

Hengsha West Anchorage: Anchorage for large vessels, awaiting orders or berth, seeking shelter and awaiting tide to enter.

Bounded by the following co-ordinates:

- Hengnan Light Buoy;
- 31° 17' 51" N, 121° 47' 35" E
- 31° 18' 20" N, 121° 46' 19" E
- 31° 18' 43" N, 121° 46' 35" E
- 31° 18' 44" N, 121° 47' 31" E

Hengsha Dangerous Goods Anchorage: Anchorage for vessels carrying dangerous goods including oil and chemical tankers and LPG carriers awaiting orders or berth, seeking shelter and awaiting tide to enter.

Bounded by the following co-ordinates:

- Hengnan Light Buoy;
- 31° 17' 57" N, 121° 49' 21" E
- 31° 17' 18" N, 121° 48' 58" E
- 31° 17' 51" N, 121° 47' 35" E

Wusong Anchorage: The Anchorage consists of 11 Anchorages and is the primary quarantine anchorage area.

Anchorages No. 1–2: For vessels engaged in domestic voyages. Located between the joint lines linking Buoys No. Q4–Q5 and parallel line 100 m. northward of line between Buoys No. 51–53. The 90° bisecting of line between Buoys No. 51–53 defines Anchorages No. 1 and 2.

Anchorages No. 3–4: For vessels engaged in domestic voyages. Located between the joint lines linking Buoys No. Q4, Q5 and Q7 and parallel line 100 m. northward of line between Buoys No. 53–55. The 90° bisecting of line between Buoys No. 53–55 defines Anchorages No. 3 and 4.

Anchorages No. 5–6: For vessels engaged in domestic voyages. Located between the joint lines linking Buoys No. Q5 to Q7 and parallel line 100 m. northward of line between Buoys No. 55–57. The 90° bisecting of line between Buoys No. 55–57 defines Anchorages No. 5 and 6.

Anchorages No. 7–8: Anchorage No. 7 is for vessels engaged in domestic voyages. Anchorage No. 8 for vessels engaged in international voyages. Located between the joint lines linking buoys No. Q7–Q8 and parallel line 100 m. northward of line between buoys No. 57–61. The 90° bisecting of line between buoys No. 57–61 defines anchorages No. 7 and 8.

Anchorages No. 9–10: Anchorage No. 9 for vessels engaged in international voyages and No. 10 for vessels berthing at berths along the Wusong River. Located between the joint lines linking Buoys No. Q7–Q9 and parallel line 100 m. northward of line between Buoys No. 61–63. The 90° bisecting of line between Buoys No. 61–63 defines Anchorages No. 9 and 10.

Anchorages No.11: Anchorage for seagoing vessels less than 1,600 g.t. Located between the joint lines linking Buoys No. Q9 to Q10 and parallel line 100 m. northward of line between Buoys No. 63–65.

Baosteel Upper Anchorage: Anchorage for large steel barges.

Bounded by the following co-ordinates:

- 31° 27' 50" N, 121° 25' 54" E
- 31° 27' 34" N, 121° 26' 18" E
- 31° 27' 23" N, 121° 26' 07" E
- 31° 27' 39" N, 121° 25' 43" E

Baoshan North Anchorage: Former anchorage for ultra-large vessels but now also for replenishment and lightering. Located between the joint lines linking Buoys No. Q11 to Q12 and parallel line 100 m. northward of line between Buoys No. 77, 79–81.

Prohibited Anchorage Areas: The following areas are within the Yangtze River.

Anchorage No. 1: Area bounded by co-ordinates:

- 31° 18' 50" N, 121° 40' 50" E
- 31° 19' 18" N, 121° 40' 05" E
- 31° 22' 18" N, 121° 42' 20" E
- 31° 22' 12" N, 121° 42' 40" E

Anchorage No. 2: Area bounded by co-ordinates:

- a) 31° 27' 00" N, 121° 26' 08" E
- b) 31° 26' 37" N, 121° 26' 30" E
- c) 31° 32' 04" N, 121° 34' 41" E
- d) 31° 31' 42" N, 121° 35' 35" E

Anchorage No. 3: Area bounded by co-ordinates:

- a) 31° 30' 19" N, 121° 19' 55" E
- b) 31° 30' 53" N, 121° 19' 20" E
- c) 31° 37' 06" N, 121° 23' 22" E
- d) 31° 36' 56" N, 121° 24' 11" E

Anchorage No. 4: Area bounded by co-ordinates:

- a) 31° 28' 44" N, 121° 44' 57" E
- b) 31° 24' 50" N, 121° 42' 32" E
- c) 31° 25' 13" N, 121° 41' 14" E
- d) 31° 29' 21" N, 121° 43' 42" E

Outer Anchorages: Changjiangkou Anchorage: Anchorage for all types of vessels, time limitless. Depth 10.0–14.0 m. Bottom mud with good holding ground. Located within the following co-ordinates:

- a) 30° 56' N, 122° 25' E
- b) 30° 56' N, 122° 32' E
- c) 31° 00' N, 122° 25' E
- d) 31° 00' N, 122° 32' E

Luhuashan Anchorage: Anchorage for all types of vessels including lightering operations, time limitless. Depth 10.0–14.0 m. Bottom mud with good holding ground. Located within the following co-ordinates:

- a) 30° 47' N, 122° 37' E
- b) 30° 47' N, 122° 38' E
- c) 30° 48' N, 122° 38' E
- d) 30° 48' N, 122° 37' E

Also see "Shipmaster's Report" dated November 1994 and "Agent's Report" dated July 2004.

VHF: Port Authority listens on Channel 16 and works on Channels 6, 9, 15, 21 and 27.

Pilot vessels listen on Channel 16 and work on Channels 6, 9, 15 and 69.

Penavico listens on Channel 16 and works on Channel 11.

Sinoagent listens on Channel 16 and works on Channel 74.

Berthing information available on Channel 11 at 1115 hrs. and 1515 hrs.

Also see "VTS/Radar".

VTS/RADAR: Compulsory for vessels or combined tug and tow of 1,000 g.t., tankers of 500 d.w.t. or if vessel carrying 12 passengers or more.

Shanghai VTS, zone encompasses the waters within the area defined by the following:

- a) The line connecting the jigu reef, the outer ends of each traffic lane and sector A and Sector C of the ship's routing system of Chang Jiang Kou, Nanzhi Lightfloat and Dazhi river
- b) Chang Jiang Kou and Lihe kou port authorities
- c) The line connecting Wusong Kou lighthouse, and buoy No. 101 and to Pudong shoreline.

The Shanghai VTS, call sign "Wusong VTS" covers two sectors within the controlled area: Sector No. 1 is the area west of the longitude passing through Chang Xing Radar Station. Working on VHF Channel 71 and Sector No. 2 is the area east of the longitude passing through Chang Xing Radar Station to the Nanchoa Light float and west to longitude through Chang Jiang Kou Light float, working on Channel 9. Chang Jiang Kou routing system east of Sector 1 works on VHF Channel 8.

Prior to arrival vessel shall forward the following information the Shanghai VTS as per IMO SRS requirements:

- a) vessel's name and call sign
- e) true course
- f) speed
- l) destination and ETA
- o) max. draft.

On departure prior to leaving the berth or heaving anchor, vessel shall provide the following information:

- a) vessel's name and call sign
- h) time and berth position.

Emergency Reports: In case of collision, pollution, injury to crew, breakdown or likely to affect safety of navigation, call Shanghai VTS giving:

- a) vessel's name and call sign
- b) time
- c or d) position
- x) full details of emergency and other information required.

Shanghai VTS Centre: Tel: +86 (21) 5667 1249. Fax: +86 (21) 5667 4045. Email: vts/ws@shmsa.gov.cn

Pre-Arrival Report: Vessels should send a report to Shanghai MSA via Agent by 1600 hrs the day prior to arrival, giving the following information:

- a) vessel's name
- b) nationality
- c) LOA
- d) g.t.
- e) draft fore and aft
- f) max. air draft
- g) last port of call
- h) destination (berth or anchorage)
- i) ETA
- j) type and quantity of cargo
- k) passenger number
- l) crew number.

After arrival vessels are required to make further reports when departing or shifting.

Shanghai MSA: Tel: +86 (21) 5393 1419. Fax: +86 (21) 5393 1420.

TUGS: 3×5,200 h.p., 2×4,100 h.p., 5×3,600 h.p., 1×3,500 h.p., 2×3,400 h.p., 5×3,200 h.p., 3×3,000 h.p., 3×2,600 h.p., 1×1,670 h.p.

CSIS: 4×4,000 h.p. and 1×980 h.p.

COSCO: 2×3,200 h.p. and 2×2,600 h.p.

Also see "Dry Dock".

BERTHS:

Tanker Berths:

Berth	LOA (m.)	Draft (m.)	Size (d.w.t.)	Remark
BCT	100	6.0	3,000	Benzene
CAT	135	8.3	10,000	Chloroform, EDC, VCM
DCC	330	9.0	35,000	AEO,BA,DOP,MMA,MEG,TDI
SIN	220	10.0	50,000	Crude, petroleum products
SGPC	100	5.5	4,000	Acetic acid, benzene, styrene monomar
SHP	110	6.0	4,500	MEG, NPE
KYT	200	7.2	10,000	Vegetable oil
OET				
1	210	9.5	35,000*	Acids, chemicals, petro-chemicals, petroleum products, oil, veg oil
2		9.5		Acids, chemicals, petro-chemicals, petroleum products, oil, veg oil
SGT	120	9.0	10,000	LPG, VCM
WCT	75	4.5	1,500	AEO, LAB
SWCT	100	6.0	3,000	Benzene, methanol, octanol
SWCB	120	6.2	5,000	Acetic acid, MEG, NBA, sulphuric acid
COFC	120	8.5	10,000	Tallow, vegetable oil
QNST				Chemicals

* Berths under development during 2008 to handle vessels up to 50,000 d.w.t.

Dry Docks:

Facility	Berth No.	Length (m.)	Draft (m.)	Size (d.w.t.)	Remarks
CSIS	0	160	6.7	200,000	1×15 ton crane, repairs
	10	200	13.2	200,000	1×32 ton crane, repairs
	11	200	10.5	200,000	3×40 ton cranes, repairs
	12	340	15.0	300,000	2×30 ton cranes, repairs
	13	340	15.0	300,000	8×40 ton cranes, repairs
	F	3,000	11.6–15.3	30,000–100,000	2×60 ton cranes, repairs
	CIC-Lifengt	1	260		65,000
2		260		65,000	Quay cranes, repairs
				888	Quay cranes, repairs
				230	Quay cranes, repairs
1		160	6.5	47,000	1×15 ton crane, repairs
2		200	6.5	47,000	1×15 ton crane, repairs
HRDD	1	260	7.0	100,000	1×15, 1×25 ton cranes, repairs
	2	180	7.0	50,000	1×32 ton crane, repairs
	3	230	7.0	50,000	1×15, 1×25 ton cranes, repairs
	4	300	8.0	200,000	1×50, 1×40 ton cranes, repairs
	5	300	8.0	200,000	1×50, 1×40 ton cranes, repairs
	6	300	8.0	200,000	2×40, ton cranes, repairs
HZSC	1	210			One portal crane
	2	466			Two portal cranes
	3	103			One portal crane
Jiangang	1	242	24.0	34,000	1×60, 1×75 ton cranes, repairs
	2	275	40.0	80,000	5×100, 1×150 ton cranes, repairs
Minnan	1			30,000	Repairs
	2			30,000	Repairs
	3			10,000	Repairs
Shanghai Shipyard	1	860			Repairs
	2	259			Repairs
	3	750			Repairs
Shenjia	1	78			Repairs
	2	190			Repairs

† Total berth length 1,150 m.

Dry Cargo:

Facility	Berth No.	Length (m.)	Draft (m.)	Size (d.w.t.)	Remarks
Nanshi	1	87			Coal
	1	250			Coal
Waigaoqiao-1	2	250			Coal
	1	250			Bituminous coal
W-aigaoqiao-2/3	2	27			Coal
	1	200			Coal
Wujing-1	1	218			Coal
	1	242.5			Coal
Shidongkou	1	215	10.5††		Containers
	2	215	10.5††		Containers
BSCT	3	210	10.5††		Containers
	1	216	10.5††		Containers
JCT	2	216	10.5††		Containers
	3	210	10.5††		Containers
ZCT	4	210	10.5††		Containers
	1	244	10.5††		Containers
2	180	10.5††		Containers	
	3	180	10.5††		Containers
4	160	10.5††		Containers	
	5	180.3	10.5††	10,000	General cargo, ore, steel
ZHCT	6	180	10.5††	10,000	Containers, general cargo, ore, steel
	7	180	10.5††	10,000	Containers, general cargo, ore, steel

Shanghai

CHINA

Facility	Berth No.	Length (m.)	Draft (m.)	Size (d.w.t.)	Remarks	Facility	Berth No.	Length (m.)	Draft (m.)	Size (d.w.t.)	Remarks		
SECT	1	312.5	14.2††		Containers	LWCT	1	167	9.0††	10,000	Coke, general cargo, rice, steel		
	2	312.5	14.2††		Containers								
	3	312.5	14.2††		Containers		2	167	9.0††	10,000	Coke, general cargo, steel		
	4	312.5	14.2††		Containers		3	167	9.0††	10,000	General cargo		
SMCT	Barge** 1	220	8.5††		Containers	4	167	9.0††	10,000	Coke, general cargo			
	Barge** 2	182	8.5††		Containers	5	167	9.0††	10,000	General cargo			
	1	220	12.8††		Containers	6	167	9.0††	10,000	General cargo, steel			
	2	220	12.8††		Containers	7	180	9.0††	10,000	General cargo, containers			
	3	220	12.8††		Containers	8	180	9.0††	10,000	Containers			
	4	220	12.8††		Containers	Barge 1-20				500	Domestic cargo		
SPCT	1	300	12.0††		Containers	XCT	1	176	11.0††	25,000	Ore		
	2	300	12.0††		Containers		2	176	11.0††	25,000	Ore		
	3	300	12.0††		Containers		3	176	10.3††	25,000	Ore		
SPCWT	1	310	13.2††		Containers	4	176	11.0††	25,000	Ore, steel			
	2	310	13.2††		Containers	5	176	10.8††	25,000	Ore, steel, general cargo			
	3	310	13.2††		Containers	6	176	10.9††	25,000	Ore, steel, general cargo			
	4	310	13.2††		Containers	7	148.6	11.4††	25,000	Fertiliser, general cargo			
	5	310	13.2††		Containers	8	201.1	11.0††	25,000	Steel, general cargo			
	6	205	13.2††		Containers	9	178.7	10.8††	25,000	Steel, general cargo			
	7	205	13.2††		Containers	10	174	7.0††	1,000	General cargo			
JGCT	6	227	10.5††	10,000	Steel, breakbulk, general cargo	GICT	1	290	10.0-12.0††	80,000	Cruise		
	7	172	10.5††	10,000	Steel, breakbulk, general cargo		2	290	10.0-12.0††	80,000	Cruise		
	8	172	10.5††	10,000	Steel, breakbulk, general cargo		3	300	10.0-12.0††	80,000	Cruise		
	9	172	10.5††	10,000	Steel, breakbulk, general cargo		ZPMC DCG	1	3,500	70	6.7	3,000	Large machinery
BNCT	1	150	9.5††	15,000	Timber, breakbulk, general cargo	GCT	2	143	9.0	10,000	General cargo		
	5	180	9.5††	15,000	Breakbulk, general cargo		3	136	10.0	10,000	General cargo		
	6	180	9.5††	15,000	Breakbulk, general cargo		1	194	8.5	10,000	Bulk, breakbulk, general cargo, steel		
	7	80	7.0††	2,000	Breakbulk, general cargo		2	164	8.5	10,000	Bulk, breakbulk, general cargo, steel		
Boasteel Inner Harbour	1	230			Steel products	GQCT	3	164	8.5	10,000	Bulk, breakbulk, general cargo, steel		
	2	230			Steel products		4	230	8.5	10,000	Bulk, breakbulk, general cargo, steel		
	3	230			Steel products		1	100	4.0	3,000	General cargo, coal		
	4	230			Steel products		2	100	4.0	3,000	General cargo, coal		
River Berth	1	200			Steel products	KCT	3	100	3.0	3,000	General cargo, coal		
	2	200			Steel products		4	100	3.0	3,000	General cargo, coal		
	3	200			Steel products		5	100	4.0	3,000	General cargo, coal		
Ore Jetty	1	312.5			Bulk ore	YJCT	1	171	13.0	10,000	General cargo		
	2	312.5			Bulk ore		2	136	13.0	10,000	Timber, general cargo		
	3	312.5			Bulk ore		1	166	10.0	10,000	General cargo		
	4	312.5			Bulk ore		2	151	10.0	10,000	General cargo		
	5	290			Bulk ore		SHIAT TKT	1	219.4	14.0		1,000	Vehicles
	6	290			Bulk ore		1				1,000	Timber, iron, steel, bulk and breakbulk	
	7	295			Bulk ore		2				1,000	Timber, iron, steel, bulk and breakbulk	
	8	295			Bulk ore								
	9	401			Bulk ore								
	10	401			Bulk ore								
Ro-Ro	1	87			Steel								
	2	87			Steel								
Cargo HCT	1	215			General cargo								
	1	121.9	6.5††	10,000	Steel, general cargo								
	2	121.9	6.5††	10,000	Steel								
	3	121.9	6.5††	7,000	Steel								
	4	152.4	8.5††	7,000	General cargo, ferry								
	5	152.4	8.5††	7,000	General cargo, ferry								
HPCT	1	149.2	5.5††	10,000	Steel, general cargo								
	2	149.2	5.5††	10,000	Steel, general cargo								
BJCT	1	218	10.0††	10,000	Steel, timber								
	2	145	10.0††	10,000	Steel, timber								
	3	147.5	9.5††	10,000	Steel, timber								
	4	184.6	9.0††	10,000	Steel, timber								
MSPIG	1	184.5	10.0††	10,000	Grain, rice, feed, oil								
	2	184.5	10.0††	10,000	Grain, rice, feed, oil								
	3	184.5	10.0††	10,000	Grain, rice, feed, oil								
	4	184.5	10.0††	10,000	Grain, rice, feed, oil								
MSCT-3	1	200	10.0††	10,000	Grain, general cargo								
	2	191	10.0††	10,000	Grain, general cargo								
	3	171.3	9.5††	10,000	Grain								
	4	212.5	9.0††	10,000	Grain								
MSCT-4	Zhujiame-E	200	10.0††	10,000	Coal, general cargo								
	Zhujiame-W	102.7	10.0††	3,000	Coal, general cargo								
SLCT	1	470	11.0††	180,000	Coal, ore								
	2	333	11.0††	180,000	Coal, ore								
	3	250			Coal, ore								
	4	250			Coal, ore								

** Inner berth †† Depth

Also see "Dry Dock".

BULK FACILITIES:

Baosteel:
Operator: Baoshan Iron and Steel Co Ltd. Tel: +86 (21) 5835 0000, 5835 8888, 664 6186. Mobile: +86 130 0322 8375. Fax: +86 (21) 6840 4832.
Web: www.baosteel.com
Facilities: Clean Products Inner Harbour: Total berth length 520 m. Equipment includes 5 gantry cranes. Quay handles finished products.
Clean Products River Berth: Located on the south bank of the Yangtze river, 2.8 n.m. upriver of the Huang Pu intersection. Jetty outer face, three berths total length 600 m. and inner face down river length 270 m. and upriver length 260 m. Equipment includes 3 gantry cranes on the outer face and 2×gantry cranes on the down river inner face. Jetty handles finished products.
Ore Jetty: Located on the south bank of the Yangtze river, 6.5 n.m. upriver of the Huang Pu intersection. Outer T-face length 1,250 m. having four berths and inner down river length 590 m. has two berths and upriver length 580 m. Total 11 extractor gantries 6 on the upriver section and 5 on the down river section.
 Inshore upriver arm length 377 m., with dolphin total length 401 m., has 2 extractor gantries. Vessels berth both sides of arm.
 Jetty handles bulk ore.

Ro-Ro Jetty: Located on the south bank of the Yangtze river, 6.7 n.m. upriver of the Huang Pu intersection.

Jetty has 3 berths, two with Ro-Ro ramps length 86 m. and one cargo berth 67 m. Jetty handles finished products.

Cargo Jetty: Located on the south bank of the Yangtze river, 6.8 n.m. upriver of the Huang Pu intersection adjacent to the Ro-Ro jetty.

Jetty berth length 215 m.

Next to Bao Steel.

Louis Dreyfus Shanghai:

Operator: Louis Dreyfus, Room 905, 9th Floor, Harbour Ring Plaza, 18 Xi Zang Zhong Road, Shanghai 200001, China. Tel: +86 (21) 5385 2626. Fax: +86 (21) 6350 8998. *Web:* www.louisdreyfus.com

Facilities: Terminal handles bulk grain.

Minsheng (MSPIG):

Location: It adjoins the west side of the Yang Pu Bridge.

Owner: SIPG Minsheng Controlled Company Ltd. Tel: +86 (21) 5885 3675. *Web:* www.portshanghai.com.cn

Facilities: Terminal has total berth length 734 m., depth 10.0 m., equipped with two scraper ship unloaders rated at 1,000 t.p.h., gantry cranes 10–16 tons, two silos total volume 170,000 cu.m., capacity 120,000 tons handling imported bulk grains, oils and feeds as well as exports rice and other bulk and breakbulk cargoes.

Minsheng Cargo No. 3 Terminal (MSCT-3):

Location: 0.5 n.m. upriver of the Nan Pu Bridge, on the east bank of the Huang Pu River, 10.7 n.m. from the intersection with the Yangtze river.

Operator: Ming Sheng Stevedores Co Ltd. Tel: +86 (21) 5885 3675. Fax: +86 (21) 5885 3471. Email: minsheng.port@online.sh.cn

Facilities: Terminal has four berths total length 774.8 m., depth 10.0–9.0 m., handling bulk grain. Berth No.1 has 2×16 tonne portal cranes and 1×800 tonne/hr. extractor. Berths No.2–4 each have 1×800 tonnes/hr. extractor.

Minsheng Cargo No. 4 Terminal (MSCT-4):

Location: Opposite Fixingdo island, on the east bank of the Huang Pu River, 8.4 n.m. from the intersection with the Yangtze river.

Operator: Ming Sheng Stevedores Co Ltd. Tel: +86 (21) 5885 3675. Fax: +86 (21) 5885 3471. Email: minsheng.port@online.sh.cn

Facilities: Terminal also known as the Shanghai Zhu Jia Jiao Coal Terminal, has two berths total length 302.7 m., depth 10.0 m., handling bulk coal. Equipment includes 2×1,200 tonnes/hr. shiploaders at Zhujiamen-E and 1×16 tonne portal crane at Zhujiamen-W.

Nanshi Power Station:

Location: On the west bank Huang Pu River, 0.35 n.m. upriver of the Nan Pu bridge and 10.5 n.m. from the intersection with the Yangtze river.

Owner: Shanghai Electric Power Co Ltd. Tel: +86 (21) 5115 6666. Email: sepc@shanghaipower.com *Web:* www.shanghaipower.com

Operator: Shanghai Electric Power Co. Tel: +86 (21) 6313 3272.

Facilities: Power station jetty length 87 m., equipped with two rail mounted extractors. Facility to become part of Expo 2010 park.

Shanghai Luojing Coal Terminal (SLCT):

Location: On the south bank of the Yangtze river, 8.5 n.m. upriver from the intersection with the Huang Pu River.

Owner: SIPG Luojing Subsidiary Company Ltd. Tel: +86 (21) 5615 0090. Fax: +86 (21) 5615 1325.

Operator: Shanghai Loujing Bulk Terminals. Tel: +86 (21) 6323 1971, 5616 0090. Mobile: +86 137 0177 8818. Fax: +86 (21) 6323 0184, 5615 1325. Email: loujin@portshanghai.com.cn

Facilities: Terminal has one jetty length 1,250 m. with inner and outer arms. The outer arm length 440 m. with dolphin, 476 m. has 2×50 ton 1,250 tonnes/hr. remote controlled gantry cranes and 2×35 tonne cranes working both berths, handles bulk coal and ore. Berth No. 1 length 470 m., berth No. 2 length 333 m.

Inner arm length has two berths, No. 3 and No. 4 each length 250 m. with two ship loaders.

Shanghai Shidongkou Terminal:

Location: On the south bank of the Yangtze river, 7.4 n.m. upriver from the intersection with the Huang Pu River and adjacent upriver to the Baosteel Ore Jetty.

Operator: Head Office: Huaneng Power International Ltd. Tel: +86 (10) 6649 1999, 6649 1114. Fax: +86 (10) 6649 1888. Email: ir@hpi.com.cn *Web:* www.hpi.com.cn

Shanghai Shidongkou Power Plant No. 1: Tel: +86 (21) 6313 8803. Fax: +86 (21) 6313 3297. Mobile: +86 (21) 136 1184 2982. Email: yymm-88@sohu.com

Shanghai Shidongkou Power Plant No. 2: Tel: +86 (21) 5615 1355. Fax: +86 (21) 5615 0620. Mobile: +86 136 5194 0650.

Facilities: T-jetty, causeway length 1,195 m., jetty head length 475 m., including dolphin to east, 495 m., has two berths each length 242.5 m. with two gantry extractors at each berth, total four. Terminal supplies coal to Shanghai Shidongkou First and Second power stations.

SIPG Coal Terminals:

Owner: SIPG Coal Branch Ltd. Tel: +86 (21) 5881 1350. Fax: +86 (21) 5881 0516. *Web:* www.portshanghai.com.cn

Facilities: Company has four terminal management offices at Zhang Jia Bang, Tangqiao, Beipiao and Zhujiamen. There are 17 berths along the Huang Pu River, eight of which have capacity 10,000 d.w.t., with a total quay length of 2,008 m., storage yards totalling 204,000 sq.m., total area 573,500 sq.m. handling coals, sands and gravels, and also acts as a shipping agency.

Waigaoqiao-1 Power Station:

Location: On the south bank of the Yangtze river in the Waigaoqiao area, 4.7 n.m. down river of the Huang Pu River intersection. Adjacent to Waigaoqiao-2 Power Station.

Owner: Shanghai Electric Power Co Ltd. Tel: +86 (21) 5115 6666. Email: sepc@shanghaipower.com *Web:* www.shanghaipower.com

Operator: Shanghai Waigaoqiao Electric Power Generating Co Ltd.

Facilities: Power station has two berths, jetty face length 500 m. There are 4 gantry extractors, total travel 475 m.

Waigaoqiao-2 Power Station:

Location: On the south bank of the Yangtze river in the Waigaoqiao area, 4.7 n.m. down river of the Huang Pu River intersection between Waigaoqiao-1 and Waigaoqiao-3 Power Stations.

Owner: Shanghai Electric Power Co Ltd. Tel: +86 (21) 5115 6666. Email: sepc@shanghaipower.com *Web:* www.shanghaipower.com

Operator: Shanghai Waigaoqiao Electric Power Generating Co Ltd.

Facilities: Power station shares the jetty with Waigaoqiao-3 Power Station has jetty face length 520 m. including dolphin to the south. Berth No. 1 length 250 m. and No. 2 270 m. The berths are equipped with rail mounted extractors.

Waigaoqiao-3 Power Station:

Location: On the south bank of the Yangtze river in the Waigaoqiao area, 4.7 n.m. down river of the Huang Pu River intersection and east of Waigaoqiao-2 Power Station.

Owner: Shanghai Electric Power Co Ltd. Tel: +86 (21) 5115 6666. Email: sepc@shanghaipower.com *Web:* www.shanghaipower.com

Operator: Shanghai Waigaoqiao Electric Power Generating Co Ltd.

Facilities: Power station shares the jetty with Waigaoqiao-2 Power Station has jetty face length 520 m. including dolphin to the south. Berth No. 1 length 250 m. and No. 2 270 m. The berths are equipped with rail mounted extractors.

Wujing-1 Power Station:

Location: On the west bank Huang Pu River, 11.8 n.m. upriver of the Nan Pu bridge and 22.0 n.m. from the intersection with the Yangtze river.

Owner: Shanghai Electric Power Co Ltd. Tel: +86 (21) 5115 6666. Email: sepc@shanghaipower.com *Web:* www.shanghaipower.com

Operator: Shanghai Wujing Heat & Power Plant. Tel: +86 (21) 6450 0150, 6450 2533. Fax: +86 (21) 6450 1164, 6450 0069.

Facilities: Power station jetty length 200 m., equipped with three rail mounted gantry extractors.

Wujing-2 Power Station:

Location: On the west bank Huang Pu River, 11.9 n.m. upriver of the Nan Pu bridge and 22.1 n.m. from the intersection with the Yangtze river.

Owner: Shanghai Electric Power Co Ltd. Tel: +86 (21) 5115 6666. Email: sepc@shanghaipower.com *Web:* www.shanghaipower.com

Operator: Shanghai Wujing Heat & Power Plant. Tel: +86 (21) 6450 0150, 6450 2533. Fax: +86 (21) 6450 1164, 6450 0069.

Facilities: Power station jetty length 218 m., equipped with two rail mounted gantry extractors.

CONTAINER FACILITIES:

Bao Shan Container Terminal (BSCT):

Location: On the south bank of the Yangtze river, 2.2 n.m. upstream the intersection with the Huang Pu River.

Owner: Bao Shan Stevedoring Co.

Operator: Shanghai Container Terminals Ltd. Tel: +86 (21) 5644 1988. Fax: +86 (21) 5644 1566. *Web:* www.sctport.com.cn

Facilities: Terminal has three berths total length 640 m., depth 10.5 m. Equipment includes five gantry cranes, 14 RTGs, 3×40 tonne front end handlers, 12 chassis, 19 tractors, 351 reefer points and total area 218,051 sq.m. handling 16,628 TEU.

Jun Gong Lu terminal (JCT):

Location: On the west bank of the Huang Pu River, 2.8 n.m. from the intersection with the Yangtze river.

Owner: Jun Gong Container Handling Co Ltd.

Operator: Shanghai Container Terminals Ltd. Tel: +86 (21) 5644 1988. Fax: +86 (21) 5644 1566. *Web:* www.sctport.com.cn

Facilities: Terminal has four berths total length 857 m., depth 10.5 m. Equipment includes 7×50 tonne gantry cranes, 20×40 tonne RTGs, chassis, 31 tractors, 270 reefer points and total area 307,375 sq.m. handling 20,678 TEU.

Shanghai East Terminal (SECT):

Location: On the south bank of the Yangtze river 7.4 n.m. downstream from the intersection with the Huang Pu River.

Operator: Shanghai East Container Terminals Ltd (SECT). Tel: +86 (21) 5848 5966, 6868 5966. Email: office@sect.com.cn *Web:* www.sect.com.cn

Facilities: Terminal has four ship berths total length 1,250 m., depth 14.2 m. and two barge total length 402 m., depth 8.5 m. Equipment includes 12×61 tonne outreach 63 m. (23 rows) ship and 2×40 tonne outreach 35 m. barge gantry cranes, 48×40–50 tonne RTGs, 3×42 tonne and 1×25 tonne top loaders, 8×7 high empty handlers, 3×42 tonne reach stackers, chassis, 31 tractors, 1,566 reefer points and total area 1,550,000 sq.m. handling 87,500 TEU.

Container freight station totalling 7,500 sq.m.

Shanghai Mingdon International Terminal (SMCT):

Location: On the south bank of the Yangtze river, furthest east of the current river container terminals, 8.5 n.m. downstream from the intersection with the Huang Pu River.

Operator: Shanghai Mingdong Container Terminals (SMCT). Tel: +86 (21) 3898 4888. Fax: +86 (21) 6868 5888. *Web:* www.hpk.com.hk

Facilities: Terminal has six berths total length 1,290 m., depth 12.8 m. Equipment includes 14×61 tonne ZPMC gantry cranes including one gantry crane capable of lifting two forty foot containers simultaneously, 48 RTGs, 16 forklifts, 2 reachstackers, chassis, 73 tractors, 720 reefer points and total area 1,630,000 sq.m. handling 30,000 TEU.

Shanghai Pudong International Terminal (SPCT):

Location: On the south bank of the Yangtze river, 7.4 n.m. downstream from the intersection with the Huang Pu River.

Operator: Shanghai Pudong International Terminal Ltd (SPCT). Tel: +86 (21) 5861 3635. Fax: +86 (21) 5861 1238. *Web:* www.spct.com.cn

Facilities: Terminal has three berths total length 900 m. Equipment includes 11×61 tonne ZPMC Super post-Panamax gantry cranes, 42 RTGs, 31 forklifts, chassis, 73 tractors, 720 reefer points and total area 500,000 sq.m. handling 30,000 TEU.

Shanghai Waigaoqiao Container Terminal (PSCWT):

Location: On the south bank of the Yangtze river, 2.6 n.m. downstream from the intersection with the Huang Pu River.

Operator: Shanghai Port Container Co Ltd (SPCWT). Tel: +86 (21) 5064 4688. Fax: +86 (21) 5041 1299. Email: fanghc@spcwt.com
Web: www.spcwt.com

Facilities: Terminal has berths total length 1,965 m. 1,552 m. of berthing for large container vessels and 410 m., depth 13.2 m., for smaller vessels and barges. Equipment includes 25×61–50 tonne and 5×35 tonne ZPMC gantry cranes, 70×40 tonne RTGs, chassis, 75 tractors, 1,188 reefer points and total area 1,659,822 sq.m. handling 24,372 TEU.

Zhang Hua Bang Container Terminal (ZCT):

Location: On the west bank of the Huang Pu River, 1.8 n.m. from the intersection with the Yangtze river.

Owner: Zhang Hua Bang Container Handling Co. Tel: +86 (21) 5644 1988, 1843. Email: ni.zhi.ping@sctport.com.cn *Web:* www.sctport.com.cn

Operator: Shanghai Container Terminals Ltd. Tel: +86 (21) 5644 1988. Fax: +86 (21) 5644 1566. *Web:* www.sctport.com.cn

Facilities: Terminal has four berths total length 764 m., depth 10.5 m. Equipment includes eight (1×50, 3×45 tonne and 4×30.5 tonne) gantry cranes, 22 RTGs, 3×40 tonne front end handlers, chassis, 30 tractors, 480 reefer points and total area 304,589 sq.m. handling 21,736 TEU.

PASSENGER FACILITIES:**Gaoyang International cruise Terminal (GICT):**

Location: 2.3 n.m. upriver of the Yang Pu bridge on the west side of Hongkou Harbour on the west bank of the Huang Pu River opposite Xinhua Terminal, 11.0 n.m. from the intersection with the Yangtze river.

Owner: Shanghai Port International Cruise Terminal Development Co Ltd. Tel: +86 (21) 9595 0959. Fax: +86 (21) 9595 0959.

Operator: Gaoyang Port Corp. Tel: +86 (21) 6541 1639. Mobile: +86 139 0170 4633. Fax: +86 (21) 6541 0749.

Facilities: Terminal will cover 160,000 sq.m. have three berths, total berth length 880 m., depth 10–12.0 m. Able to handle 3×80,000 d.w.t. or 4×30,000 d.w.t. cruise vessels.

OTHER FACILITIES:**Bao Shan Cargo Terminal (BNCT):**

Location: Terminal is located within Bao Shan harbour, 2.1 n.m. upriver of the Huang Pu River intersection.

Owner: SIPG Bao Shan Branch Ltd. Tel: +86 (21) 5660 1310. Fax: +86 (21) 5660 1394. *Web:* www.portshanghai.com.cn

Operator: Shanghai Harbour Bao Shan Stevedoring Co. Tel: +86 (21) 5660 1310. Fax: +86 (21) 5660 1394. Email: jlb@portbs.com
Web: www.portbs.com

Facilities: Terminal has seven berths total length 670 m. Berth No. 1 at the western end of the harbour has depth 9.5 m., has 3×40–25 tonne portal cranes. Berths No. 5–8 linear length 520 m., depth 9.5–7.0 m., is located on the south side of the harbour, has 6×25–16 tonne portal cranes.

Bai Lian Jing Cargo terminal (BJCT):

Location: Adjacent to the Nan Pu Bridge, on the east bank of the Huang Pu River, 10.5 n.m. from the intersection with the Yangtze river.

Owner: SIPG Nanpu Branch Ltd. Tel: +86 (21) 5883 8640. Fax: +86 (21) 5880 0901. *Web:* www.portshanghai.com.cn

Operator: Nan Pu Stevedoring Co Ltd. Tel: +86 (21) 5883 8640. Mobile: +86 13611 97553.

Facilities: Terminal has four berths total length 695.1 m., depth 10.0–9.0 m., handling timber and steel products.

Dongchang Terminal (DCG): See "Berths".

Gaoyang Cargo Terminal (GCT):

Location: On the west bank Huang Pu River, 0.3 n.m. down river of the Nan Pu bridge opposite Mingshen Cargo Terminals 3–4 and 10.0 n.m. from the intersection with the Yangtze river.

Owner: SIPG Gaoyang Branch Ltd. Tel: +86 (21) 6512 3322. Fax: +86 (21) 6537 8465. *Web:* www.portshanghai.com.cn

Facilities: The terminal has concrete quays without rail mounted cranes handling bulk and break-bulk cargoes.

Gongqing Cargo Terminal (GQCT): See "Berths".

Huishan Cargo Terminal (HCT):

Location: 2.3 n.m. upriver of the Yang Pu bridge on the west bank of the Huang Pu River opposite Xinhua Terminal, 11.0 n.m. from the intersection with the Yangtze river, adjacent to the Gaoyang International Cruise Terminal (GICT).

Owner: Gaoyang Port Corp. Tel: +86 (21) 6541 1639. Mobile: +86 139 0170 4633. Fax: +86 (21) 6541 0749.

Operator: Huishan Stevedoring Co Ltd.

Facilities: Terminal has six berths total length 822.9 m., depth 6.5–8.5 m., handling steel products, general cargo and ferries. Terminal has 5×10 tonne portal cranes.

Huang Pu Cargo Terminal (HPCT):

Location: On the west bank of the Huang Pu River, 10.5 n.m. from the intersection with the Yangtze river.

Operator: Huishan Stevedoring Co Ltd.

Facilities: Terminal has two berths total length 298.4 m., depth 5.5 m., handling steel products and general cargo.

Jun Gong Lu Cargo terminal (JGCT):

Location: Adjacent to Jun Gong Lu Container Terminal, on the west bank of the Huang Pu River, 3.0 n.m. from the intersection with the Yangtze river.

Owner: SIPG Jungong Road Branch Ltd. Tel: +86 (21) 5682 1616. Fax: +86 (21) 5644 1795. *Web:* www.portshanghai.com.cn

Operator: Jun Gong Lu Stevedoring Co. Tel: +86 (21) 5682 1403, 5644 1971. Fax: +86 (21) 5682 404, 5644 1971. Email: zhangsywl@citiz.net

Facilities: Terminal has four berths total length 743 m., depth 10.5 m. Terminal has eight portal cranes and 154 handling machines. Warehousing and storage yards totalling 143,000 sq.m. and total area 251,000 sq.m. 6,304 m. rail spur dedicated to the terminal. Cargoes handled include iron, steel, pulp, vehicles, bulk and breakbulk cargoes.

Kaiping Cargo Terminal (KCT):

Location: On the west bank Huang Pu River, 2.2 n.m. upriver of the Nan Pu bridge and 17.8 n.m. from the intersection with the Yangtze river.

Operator: Nan Pu Stevedoring Co Ltd. Tel: +86 (21) 5883 8640. Mobile: +86 13611 97553.

Facilities: The terminal has two berths total length 307 m. Berth No. 1, 4×10 tonne, 1×16 tonne rail mounted cranes. Berth No. 2, 2×10 tonne, 2×16 tonne rail mounted cranes.

Longwu Cargo Terminal (LWCT):

Location: Opposite Guangang district, on the west bank of the Huang Pu River, 24.4 n.m. from the intersection with the Yangtze river.

Owner: SIPG Longwu Branch Ltd. Tel: +86 (21) 6434 2300. Fax: +86 (21) 6434 5662. Email: longwu@public1.sta.net.cn *Web:* www.longwuport.com

Operator: Longwu Stevedoring Co. Tel: +86 (21) 6434 8228. Mobile: +86 138 0180 3438. Fax: +86 (21) 6434 5662.

Facilities: Terminal has eight berths total length 1,362 m., depth 9.0 m. Terminal has 6×10 tonne, 1×16 tonne and 1×26 tonne portal cranes and 2×42 tonne gantry cranes. Cargoes handled include coke, bulk cargo, containers, general cargo and steel.

Shanghai Haitong International Automobile Terminal (SHIAT):

Location: On the south bank of the Yangtze river adjacent and up river of the Shanghai Pudong International Terminal, 7.0 n.m. downstream from the intersection with the Huang Pu River.

Operator: Shanghai Haitong International Automobile Logistics Co Ltd. Tel: +86 (21) 5848 0808, 5848 3152. Fax: +86 (21) 5848 2649.

Web: www.haitongauto.com

Facilities: Phase 1 berth length 219.4 m., depth 14.0 m., can accommodate the fifth and sixth generation Ro-Ro ships. Total area 265,000 sq.m. handling 7,000 cars with some warehousing. Phase 2 will increase area by 100,000 sq.m.

Tangkou Terminal (TKT):

Location: Located in Nan Pu on the east bank of the Huang Pu River adjacent to Bai Lian Jing Cargo Terminal, 10.5 n.m. from the intersection with the Yangtze river.

Owner: SIPG Nanpu Branch Ltd. Tel: +86 (21) 5883 8640. Fax: +86 (21) 5880 0901. *Web:* www.portshanghai.com.cn

Facilities: Terminal has two 1,000 d.w.t. berths and shares four 10,000 d.w.t. berths with Bai Lian Jing Cargo Terminal, total length 695.1 m., depth 10.0–9.0 m., handling timber, iron, steel and bulk and break-bulk cargoes.

Xinhua Cargo Terminal (XCT):

Location: 0.8 n.m. upriver of the Yang Pu bridge on the east bank of the Huang Pu River opposite Gaoyang Terminal, 11.0 n.m. from the intersection with the Yangtze river.

Owner: SIPG Xinhua Branch Ltd. Tel: +86 (21) 5885 5588. Fax: +86 (21) 5885 2077. *Web:* www.portshanghai.com.cn

Operator: Xinhua Harbor Co. Tel: +86 (21) 5885 2873. Mobile: +86 136 0169 4054. Fax: +86 (21) 5885 2873.

Facilities: Terminal has ten berths total length 1,464.4 m., depth 11.0–7.0 m. Berths No. 1–7 have 5×10, 4×16, 3×25 tonne portal cranes. Berths No. 8–9 have 3×25 tonne portal cranes. Berth No. 10 has 2×16 tonne portal cranes. Cargoes handled include bulk ore, fertiliser, general cargo and steel.

Yangjiadu Cargo Terminal (YJCT): See "Berths".

Zhang Hua Bang Cargo terminal (ZHCT):

Location: Adjacent to Zhang Hua Bang Container Terminal, on the west bank of the Huang Pu River, 2.8 n.m. from the intersection with the Yangtze river.

Owner: SIPG Zhang Hua Bang Co Ltd. Tel: +86 (21) 5682 1616. Fax: +86 (21) 5644 0324. Email: zhbsh@public2.sta.net.cn
Web: www.portshanghai.com.cn

Operator: Shanghai Harbour Zhang Hua Bang Stevedoring Corp. Tel: +86 (21) 5682 1616. Fax: +86 (21) 5682 0324.

Facilities: Terminal has three berths total length 540.3 m., depth 10.0 m. Terminal has 5×10, 2×16, 1×20, 1×25 tonne portal cranes.

ZMPC Terminal:

Location: On the south shore of Chang Xing island opposite Shanghai Pudong International Terminal on the Yangtze river.

Operator: Shanghai Zhenhua Port Machinery Co Ltd (ZPMC). Tel: +86 (21) 5839 6666. Mobile: +86 138 1754 9178. Fax: +86 (21) 5685 6558, 5839 9555, 5839 7000. Email: mail@zpmc.com *Web:* www.zpmc.com

Facilities: Terminal has 3,500 m. of berth. Manufacturer of gantry and portal cranes, RGTs and other container handling equipment.

TANKER FACILITIES:**Baosteel chemical (BCT):**

Location: On the south bank of the Yangtze river in the Bao Shan area, upriver of the Huang Pu River intersection.

Operator: Shanghai Baosteel Chemical Co Ltd. Tel: +86 (21) 2664 8409, 2664 6186. Fax: +86 (21) 5619 6149, 6840 4832.

Mobile: +86 130 0322 8375. *Web:* www.baosteel.com

Facilities: Terminal handles benzene.

Chlor-Alkali Terminal (CAT):

Operator: Shanghai Chlor-Alkali Chemical Co Ltd. Tel: +86 (21) 6434 2640, 6434 0823, 5887 4248. Mobile: +86 139 1604 3663. Fax: +86 (21) 5887 4276. Email: 4747@scacc.com Web: www.scacc.com

Facilities: Terminal handles chloroform, ethylene dichloride, vinyl chloride monomer.

COFCO Terminal (COFC):

Operator: COFCO Shanghai Cereals & Oils Import & Export Corporation. Tel: +86 (21) 6450 5497. Mobile: +86 136 2193 4356. Fax: +86 (21) 6450 5497. Web: www.COFCO.com.cn

Facilities: See "Berths".

Dove Terminal (DCC):

Operator: DoveChemCentral (Shanghai) Co Ltd. Contact: Eric Li, Operations. Tel: +86 (21) 6341 0400/1. Fax: +86 (21) 6341 0403. Email: enquiry@dovechemcentral.com Web: www.dovechem.com

Facilities: Terminal handles bulk chemicals.

Also see "Berths".

Huarongda Terminal (SHP):

Location: On the west bank of the Huang Pu River, 4.0 n.m. from the intersection with the Yangtze river.

Operator: Shanghai Huarongda Petrochemical Storage Co Ltd. Tel: +86 (21) 5864 4044, 9568, 4119. Mobile: +86 139 1652 0250, 5864 4119. Fax: +86 (1) 5864 4051. Mobile: +86 139 1652 0250. Email: sotco@orientank.com Web: www.orientank.com

Facilities: Terminal has two berths, total length 168 m., depth 5.5–6.0 m., handling vessels 3,000–4,500 d.w.t., draft 6.0 m. Tank farm capacity 15,400 cu.m. handling chemicals.

Kerry Terminal (KYT):

Operator: Shanghai Kerry Oils & Grains Industrial Co Ltd.

Facilities: See "Berths".

Oriental Terminal (OET):

Location: On the south bank of the Yangtze river in the Waigaoqiao area, 2.1 n.m. down river of the Huang Pu River intersection.

Operator: Shanghai Orient Terminal Co Ltd (SOTCO). Tel: +86 (21) 5864 4044, 9568, 4119. Mobile: +86 139 1652 0250, 5864 4119. Fax: +86 (1) 5864 4051. Mobile: +86 139 1652 0250. Email: sotco@orientank.com Web: www.orientank.com

Facilities: Terminal has two berths, Berth No. 1 length 400 m., depth 10.0 m. and Berth No. 2 length 144 m., depth 10.0 m., handling vessels 300–35,000 d.w.t. and draft 9.5 m. Berths under development during 2008 to handle vessels up to 50,000 d.w.t.

Tank farm has 58 tanks, total capacity 222,500 cu.m. Cargoes handled include diesel, gasoline, coal oil, fuel oil, lubricating oil, vegetable oil, hydrocarbons, acids, benzenes, alcohols, ester, hydroxyl-benzene, MEK, etc. petrochemicals, oil products, carboric acid, ethylene glycol, butylether, and tetrachloromethane.

Qi Ning Shi Oil terminal (QNST):

Location: On the east bank of the Huang Pu River, adjacent upriver of Hudong Shipyard, 9.1 n.m. from the intersection with the Yangtze river.

Facilities: Terminal has total berth length 225 m., and tank farm totalling nine tanks.

Shanghai Wujing Chemical Base (SECB):

Location: On the west bank of the Huang Pu River, 9.8 n.m. upriver from the Nan Pu bridge and 20.1 n.m. from the intersection with the Yangtze river, 1.5–2.2 n.m. down river of the Wujing power stations and adjacent to the Shanghai Wujing Coke Terminal.

Owner: Shanghai Huayi (Group) Co Ltd. Tel: +86 (21) 6473 6060, 6568 1579. Fax: +86 (21) 6568 0252. Email: webmaster@shhuayi.com Web: www.shhuayi.com

Operator: Shanghai Wujing Chemical Co Ltd. Tel: +86 (21) 6434 3040, 0640. Mobile: +86 138 171 2664. Fax: +86 (21) 6434 5529, 6434 3739. Web: www.wjchem.cn Web: www.wj-chemical.com

Facilities: Total berthing length 549 m. The facility, part of the Huayi Group, partially covers area totalling 4.6 sq.km. with substantial storage and refining facilities. Cargoes handled include acetic acid, methanol, formaldehyde, caustic soda, hydrochloric acid, sulphuric acid, PVC, fluororesin, fluororubber, etc.

Shanghai Wujing Coke Terminal (SWCT):

Location: On the west bank of the Huang Pu River, 9.8 n.m. upriver from the Nan Pu bridge and 20.1 n.m. from the intersection with the Yangtze river, 1.5–2.2 n.m. down river of the Wujing power stations.

Owner: Shanghai Huayi (Group) Co Ltd. Tel: +86 (21) 6473 6060, 6568 1579. Fax: +86 (21) 6568 0252. Email: webmaster@shhuayi.com Web: www.shhuayi.com

Operator: Shanghai Coking & Chemical Company. Tel: +86 (21) 6434 3649. Fax: +86 (21) 6434 1715. Email: shcoking@shcoking.com.cn Web: www.shcoking.com.cn

Facilities: Coal quay length 378 m. and two quays handling clean products, total berthing length 706 m. Terminal has 4 gantry extractors handling coal and 2 port cranes for clean products. The facility, part of the Huayi Group, partially covers area totalling 4.6 sq.km. with substantial storage and refining facilities. Cargoes handled include coke, methanol, benzene and octanol.

Shanghai Gao Qiao Terminal (SGPC):

Location: On the east bank of the Huang Pu River, 4.0 n.m. from the intersection with the Yangtze river.

Operator: Shanghai Gaoqiao Petrochemical Co Ltd (SGPC). Tel: +86 (21) 5861 2861. Fax: +86 (21) 5861 1160. Web: www.sinogpc.com

Facilities: The terminal covers part of an area totalling 4.2 sq.km. with substantial storage and refining facilities. Terminal handles refined chemical products including butadiene, petro-chemicals, synthetic plastic and Lube oils.

Shidongkou Gas terminal (SGT):

Location: On the south bank of the Yangtze river in the Shidong Kou area, 7.7 n.m. upriver of the Huang Pu River intersection, adjacent to Shanghai Shidongkou Terminal.

Operator: Shanghai Shidongkou Gas Manufacturing Ltd. Tel: +86 (21) 5615 2857.

Facilities: T-head jetty causeway length 640 m. with jetty face length 90 m. and including four dolphins length 190 m.

SINOPEC Shanghai Gaoqiao Terminal (SIN):

Location: On the east bank of the Huang Pu River, 4.0 n.m. from the intersection with the Yangtze river adjacent to Shanghai Gaoqiao Terminal (SGPC).

Operator: China Petroleum and Chemical Corporation. Tel: +86 (21) 5871 1001, 5794 3800. Mobile: +86 138 1824 4183. Fax: +86 (21) 5871 2207. Email: gpcc@sinogpc.com Web: www.sinopec.com

Facilities: See "Berths".

White Cat terminal (WCT):

Operator: Shanghai Whitecat Co Ltd. Contact: Hu Jingjing. Tel: +86 (21) 6470 0249. Fax: +86 (21) 6457 2730. Email: wcat@public.bta.net.cn Web: www.wcat.com

Facilities: Terminal covers part of an area totalling 4.2 sq.km. with substantial storage and refining facilities.

Also see "Berths" and "Bulk Facilities".

LPG/LNG FACILITIES: Huaneng Power Station: Operator: Head Office: Huaneng Power International Ltd. Tel: +86 (10) 6649 1999, 6649 1114. Fax: +86 (10) 6649 1888. Email: ir@hpi.com.cn Web: www.hpi.com.cn

Facilities: Gas turbine power station operational 2008.

Also see "Berths" and "Tanker Facilities".

WASTE DISPOSAL: Available. Contact Agent.

SLOPS DISPOSAL: Available by contacting Penavico. The service is undertaken by a designated environmental team using tankers. Charges are imposed according to amount of waste oil.

MEDICAL: The city has several very modern hospitals. Contact Agent.

FRESH WATER: Available by barge and alongside.

FUEL: Shanghai CHIMBUSCO Marine Bunker Co Ltd. Tel: +81 (21) 6324 6102. Fax: +86 (21) 6324 6104. Telex: 337128 CMBSH CN. Email: cbshld@mail2.online.sh.cn Web: www.chimbusco.com.cn

Bomin Bunker Oil Ltd. Tel: +86 (21) 5308 7228, 6351 2073. Fax: +86 (21) 5308 9068, 6351 3996. Email: bominchina@online.sh.cn

Brightway Petroleum Co Ltd. Tel: +86 (755) 8319 9398, 8319 9338. Fax: +86 (755) 8423 1522.

China Shipping & Sinopec Suppliers Co Ltd. Tel: +86 (20) 8410 8209. Fax: +86 (20) 8410 8162. Email: bunker@chinabunker.com.cn

Web: www.chinabunker.cn

Frisol Bunkering (HK) Ltd. Tel: +86 (21) 5836 2750/2752. Fax: +86 (21) 5836 2753. Telex: 71206 FBHKG HX. Email: bunker@frisol.com.hk

Web: www.frisol.com.hk

Peninsula Petroleum Ltd. Tel: +86 (21) 5386 8866. Fax: +86 (21) 5386 6766. Email: shanghai@peninsulapetroleum.com

Web: www.peninsulapetroleum.com

PetroChina Ltd. Tel: +86 (10) 8488 6270. Fax: +86 (10) 8488 6260. Email: xwzou@petrochina.com.cn Web: www.petrochina.com.cn

Shenzhen Brightoil Petrochemicals Co Ltd. Tel: +86 (755) 8423 1555, 0755. Fax: +86 (755) 8423 1522. Email: bunkering@bwoil.com Web: www.bwoil.com

DRY DOCK: COSCO - Shanghai: Operator: COSCO (Shanghai) Shipyard Co Ltd. Tel: +86 (21) 6434 1256. Fax: +86 (21) 6434 5542. Email: biz@cosco-shipyard.com Web: www.cosco-shipyard.com

Facilities: Two floating docks. Bai Yunshan length 195m., inner width 35.0 m., draft 12.8 m., capacity 50,000 d.w.t. 1×15 ton and 1×30 ton cranes.

Yuan Yang No. 3 length 220 m., inner width 37.0 m., draft 7.7 m., capacity 80,000 d.w.t. 1×15 ton and 1×25 ton cranes.

1×35 ton and 1×63 ton floating cranes. 1×690 ton repair vessel.

CSIS Shipyard: Location: located on Chang Xing Island on the Yangtze river.

Operator: China Shipping International Shipyard Co Ltd. Tel: +86 (21) 5685 1166. Fax: +86 (21) 5685 0057. Email: web@xcshipyard.com Web: www.cxshipyard.com

Facilities: Three floating docks. Putuo Shan length 247 m., block length 221.9 m., inner width 36.6 m., moulded draft 8.5 m. and lifting capacity 22,000 tons. 22×25 ton cranes.

Jiuhua Shan length 300 m., block length 280 m., inner width 50.0 m., moulded draft 17.5 m. and lifting capacity 38,000 tons. 28×25 ton cranes.

Mei Shan length 397 m., block length 370 m., inner width 70.0 m., moulded draft 18.5 m. and lifting capacity 75,000 tons. 40×30 ton cranes.

1×200 ton and 1×60 ton floating cranes.

CIC-Lifeng Shipyard: Location: Located on the east bank of the Huang Pu River.

Operator: Head Office: China Shipping Industry Co Ltd (CIC). Tel: +86 (21) 5831 2288. Fax: +86 (21) 6867 0706. Email: cic@csgcic.com Web: www.csgcic.com

Shipyard: China Shipping Industry Co Ltd (CIC). Tel: +86 (21) 5841 0623, 5841 6606. Fax: +86 (21) 5841 1000. Email: lfsy@csgcic.com

Web: www.lifeng-shipyard.com

Facilities: Two floating docks. Huang Shan length 190 m., inner width 28.80 m., capacity 35,000 d.w.t., lift 13,000 tons.

Hua Shan length 164 m., inner width 27.40 m., capacity 25,000 d.w.t., lift 9,000 tons.

1×30 ton and 1×60 ton floating cranes.

Yard can handle 8×65,000 d.w.t. vessels at once. Repair berths total length 1,150 m.

CIC-Lixin Shipyard: Location: Located on the east bank of the Huang Pu River.

Operator: Head Office: China Shipping Industry Co Ltd (CIC). Tel: +86 (21) 5831 2288. Fax: +86 (21) 6867 0706. Email: cic@csgcic.com Web: www.csgcic.com

Shipyard: China Shipping Industry Co Ltd (CIC). Tel: +86 (21) 5861 2772, 5861 6385. Fax: +86 (21) 5861 2769, 5861 1216. Email: lxsy@csgcic.com Web: www.lixin-shipyard.com

Facilities: One floating dock Pudong, length 222.5 m., inner width 38.0 m., capacity 65,000 d.w.t., lifting 22,000 tons.

Donghai Shipyard: Operator: Donghai Shipyard (DHSY). Tel: +86 (21) 5644 1008. Mobile: +86 136 5168 3534. Fax: +86 (21) 5644 0757. Email: donghaib@sh163.net

Facilities: Ship lift capacity 2,000 tons, dry dock capacity 3,000 d.w.t. and repair berths.

HRDD Shipyard (HRDD): Location: Southern end of Chongming Island on the north side of the Yangtze River opposite the Waigaoqiao Container Terminal in position Lat. 31° 34' 5" N, Long. 121° 27' 25" E.

Operator: Huarun Dadong Dockyard Co Ltd. Tel: +86 (21) 5836 3555. Fax: +86 (21) 5836 5841. Email: info@hrdd.com.cn Web: www.hrdd.com.cn

Facilities: Four floating dry docks. Da Dong length 340 m., inner width 52.0 m., capacity 170,000 d.w.t., lift 48,000 tons. 3×20 ton cranes.

Hua Dong length 280 m., inner width 45.0 m., capacity 150,000 d.w.t., lift 33,000 tons. 2×20 ton cranes.

Rung Dong length 195 m., inner width 36.5 m., capacity 50,000 d.w.t., lift 18,000 tons. 2×20 ton cranes.

Xin Dong length 240 m., inner width 38.0 m., capacity 80,000 d.w.t., lift 22,000 tons. 2×20 ton cranes.

One VLCC graving dock emailed for data.

Hudong Shipyard (HZSC): Location: On the east bank of the Huang Pu River 8.8 n.m. upriver from the Yangtze river intersection. Adjacent, upriver of the Mingshen 4 Terminal.

Operator: Hudong-Zhonghua Shipbuilding (Group) Co Ltd. Tel: +86 (21) 5871 3222. Mobile: +86 131 6263 7362. Fax: +86 (21) 5871 2603, 5871 2007. Email: bmd@hz-shipgroup.com Web: www.hudong.com.cn

Facilities: Yard has three dry docks, largest 356×90.0 m. repair berths totalling 2,000 m.

Jiangnan Shipyard: Location: On the south bank of the Yangtze river.

Operator: Jiangnan Shipyard (Group) Co Ltd. Tel: +86 (21) 6315 1818, 6699 3388. Fax: +86 (21) 6313 4743, 6699 3488. Email: jninfo@jnshipyard.com.cn Web: www.jnshipyard.com.cn

Facilities: Three graving docks. Dock No.1 length 153.0 m., inner width 17.6 m., draft 8.8 m., capacity 5,000 d.w.t., 1×30 ton crane.

Dock No. 2 length 184.0 m., inner width 24.0 m., draft 9.1 m., capacity 10,000 d.w.t., 1×15 and 1×60 ton cranes.

Dock No. 3 length 232.0 m., inner width 40.0 m., draft 11.3 m., capacity 70,000 d.w.t., 1×60 and 1×150 ton cranes.

Minnan Shipyard: Location: On the east bank of the Huang Pu River.

Operator: Minnan Shipyard Co Ltd. Tel: +86 (21) 6450 4744, 6450 3308. Fax: +86 (21) 6450 3658, 6450 3978. Email: jy@minnan-shipyard.com

Facilities: Three floating docks. Feng Shan length 42.0 m., inner width 14.0 m., lift 400 tons.

Long Shan length 72.0 m., inner width 18.0 m., lift 1,500 tons, 1×5 ton crane.

Tian Shan length 159.0 m., inner width 27.0 m., lift 10,000 tons, 1×5 ton crane.

Shipyard also has 1×60 ton portal crane located on one of the repair quays.

Ocean Ship Repair Dockyard: Location: On the east bank of the Huang Pu River.

Operator: China Shipping Industry Co Ltd (CIC). Tel: +86 (21) 5881 6285, 5881 3282. Fax: +86 (21) 5881 0917. Email: wlsy@csgcic.com

Facilities: One graving dock, Ocean, length 110.0 m., inner width 17.0 m., capacity 6,000 d.w.t.

QiuXin Shipyard: Operator: QiuXin Shipyard Ltd. Tel: +86 (21) 6378 3228. Fax: +86 (21) 6377 2100. Email: qiuXinsh@online.sh.cn

Shanghai Ship Repair Centre: Operator: Shanghai Ship Repair Centre (SSRC). Tel: +86 (21) 6557 1072. Fax: +86 (21) 6557 5477, 6503 7299. Email: shom@public2.sta.net.cn

Shanghai Shipyard: Location: On the north shore of the Chongming Island.

Operator: Shanghai Shipyard Co Ltd. Tel: +86 (21) 6546 1571. Fax: +86 (21) 6545 3637. Email: ssrd@ssrd.com Web: www.sh-shipyard.com

Facilities: Two graving docks. Dock No. 1 length 262 m., inner width 44.0 m., depth 10.9 m.

Dock No. 2 length 205 m., inner width 36.0 m., depth 10.4 m.

Three floating docks. Bai Yun Shang length 190 m., inner width 26.9 m., depth 13.0 m., lift 11,500 tons.

Xin Xiang Shen length 245 m., inner width 51.0–39.4 m., depth 15.3 m., lift 25,000 tons.

Hai Hua length 192 m., inner width 40.5–29.0 m., depth 14.4 m., lift 12,000 tons.

One slipway length 300 m.

4×150, 2×120, 2×100, 2×80 and several 40 ton gantry cranes available.

Shenjia Shipyard: Location: On the east bank of the Hang Pu River, 0.1 n.m. downriver of the Yang Pu bridge and 10.2 n.m. upriver of the intersection with the Yangtze river.

Operator: Shenjia Shipyard. Tel: +86 (21) 5851 1788, 5851 7181, 5851 8034. Mobile: +86 135 0167 3212. Fax: +86 (21) 5851 7181.

Facilities: Facility 1×16,000 d.w.t. graving dock length 168 m., width 32.0 m. and two repair quays total length 268 m.

Also see "Berths".

REPAIRS: See "Dry Dock".

WEATHER/TIDES: Tidal Range:

MHWS 4.1 m. (CD)

MHWN 3.0 m. (CD)

MLWN 1.6 m. (CD)

MLWS 0.5 m. (CD)

NEAREST AIRPORT: Shanghai International Airport, 30 km.

SEAMAN'S CLUBS: Shanghai International Seaman's Club, 60 Huangpu Road, Shanghai. Tel: +86 (21) 325 1500, 324 5265. Shanghai Seaman's Club is an entertainment company for international and domestic seamen. There is an area of 12,000 sq.m. in the new building containing 105 suites with modern facilities; all kinds of souvenirs, wines, arts, ceramics, antiques, wares, herbal remedies, food, embroidery, seal engravings are available in the shopping centre. In addition, a billiard room, table tennis, video, chess, mah-jong and reading room, electric games, post office, barber,

restaurant, bar and a multi-functional hall for 200 members will open to seamen.

DEVELOPMENTS: There is extensive development work being carried out on the Yangtze river shoreline of Chongming Island and to the east of the Shanghai Mingdong International Terminal.

Shanghai Hudong Container Terminal: Operator: Shanghai Hudong Container Terminal Co. Tel: +86 (21) 5848 5966, 5848 5559. Fax: +86 (21) 5848 5203. Web: www.sctport.com.cn

Facilities: Build and operate phase IV of the Waigaoqiao Container.

Sinochem Yangzhou Petrochemical Terminal: Location: Yizheng section of Yangtze River.

Operator: Sinochem Yangzhou Petrochemical Terminal Co Ltd.

Facilities: Terminal area 951,000 sq.m. will have two docks for petroleum products and chemicals, having three berths, the largest handling 40,000 d.w.t. Ships ranging from 300–47,500 d.w.t. Tank farm 57 tanks 40–20,000 cu.m., capacity 235,580 cu.m. Operational early 2009.

Also see "Yangshan".

SHIPMASTER'S REPORT: October 1980

Shanghai pilot vessel will now give orders about proceeding inwards to pilot vessel or remaining outside at designated anchorage. Pilot checked to make sure we had anchored in the correct anchorage. Channel buoys as per *Guide to Port Entry*. See Circulars—*Guide to foreign vessels calling at Shanghai—Para 3*. These buoy positions and descriptions were transmitted to vessel but only four hours before arrival at channel entrance. Pilot vessel tends to be between Buoys No. 14 and 18. All other information in the Shipmaster's reports appears to be still valid.

Since about July 1980 foreigners changing money ashore are issued with Bank of China foreign exchange certificates, likewise if drawing cash from Agent. Denominations of 50, 10, 5, 1, 0.50, 0.10 yuan. The certificates (like banknotes) are printed with the following:

The yuan expressed in this certificate is equivalent in value to the Renminbi yuan. This certificate can only be used within China at designated places. No request to register its loss will be accepted by the Bank.

The Renminbi Yuan is the official currency unit. Designated places are Seaman's Club, Seaman's Store and Friendship Store. The two former have cheaper prices for seamen. Other designated places are the tourist hotels.

For tankers, authorities require a Cargo Manifest of nil cargo, no special form required.

For entry papers the official Chinese forms must now be used for Report of Entry for Foreign-Going Ship, Crew List and List of Specified Articles, Foreign Currencies, Gold, Silver belonging to Ship and/or Members of Crew. If not available on board before arrival then vessel must now transfer the information to the Chinese forms.

If vessel coming from what they describe as a cholera infected port then the following are required.

- A statement of ballast quantities and disposition (required from clean port also) and where the ballast came from, i.e. open sea or which river. They are most concerned that no ballast is imported from a cholera infected port. Ballast is inspected by quarantine officials and the slightest "rainbow" on top means the top one third of that tank will have to be pumped into a barge. They will not give statement to say they consider any tank is not suitable to pump overboard into river.

- A statement of where you last took fresh water, amounts taken and amounts remaining on board. They analysed our water from Bangkok and declared it was not very good and chlorinated the drinking water tank and also the wash water tanks but again they would not give a statement to say what was wrong with it, although they do not give a certificate to say the tanks have been chlorinated.

- A list of stores taken at any "cholera infected port". If any fresh stores were taken then samples are taken ashore for analysis. Obviously, it is best to endeavour to ascertain beforehand whether they consider your last port cholera infected.

Other papers required are crew declaration (to include makers' names for items like watches, radios, etc.). Ten copies of Notice of Readiness. They do not consider a vessel ready until all ballast has been discharged. They do not require lists of bridge navigational equipment or lists of pyrotechnics or lists of radio equipment.

Light dues are payable for 3 months or 30 days. For 30 days, dues are calculated at Yuan 0.90 per nett registered ton. For 3 months it is more expensive.

At Quarantine Anchorage, accommodation required for two guards. At berth same required plus accommodation for two customs officials, one Agent and possibly one cargo surveyor.

Inspection is carried out on arrival at the Quarantine Anchorage and prior to departure berth. This was just the entry and departure formalities. No search was made and there was no crew assembly. Passes issued to everyone and collected prior to sailing.

Apparently fresh water and bunkers are available. There appeared to be no restrictions on use of radar, echo sounder, binoculars, etc.

Gasoline cargo loaded was about average SG with a loading temperature of 23.5°C. Cargo papers on sailing are manifests and Bills of Lading only.

SHIPMASTER'S REPORT: July 1984

Shanghai Entrance. Buoys as follows:

AAA Changkiangkou Light Vessel Lat. 31° 03' 30" N, Long. 122° 23' 1" E.

BBB Changkiangkou Light Buoys M1 H11-H20 replaced by Buoys No. 44–49.

Buoy 44 Lat. 31° 03' 22" N, Long. 122° 19' 52" E. Fl. 3/10 secs.

Buoy 45 Lat. 31° 03' 14" N, Long. 122° 16' 58" E. Fl. 3/6 secs.

Buoy 46 Lat. 31° 03' 06" N, Long. 122° 14' 02" E. Fl. 3/10 secs.

Buoy 47 Lat. 31° 03' 00" N, Long. 122° 11' 06" E. Fl. 3/6 secs.

Buoy 48 Lat. 31° 03' 34" N, Long. 122° 08' 14" E. Fl. 3/10 secs.

Buoy 49 Lat. 31° 04' 11" N, Long. 122° 05' 26" E. Fl. 3/6 secs.

Pilot vessel moving in/area Buoys 47–49 serving/as pilot station.

SHIPMASTER'S REPORT: January 1986

Documents: The following papers are required by the port authorities:

- 1 Maritime Declaration of Health
- 2 Reports of Entry for Foreign Going Vessels
- 4 Crew Lists
- 1 List of Specified Articles, Foreign Currency, Gold, Silver belonging to the ship or crew members
- 1 Import Manifest.

The following certificates and papers are to be submitted for examination by the port authorities:

Registry Certificate
Tonnage Certificate
International Load Line Certificate
Derat Certificate
Deck and Engine Log Books
Tonnage Dues Certificate
Manifest of Cargo for Discharging and Transit Cargo
Oil Record Books.

Clearance: Clearance of the vessel usually takes place at the Shanghai Quarantine Anchorage located in the following position between the buoys:

Buoy No. 25	Lat. 31° 20.8' N, Long. 121° 39.7' E
Buoy No. Q1	Lat. 31° 21.9' N, Long. 121° 37.8' E
Buoy No. 29	Lat. 31° 23.0' N, Long. 121° 35.9' E
Buoy No. Q4	Lat. 31° 23.5' N, Long. 121° 36.3' E
Buoy No. Q3	Lat. 31° 22.6' N, Long. 121° 38.4' E
Buoy No. Q2	Lat. 31° 21.8' N, Long. 121° 40.4' E

After clearance vessel proceeds for berthing/mooring. Occasionally port authorities instruct Pilots to proceed direct for berthing/mooring and entry clearance of the vessel carried out after berthing or mooring.

Navigation: BA Charts No. 1601 and No. 1602 proved most useful when entering the South Channel in order to receive Pilots.

The positions and new numbers of the buoys are indicated below:

Changjiang Kou Light vessel	Lat. 31° 03.4' N, Long. 122° 23.2' E
Buoy No. 1 (ex-Buoy No. 44)	Lat. 31° 03.4' N, Long. 122° 19.8' E
Buoy No. 2 (ex-Buoy No. 45)	Lat. 31° 03.2' N, Long. 122° 17.0' E
Buoy No. 3 (ex-Buoy No. 46)	Lat. 31° 03.1' N, Long. 122° 14.0' E
Buoy No. 4 (ex-Buoy No. 47)	Lat. 31° 03.0' N, Long. 122° 11.1' E
Buoy No. 5 (ex-Buoy No. 48)	Lat. 31° 03.6' N, Long. 122° 08.2' E
Buoy No. 6 (ex-Buoy No. 49)	Lat. 31° 04.2' N, Long. 122° 05.4' E
Buoy No. 7 (ex-Buoy No. 50)	Lat. 31° 05.4' N, Long. 122° 02.8' E
Buoy No. 8 (ex-Buoy No. 51)	Lat. 31° 06.6' N, Long. 122° 00.2' E
Buoy No. 9 (ex-Buoy No. 52)	Lat. 31° 07.6' N, Long. 121° 57.7' E

The characteristics of all the above buoys of the South Channel are red/white with radar reflector on top.

The South Channel is used for vessels in light condition or vessels with a draft up to 7.5 m. (FW).

The North Channel is used for large vessels or vessels with a draft over 7.5 m.

The numbering of the buoys of the North Channel is still the same as indicated on BA Chart No. 1602 but in the near future this channel will also be re-numbered.

Pilotage: During good weather the pilot vessel is anchored in position Lat. 31° 03.8' N, Long. 122° 07.2' E and Pilots board vessels between Buoys No. 5 and 6 in the South Channel.

For vessels using the North Channel, boarding area is between Changjiang Kou Light Vessel and Buoy No. 1 of South Channel.

During bad weather or strong winds Pilots board between Buoys No. 6 and No. 7 of South Channel and occasionally near Buoy No. 8.

For entry or departure through the South Channel all ships navigate anti-clockwise within a radius of 1.3 miles of the Changjiang Kou Light Vessel but clear of an inner radius of 0.3 miles centred on Changjiang Kou Light Vessel and then entering South Channel within 500 m. north of the line joining mid-channel Buoys No. 1-9 or 500 m. south of the line joining mid-channel Buoys No. 1-9 on leaving.

Pilots listen on VHF Channel 16, and give instructions to vessels entering or berthing at Shanghai. They also give instructions as to the Pilots' boarding position. Foreign vessels contact the pilot station at 0845 hrs., 1115 hrs., 1515 hrs. and 1915 hrs. to enquire if they are on the daily list for entering.

Local Agents "Penavico Shanghai" also inform vessels by cable via Shanghai Radio of berthing prospects and Pilots' boarding time. Two Pilots board vessel and they stay on board until vessel is berthed or moored.

Anchorage: Vessels anchor in the area indicated to the SE of Changjiang Kou Light Vessel (between 30° 35' N and 31° 00' N and between 122° 25' E and 122° 32' E).

Due to strong current and tide at least 6-7 shackles are recommended when anchoring in the above anchorage.

Radio: All telexes transmitted to Agents via Singapore Radio and Shanghai. Agents "Penavico" relay cables via Shanghai Radio only.

The following information is required by the Agents:

Forward and aft arrival draft (salt water).
Crew/passengers on board and if all healthy.

Ports of call from loading port with dates of arrival/departure each port

Quantity of main provisions, drinking water, ballast water on board and when and where taken

Derat or Derat Exemption Certificate, port and date of issue.

"Penavico" use VHF Channel 11 for all ships when giving any information required by the vessels.

Berthing: All berthing information received from the Agent via VHF. Berthing or shifting carried out day and night.

For discharging of soyabean oil, vessel moored to Buoys No. 81-82 located on the ninth section of the river. The actual berth for soyabean oil is a small wooden pier used only by small coasters and barges. During mooring one tug used only for pushing. Four headlines and one slip wire used forward and only four stern lines used aft.

No ballast water can be discharged into the river without the permission of the Harbour Master.

For a short period (6-8 hours) the port authorities (through the Agent) give permission for engine inspection and overhauling of pistons.

Discharging: Notice of Readiness tendered on vessel's arrival at the Outer Anchorage but accepted by "Penavico" after berthing and only during office hours.

Cargo surveyors (3 persons), board vessel and check the quality of the cargo, taking ullages and samples. The surveyors company is the national firm China Commodity Inspection Bureau.

After cargo inspection and test, and if they find cargo in good order, they give permission for discharge to commence. No ship's papers or cargo calculations signed by them.

Cargo discharged into barges at a maximum rate of 350 tonnes/hr. through a flexible 6 in. hose. Each barge has a capacity of about 350-500 tonnes.

There is always a shortage of barges. For a quantity of 10,000 tonnes the discharging time is usually 4-7 days.

The daily quantity discharged was:

Day 1-350 tonnes (1 barge)
Day 2-685 tonnes (2 barges)
Day 3-No discharging. No barges available
Day 4-1,250 tonnes (3 barges)
Day 5-1,745 tonnes (4 barges)
Day 6-2,200 tonnes (5 barges)
Day 7-3,515 tonnes (9 barges) maximum
Day 8-485 tonnes (1 barge).

The daily maximum quantity that they can receive is approximately 3,500 tonnes.

After discharging and stripping of the cargo the surveyors inspected all the tanks carefully and gave their own Dry Certificate. If there is a difference between the ship's figures and shore figures, vessel's departure is postponed until a final settlement is reached.

Unberthing: Two tugs are used for unmooring, one each end, using tugs' lines.

Large vessels always use two Pilots and they speak good English. The Pilots use the ship's whistle a lot in order to keep the main channel clear as no safety regulations followed by small craft, barges, ferries, etc.

Both anchors to be ready for use at all times when berthing/unberthing.

Facilities: Free transportation by a small ferry is available from the ship to the ferry station.

Two guards and one customs officer stay on board from arrival until sailing.

Provisions, stores, bunkers and water are available with 2-3 days' notice. The water is not very good quality so should be avoided if possible. Bonded stores are not sealed. Port authorities and Agents are very pleasant and polite. The vessel did not face any problems during entering, stay alongside or when leaving Shanghai.

SHIPMASTER'S REPORT: March 1986

Vessel anchored with 6 shackles in the water; Changjiang Kou Light Vessel bearing 277° x 9.5 miles. Strong winds (Force 6) were experienced and vessel rolled 20°. Ebb tide is stronger than the flood. All messages were passed on to the Agents via W/T, who keep watch 24 hours on VHF Channel 11, but there was no answer. Entry and departure is through the South Channel (Nancao Hangdo). Changjiang Kou Light Vessel and the buoys are in position as marked on Chart No. 1602; but no racon was observed on any of the light vessels. Light Buoys No. 44 onwards are re-numbered as No. 1 onwards; and are red and white can buoys with spherical topmarks. The light vessel and all the buoys are to be passed on the port side. Two pilot vessels were cruising between Buoys No. 5 and 6 and Pilot boards from a small boat coming alongside.

Vessel had to anchor for free pratique at Woosung Quarantine Anchorage, which was granted in 30 minutes. After the vessel was tied up at berth between Buoys No. 44 and 45, Customs and Immigration boarded the vessel (4 people). The following documents were required: 6 Crew Lists; 1 Private Property List including currency; List of Provisions and where purchased; quantity of fresh water, ballast and where and when taken; List of Ports of Call during last 30 days.

All passports and health books to be collected. Bonded stores not sealed. No separate List of Foreign Currency on Board required. Foreign currency can only be changed at "Friendship Stores", Seamen's Club or big hotels in exchange for specially made notes for use of foreigners-but can also be used in any other stores or hotels. No restrictions on the use of VHF, radar, echo sounder or any other navigational equipment. Cargo Manifest was sighted.

Two officials from Customs and Immigration stay on board and a cabin has to be made available. Everyone has to show shore passes before going ashore. There is a launch every hour, last one at 2330 hrs. Charges US\$10.0 per day for every ship on the buoys.

SHIPMASTER'S REPORT: July 1993

Chimbusco Terminal:

1. On route to Changjiang Kou Anchorage numerous fishing nets are encountered.

At anchorage, contact Shanghai Pilots on VHF Channel 16.

2. Depending on draft, vessel enters/leaves via North or South Channel.
3. Essential to calculate tidal predictions. -Beware of squat.

4. Ordered and received new BA Charts No. 1603. BA Charts No. 1601 and 1602 were updated to latest Notice to Mariners received.

In spite of this, it is necessary to obtain updated Chinese charts regarding Shanghai area, because when comparing BA No. 1603 and the local chart, some differences regarding the channel were noticed. Several changing depths "Notes" regarding channel on BA charts as well as on the local charts.

5. Although visibility between 150 m. and 3 miles on route to pilot station (and during transit), South Channel pilot services were not suspended.

6. Pilot boarded between Buoy No. 4 and No. 5 South Channel.

Pilot not in possession of charts.

Outward bound pilot disembarks between Buoys No. 3 and 4 in the South Channel.

7. Vessel proceeds to Anchorage No. 1 and anchored 1 mile ENE off Chimbusco Terminal.

8. At this anchorage, Immigration authorities board vessel.

Documentation required:

All Certificates
4 copies Crew List
Personal Effects List
Firearms "Nil" Declaration
Passengers "Nil" Declaration

Chinese Customs forms to be completed by Master, including Chinese forms Maritime Declaration of Health and Animal/Plant Declaration form.

9. When documentation completed, vessel proceeded to jetty where berthing was carried out by same pilot who boarded at South Channel.

10. Vessel moored 4 hours before low water.

Due to many ship movements at that time, only one tug (estimated 1,400/1,500 h.p.) available.

Although wind Force 1-2 (BF) during mooring, pilot showed concern.

According to pilot, current is 2-4 knots.

No mooring launches and mooring winches available.

Moorings:

Forward:	First:	Starboard anchor (1 shackle)
	Secondly:	5 head lines
	Thirdly:	Breast rope
	Last:	Spring
Aft:	First:	Spring (leading forward)
	Secondly:	Spring (leading aft)
	Last:	5 stern lines

Note: Only one bollard available for 5 head lines forward, and one bollard for 5 stern lines aft (see "Plan").

11. When alongside plotted GPS position on Chinese Chart No. 9504. As can be seen on chart (see "Plan"), there is a deviation in position.
 - (1) As GPS position obtained from satellite, navigation systems are normally referred to the World Geodetic System (WGS), adjustments for plotting such positions are not known, but it should not be assumed that they are negligible.
 - (2) Due to the fact that GPS type on board is a 2 D fix type, accuracy (95%) approximately 100 m.
12. Ship's draft 7.20 m. even keel (fresh water).
Low water 07/07/93: 2200 hrs. LT.
Transducer of echo sounder situated in fore peak tank.
At low water calculated depth forward 11.00 m.
Remarks:
See Note 11: Looking at Chart No. 9504, where ship's position is plotted, you may expect the vessel on the port and aft side to be within the 10 m. sounding line.
According to information given by Penavico Shanghai Agency, Terminal restrictions are LOA 180 m., draft in FW 9.5 m.
On 9 July at 0830 hrs. (LT), soundings on the port side of the vessel were taken.
See tidal predictions (see "Plan").
Draft of vessel at 0830 hrs.: Forward 1.00 m., aft 7.15 m.
Density: 1005.

Results:	Calculated Depth
In way of No. 1 port COT	11.10 m.
In way of No. 3 port COT	10.95 m.
In way of manifold port	10.50 m.
In way of No. 6 port COT	10.30 m.
In way of pump room	10.40 m.
In way of aftship port	10.25 m.

13. Vessel discharged light diesel. Average rate 600 cu.m./hr. with 1×6 in. discharge hose. Maximum back pressure 5 Bar.
14. According to Loading Master, this berth is normally used by bunker barges.

Safety:

1. No Safety Check List by shore-supplied by ship.
2. On all manifolds (shown on sketch), hoses are connected, none of them is blanked.
3. No fixed fire or foam installation on jetty.
4. No international ship/shore connection on jetty.
5. Portable fire extinguishers on jetty: three (1×P50 and 2×P9).
6. Only one bollard available forward for 5 head lines, and one bollard aft for 5 stern lines.
7. Jetty illumination is poor.
8. Small electric hose crane on jetty in way of middle manifold. Intrinsicly safe: unknown.
9. On all hoses on jetty is mentioned (with paint) 91/09/07. Probably test date (test pressure not found). External damage to discharge hose.
10. Telephone No./VHF channel in case of emergency not supplied.
11. Non-smoking area indication limited and almost unreadable.
12. Some fenders missing/damaged. Concrete edges of jetty badly damaged in a few places.

SHIPMASTER'S REPORT: November 1993

1. Approach to Changjiang Anchorage: Good radar targets are the islands of Maan Liedao. Anchorage heavily crowded. Vessels are anchoring anywhere. A lot of small craft and fishing vessels passing. On arrival anchorage, we had strong westerly winds and a good easterly current running. We anchored with 7 shackles in water. Arrival draft at anchorage 7.50 m. (even-keel) = 7.75 m. (FW). Vessels have to anchor on arrival awaiting entry arrangements for Shanghai.
2. Pilot Information: VHF contact with "Shanghai Pilot" on Channel 16. Pilots will pass boarding time and position. Same information also passed by "Penavico Agency" via telex.
Care has to be taken with the Pilot boarding position. We were ordered to pick up Pilot at Buoy No. 5 at South Channel. This information was wrong, vessel would have been aground in this position.
3. Approach to Pilot Boarding Position: We approached from Changjiang Kou Anchorage to Changjiang Kou Light Buoy, turning into the "roundabout" heading for Buoy No. 1 of South Channel. The light buoy was a replacement buoy (no Racon) and a very poor target, and was difficult to locate between all the small craft. Visibility at that time was about 3 miles. A strong easterly current was running and we stopped between Buoys No. 1 and No. 2, with an under-keel clearance of 1.0 m.
The pilot vessel was heading towards Changjiang Kou Light Buoy as about 6 vessels were queueing up at the roundabout for the passage via South Channel.
The Pilot boarded at 0730 hrs. from a small pilot cutter (speed 3-4 knots) and we turned to starboard heading for the North Channel.
4. Approach North Channel: All other vessels were redirected to the North Channel. Due to Pilot information, the water depth in the South Channel was only 5.0 m. Depth shown in BA Charts No. 1602 and 1603 are not reliable and are changing. We picked up speed and were the only vessel in the convoy turning into the North Channel. The passage was done with Pitch 7 and rising tide.

The pilot boarding area at Beicao Hangdao is cancelled due to strong tidal streams. Care has to be taken when entering the Beicao Channel (dredged to 7.0 m.), and a good helmsman is required as the bottom width of the channel is only 250-300 m. and a strong current was setting to the northwest.

The bar at Yuanyuasha Hangcao is dredged to 9.0 m.

Three hours after Pilot boarded, we anchored at the Large Vessel Anchorage No. 2. Care to be taken for slowing down ship's speed in time, as the current was setting from the stern and with rudder hard-to-starboard, vessel was swinging into the crowded anchorage with starboard anchor 1 shackle in water and engine astern dragging into a suitable position.

5. Approach to the Huangpu Jiang: Vessel had to anchor for about 2 hours, until the ebb tide started running, before the approach is done to Wusong Kou.

When entering the Huangpu Jiang, the call sign and berth number (advised by Pilot) have to be hoisted. Two crew (officer and bosun) required on fo'c'sle to stand by both anchors until moored. The Huangpu Jiang is heavily crowded with all kinds of craft and vessels. Pilot uses the whistle continuously to make his way through the traffic. There is no discipline on this waterway. There were 10 near misses before reaching the berth. Another dangerous situation occurred when vessels ahead stop in the river. With the help of two tugs, we were kept in position until the transit commenced. Both tugs (new) of 3,200 h.p. each, well equipped, also used for mooring alongside Quing Ning Shi Wharf. It was difficult to come alongside as small craft always passed between ship and berth.

6. Quing Ning Shi Wharf: Once in position, the mooring operation was quite smooth. Sufficient line handlers and one mooring boat available. Mooring with "Atlas ropes" is a great advantage. Both tugs stayed alongside for pushing until vessel moored. For moorings see "Plan".

The tank inspection and the discharge can be called a normal and smooth operation. Discharge with two pumps into 2×6 in. flexible hoses, connected to an 8 in. shore line. There was no interruption during discharge. Signals to be hoisted advised by Harbour Master. To shore side flag B or one red light, to riverside flags R above Y or green above red light (pass tanker slowly).

Discharge rate 1,000 cu.m./hr.

7. Departure Shanghai: Departure condition-total ballast on board 8,300 tonnes. Draft forward 4.20 m., aft 6.80 m. (fresh water).

On departure, Pilot requested vessel to minimise the draft aft to maximum 6.40 m., due to transit via South Channel. Ballast was run internally to reach the required draft (F: 4.6 m. A: 6.4 m. (FW)). Unmooring during slack water (low water) at 1020 hrs. with two tugs. Forward tug required ship's rope.

Vessel proceeded to turning position upstream between mooring Buoys No. 38 and 40, passing newly built bridge, which said to have 50 m. clearance. Vessel's air draft was 42 m. Vessel was turned by two tugs without any tug lines. The passage downstream the Huangpu Jiang was similar to arrival. Once Wusong Kou passed, the passage via the South Channel can be called a normal transit. Passing South Channel from Buoy No. 77-1 - Juidan Light Vessel to Buoy No. 2, the under-keel clearance was not more than 1.0 m. Pilot disembarked between Buoy No. 7 and No. 8 at 1610 hrs. Changjiang Kou Light Buoy was unlit, water depth slowly increasing. A strong SE'ly current was observed while passing the South Channel.

At 1730 hrs., Changjiang Kou Light Buoy was passed and vessel proceeded on voyage.

Documents: The following documents required by Customs and Immigration in order to complete the necessary port formalities:

1. Port Clearance from Last Port
2. Load Line Certificate
3. Safety Radio Certificate
4. Safety Equipment Certificate
5. Safety Construction Certificate
6. Certificate of Registry
7. Civil Liability Certificate
8. IOPP Certificate
9. International Tonnage Certificate
10. Derat (Exemption) Certificate
11. Tonnage Dues Certificate of China (valid for 1 month)
12. Certificates of Competency.

SHIPMASTER'S REPORT: November 1993

Documents to be prepared before arrival Shanghai:

- 7 Crew Lists (ship's form)
- 1 Crew Personal Effects List (ship's form)
- 1 Foreign Currency List (ship's form), not required this voyage
- 1 Maritime Health Declaration (Chinese form)
- 1 Ship's Stores List (ship's form)
- 2 Reports of Entry for Foreign-Going Ships (Chinese form)
- 1 Passenger List (plain form)
- 1 Arms List (plain form)
- 2 Reports of Clearance (Chinese form)
- 1 Vaccination List (ship's form)
- 1 Port of Call List (ship's form)
- 4 Cargo Manifests-copies from Cargo Documents

Chinese forms will be received on arrival if no spare forms on board.

Customs and Immigration on arrival: Ship's documents and forms as per above list.

Harbour Master:

- Ship's Documents
- Liferaft Certificates
- CO-2 Certificate
- Oil Record Books (Deck and Engine)
- Quarantine for animals and plants: Checking provision rooms and issue certificate.

Bonded Stores are not sealed by Customs (should not be opened during stay in Shanghai)

No documents taken ashore.

Customs check bonded stores before sailing.
Immigration collect shore passes before sailing.

Port Clearance and Quarantine Certificate delivered on board by port authorities.

Passports and shore passes required for shore leave.

Agent: Penavico Shanghai. Telex: 33052 Penav Cn. VHF Channel 11 (call for information: 1115-1130 hrs. and 1515-1530 hrs.). Tel: 3234603, 3231352.

Agent prepares a Notice of Readiness on arrival. Timesheet is also prepared by Agent. He will sign Ship's Notice of Readiness, Port Activity Report and Cargo Report Handling Log. Cargo documents (copies only) handed to Agent.

Any crew members for doctor (not on short notice), only emergency cases.

Care has to be taken for arranging tank inspectors for tank inspection after discharging. It was not quite clear who will do the arrangements, Agent or cargo receiver, as they arrived 6 hours after completion of discharging, and vessel had to wait for ballasting cargo tanks.

The sailing time was arranged by the Agency via VHF Channel 11 on the previous day. The Agency is open 24 hours, but after office hours it is not possible to make any arrangements.

One Immigration officer will stay on board during port call. One cabin is required.

SHIPMASTER'S REPORT: November 1994

Location: Luhushan Anchorage.

Chart: BA Chart No. 1199.

Approach: Open, apart from fishing fleets. From the south, there are shoals Wai Baimtian Jiao giving 3.5 miles passage-3 miles south of Luhushan.

Lookout tower (Lat. 30° 49.5' N, Long. 122° 37.2' E) on Luhushan Island at the rear of Fangang village is conspicuous.

Anchorage: See plan inset on BA Chart No. 1199, situated south of Luhushan Island. It is sheltered from all winds, except southerlies.

Depth around 30 m., except north end where depth is 12.0-16.0 m. in lee of islands.

Parts of the anchorage, particularly the centre section, are subject to strong tidal currents. The strongest tide was found to be on the ebb.

Anchorage is under the jurisdiction of Fangang Harbour Master. We firstly anchored in position Lat. 30° 47.4' N, Long. 122° 37.5' E, which was found to be very susceptible to strong currents, vessel swinging/sheering strongly around 25°, 2 hours before and until LW.

Our second anchorage position was Lat. 30° 46.6' N, Long. 122° 37.0' E, and was somewhat calmer.

On ebb, tidal current runs for about two hours after LW.

The flood tide is not as strong, possibly because it is broken up by islands.

Sometimes the northerly wind overcame the flood tide with the vessel not completely swinging. Vessel always swung through north.

The northern end of the anchorage, about 0.8 miles south of the Luhushan Islands, is occupied by two anchored transshipment vessels, a bulk carrier to the west and a crude carrier to the east. Positions are Lat. 30° 48.05' N, Long. 122° 37.3' E, and Lat. 30° 48.00' N, Long. 122° 37.7' E respectively.

Anchorage is mainly used for bulk, crude and LPG transshipments and as shelter for small vessels under the lee of Luhushan.

LPG vessels are not allowed to anchor within 1.1 miles from the transshipment bulk carrier which has continuous operations.

Holding ground was found to be good, bottom mud/sand.

In strong southerly winds, local information advises to anchor to north of Luhushan Islands.

VHF: Channel 9 for tugs and Pilot call "Shauangfenghai CPT Tong".

Channel 14 for fresh water and supplies, call "Luhua".

Weather Forecast: Shanghai on Navtex twice daily. Good synopsis. Tokyo fax charts as per ALRS.

Services: Fresh water obtainable from 150 tonne capacity barge (an old inter-island coaster) from Fangang. Initially order through state Agent "Penavico". Cost US\$6.00 per tonne (compares with Shanghai at USD 0.50 per tonne).

Provisions obtainable from water suppliers "Luhua". Standard list given. If vessel lightning, can obtain from Shanghai via "Shanghai Development Company" Chandlers (Fax: +86 (21) 306 9614).

Communications: Communication with Shanghai is by means of coast guard tug at US\$1,500. Journey takes 6-7 hours, depending on tide/weather.

Medical: Difficult, via Shanghai by tug or lightning ship.

Formalities: Shore leave allowed. Landing cards given by Immigration. Shore leave only via Shanghai. Tug cost and night in hotel would probably make shore leave prohibitive.

If vessel working cargo, Authorities from Shanghai board vessel by coast guard tug.

Officials: About 10 persons (Customs, Immigration, Harbour Master, Agent) board and require meals. Bond not sealed.

Documents:

- 8 Crew Lists
- 3 Crew Manifests
- 3 Stores Lists
- 1 Health Declaration (Chinese form)
- 1 Vaccination List
- 2 Ports of Call Lists
- 2 Arms/Ammunition Lists, or "Nil" Declarations
- 2 Passenger Status
- 6 Cargo Manifests (Chinese form).

AGENT'S REPORT: June 1997

Terminal: Ming Seng STVDG Co.-Berth No. 1.

Length of dock/Length with dolphins: 185.6 m.
Draft restriction alongside: 8.6 m.
Year built/last modified: 1908

SHIPMASTER'S REPORT: June 1997

Terminal: Ming Seng STVDG Co.-Berth No. 2.

Length of dock/Length with dolphins: 169.1 m.
Draft restriction alongside: 9.6 m.
Year built/last modified: 1908

AGENT'S REPORT: June 1997

Terminal: Ming Seng STVDG Co.-Berth No. 3.

Length of dock/Length with dolphins: 171.3 m.
Draft restriction alongside: 9.6 m.
Year built/last modified: 1920

AGENT'S REPORT: June 1997

Terminal: Ming Seng STVDG Co.-Berth No. 4.

Length of dock/Length with dolphins: 212.5 m.
Draft restriction alongside: 8.6 m.
Year built/last modified: 1920

AGENT'S REPORT: June 1997

Terminal: Ming Seng STVDG Co.-Berth Yang Jing.

Length of dock/Length with dolphins: 231.2 m.
Draft restriction alongside: 9.6 m.
Year built/last modified: 1990

AGENT'S REPORT: June 1997

Terminal: Ming Sheng Stevedores Co. Terminal No. 2.

Length of dock/Length with dolphins: 169.1 m.
Draft restriction alongside: 9.6 m.
Dock height at MLW: 5.3 m.
Spout air draft at MLW: 15 m.
Maximum outreach of spouts: 20 m.
Number of spouts: 1
Commodities handled: Corn, wheat, meal, grain
Storage capacity: 40,000 sq.m.
Year built/last modified: 1908/1981
Designed loading rate/t.p.h.: 500
Potable fresh water available: Yes
Contact Office: Ming Sheng Stevedores Co
Contact Tel: +86 (21) 588 5176
Contact Fax: +86 (21) 588 5176
Dock access by vehicle permitted: Permitted
Is bunkering permitted alongside?: Permitted
Owner/Operator of elevator: Ming Sheng Stevedores Co.

AGENT'S REPORT: June 1997

Terminal: Ming Sheng Stevedores Co. Terminal No. 3.

Length of dock/Length with dolphins: 171.3 m.
Draft restriction alongside: 9.6 m.
Dock height at MLW: 5.3 m.
Spout air draft at MLW: 22.3 m.
Maximum outreach of spouts: 18 m.
Number of spouts: 2
Distance between spouts: Movable spouts
Commodities handled: Corn, wheat, meal, grain
Storage capacity: 40,000 sq.m.
Year built/last modified: 1920/1996
Designed loading rate/t.p.h.: 10,000
Potable fresh water available: Yes
Contact Office: Ming Sheng Stevedores Co
Contact Tel: +86 (21) 5885 1576
Contact Fax: +86 (21) 5885 1576
Dock access by vehicle permitted: Permitted
Is bunkering permitted alongside?: Permitted
Owner/Operator of elevator: Ming Sheng Stevedores Co.

AGENT'S REPORT: June 1997

Terminal: Ming Sheng Stevedores Co. Terminal No. 4.

Length of dock/Length with dolphins: 212.5 m.
Draft restriction alongside: 8.6 m.
Dock height at MLW: 5.3 m.
Spout air draft at MLW: Nil
Maximum outreach of spouts: Nil
Commodities handled: Corn, wheat, meal, grain
Storage capacity: 40,000 sq.m.
Year built/last modified: 1920/1981
Designed loading rate/t.p.h.: 600
Potable fresh water available: Yes
Contact Office: Ming Sheng Stevedores Co
Contact Tel: +86 (21) 5885 1576
Contact Fax: +86 (21) 5885 1576
Dock access by vehicle permitted: Permitted
Is bunkering permitted alongside?: Permitted
Owner/Operator of elevator: Ming Sheng Stevedores Co.

AGENT'S REPORT: July 2004

Anchorage:

Lat.	Long.	Depth (m.)	Remarks
Changjiangkou Anchorage:			
122° 25' E	30° 56' N	10-14	Awaiting berth, awaiting tide. Mud with good holding ground.
122° 32' E	30° 56' N		
122° 32' E	31° 00' N		
122° 25' E	31° 00' N		
Luhushan Anchorage:			
122° 37' E	30° 47' N	22-33	Lightening, haven. Mud with good holding ground.
122° 38' E	30° 47' N		
122° 38' E	30° 48' N		
122° 37' E	30° 48' N		
Wusong Anchorage:			
Among Q5, Q4, 29 and 31 Buoy		5-17	Quarantine. Mud and sand with good holding ground.
Limitless holding capacity.			

Berths:

Name of Berth	Length (m.)	Depth (m.)	Size (d.w.t.)	Remarks
Waigaoqiao Stevedores:				
No.2 of 2nd/3rd stage	180	10.5	25,000	Containers
No.3 of 2nd/3rd stage	180	10.5	25,000	Containers
No.4 of 2nd/3rd stage	180	10.5	25,000	Containers
No.5 of 2nd/3rd stage	180	10.5	25,000	Containers
SCT Stevedores:				
No.1 of Zhanghuabang	244	10.5	10,000	Containers
No.2 of Zhanghuabang	180	10.5	10,000	Containers
No.3 of Zhanghuabang	180	10.5	10,000	Containers
No.4 of Zhanghuabang	180	10.5	10,000	Containers
No.1 of Jungonglu	160	10.0	10,000	Containers
No.2 of Jungonglu	180	10.0	10,000	Containers
No.3 of Jungonglu	180	10.0	10,000	Containers

Name of Berth	Length (m.)	Depth (m.)	Size (d.w.t.)	Remarks	Stevedores	Berth Name	Cranes and Pipelines (tons)
No.4 of Jungonglu	196	10.0	10,000	Containers	SCT	No. 1 of Zhanghuabang	1×50, 3×45, 4×30.5 gantry cranes
No.5 of Jungonglu	141	10.5	10,000	Containers			
No.2 of Baoshan	240	9.4	10,000	Containers		No. 1 of Jungonglu	2×50, 3×45, 1×30 gantry cranes
No.3 of Baoshan	200	9.4	10,000	Containers			
No.4 of Baoshan	200	9.4	10,000	Containers		No. 3 of Baoshan	2×30.5 bridge cranes
Luojing Stevedores:					Luojing	1-2	1×35 shore cranes, 2 unloaders 1,250 t.p.h.
1-2	463	11	15,000	Coal, ore			
Minsheng Stevedores:					Minsheng	No. 1 of Minsheng	2×16 shore cranes, 2 unloaders 800 t.p.h.
No.1 of Minsheng	200	10	10,000	Grain, general		Zhujiamen (E)	2×1,200 t.p.h. ship loaders
No.2 of Minsheng	191	10.0	10,000	Grain, general		Zhujiamen (W)	1×16 shore crane
No.3 of Minsheng	171.3	9.5	10,000	Grain			
No.4 of Minsheng	212.5	9.5	10,000	Grain	Huishan	No. 1 of Huangpu	5×10 shore cranes
Zhujiamen (E)	200	10	10,000	Coal	Nanpu	No. 1 of Bailianjing	6×10, 2×28 shore cranes
Zhujiamen (W)	102.7	10	3,000	Coal		No. 1 of Kaiping	4×10, 1×16 shore cranes
Huishan Stevedores:						No. 2 of Kaiping	1×16 shore crane
No.1 of Huangpu	149.2	5.5	7,000	Steel, general cargo	Gaoyang	Gongpinglu (E)	2×10 shore cranes
No.2 of Huangpu	149.2	5.5	7,000	Steel, general cargo		No. 1 of Gaoyang	1×5 shore crane
No.1 of Huishan	121.9	6.5	10,000	Steel, general cargo	Xinhua	No. 1 of Xinhua	4×16, 5×10 shore cranes
No.2 of Huishan	121.9	6.5	10,000	Steel, general cargo		No. 7 of Xinhua	Spiral unloader 800 t.p.h.
No.3 of Huishan	121.9	8.5	7,000	Steel, general cargo	Zhanghuabang	No. 5 of Zhanghuabang	1×20, 5×10 shore cranes
No.4 of Huishan	152.4	8.5	7,000	Cargo, passenger ferry		No. 6 of Zhanghuabang	2×16, 1×40 shore cranes
No.5 of Huishan	152.4	8.5	7,000	Cargo, passenger ferry	Jungonglu	No. 6 of Jungonglu	5×10 shore cranes
No.6 of Huishan	152.4	6.5	10,000	Cargo, passenger ferry		No. 7 of Jungonglu	2×16 shore cranes
Nanpu Stevedores:					Gongqing	No. 8 of Jungonglu	1×40 shore crane
No.1 of Bailianjing	218	10	10,000	Log, timber		No. 5 of Gongqing	1×10 shore crane
No.2 of Bailianjing	145	10	10,000	Log, timber, steel		No. 6 of Gongqing	1×10 shore crane
No.3 of Bailianjing	147.5	9.5	10,000	Log, timber, steel	Baoshan	No. 1 of Baoshan	2×16 shore cranes
No.4 of Bailianjing	184.6	9.0	10,000	Log, timber, steel		No. 5 of Baoshan	3×16, 2×40 shore cranes
No.1 of Kaiping	171.4	10.0	10,000	General cargo		No. 6 of Baoshan	1×25 shore crane
No.2 of Kaiping	136.4	10.0	10,000	Timber, general	Longwu	No. 1	6×10, 1×16, 1×26 shore cranes, rice exporting
Gaoyang Stevedores:						No. 5 of Guan	1×42 shore crane
Gongpinglu (E)	182.7	9.5	10,000	General cargo	Waigaoqiao	No. 7 of Guan	2×42 gantry cranes
Gongpinglu (W)	61	9.5	10,000	Passenger		No. 1 of 1st stage	5×30.5, 4×42 gantry cranes
No.1 of Gaoyang	194.4	10.0	10,000	General cargo, steel		No. 2 of 2nd/3rd stage	15×50 gantry cranes
No.2 of Gaoyang	164.4	10.0	10,000	Ferry, general cargo			
No.3 of Gaoyang	164.4	10.0	10,000	General cargo, ferry			
No.4 of Gaoyang	230.2	10.0	10,000	Ferry, general cargo			
Waihongqiao	117	11.0	5,000	Passenger			
Xinhua Stevedores:							
No.1 of Xinhua	176	11	25,000	Ore			
No.2 of Xinhua	176	11	25,000	Ore			
No.3 of Xinhua	176	10.3	25,000	Ore			
No.4 of Xinhua	176	11	25,000	Steel, general cargo			
No.5 of Xinhua	176	10.8	25,000	Steel, general cargo			
No.6 of Xinhua	176	10.9	25,000	Steel, general cargo			
No.7 of Xinhua	148.6	11.4	25,000	Fertiliser			
No.8 of Eastern	201.1	11	25,000	Steel, general cargo			
No.9 of Eastern	178.7	10.8	25,000	Steel, general cargo			
No.10 of Western	174	7	1,000	General cargo			
Zhanghuabang Stevedores:							
No.5 of Zhanghuabang	180.3	10.5	10,000	General cargo, steel			
No.6 of Zhanghuabang	180	10.5	10,000	Ore, containers, general cargo			
No.7 of Zhanghuabang	180	10.5	10,000	Ore, containers, general cargo			
Jungonglu Stevedores:							
No.6 of Jungonglu	227	10.5	10,000	Steel, general cargo			
No.7 of Jungonglu	172	10.5	10,000	Steel, ore, general cargo			
No.8 of Jungonglu	172	10.5	10,000	Ore, general cargo			
No.9 of Jungonglu	172	10.5	10,000	Ore, sand, general cargo			
Gongqing Stevedores:							
No.1 of Gongqing	100	4	3,000	Containers			
No.2 of Gongqing	100	4	3,000	Containers			
No.3 of Gongqing	100	3	3,000	Domestic containers			
No.4 of Gongqing	100	3	3,000	Domestic containers			
No.5 of Gongqing	100	4	3,000	General cargo, coal			
No.6 of Gongqing	100	4	3,000	General cargo, coal			
No.7 of Gongqing	100	4	3,000	General cargo, coal			
No.8 of Gongqing	100	4	3,000	General cargo, coal			
No.9 of Gongqing	100	4	3,000	General cargo, sand			
Baoshan Stevedores:							
No.1 of Baoshan	150	9.5	15,000	Timber, general cargo			
No.5 of Baoshan	180	9.5	15,000	General cargo			
No.6 of Baoshan	180	9.5	15,000	General cargo			
No.7 of Baoshan	80	7.0	2,000	General cargo			
No.8 of Baoshan	80	7.0	1,000	General cargo			
Longwu Stevedores:							
No.1	167	9.0	10,000	General cargo, steel, coke			
No.2 of Guan	167	9.0	10,000	General cargo, steel, coke			
No.3 of Guan	167	9.0	10,000	General cargo			
No.4 of Guan	167	9.0	10,000	General cargo			
No.5 of Guan	167	9.0	10,000	General cargo			
No.6 of Guan	167	9.0	10,000	General cargo, steel			
No.7 of Guan	180	9.0	10,000	Containers			
No.8 of Guan	180	9.0	10,000	Containers			
Waigaoqiao Stevedores:							
No.1 of 1st stage	200	10.5	25,000	Containers			
No.2 of 1st stage	180	10.5	25,000	Containers			
No.3 of 1st stage	180	10.5	25,000	Containers			
No.1 of 2nd/3rd stage	180	10.5	25,000	Containers			

Cranes:

See guidelines for compiling and submitting information (page x)

Agent: China Ocean Shipping Agency Shanghai, 531 Wusong Road Shanghai, China. Tel: +86 (21) 6364 7688. Fax: +86 (21) 6393 9681. Telex: 33052 PENAV CN. Web: www.penavico.sh.cn

SHIPMASTER'S REPORT: December 2005**Vessel:** Container Vessel.**Vessel Size:** 4,250 TEU.**Berth:** Wei Gao Qiao.

Our vessel sailed from Shanghai with max. draft 10.7 m. (FW).

Outbound container ships from the many berths at Wei Gao Qiao generally face the prospect of delays in sailing due to a combination of two factors:

- Lines, Agents and terminals are under pressure to load the maximum cargo.
- Most Pilots and tugs are engaged in berthing operations of vessels that have arrived on the flood tide. Delays can be critical for heavily laden ships as they are obliged to navigate approximately 40 n.m. to the open ocean mostly on a falling tide.

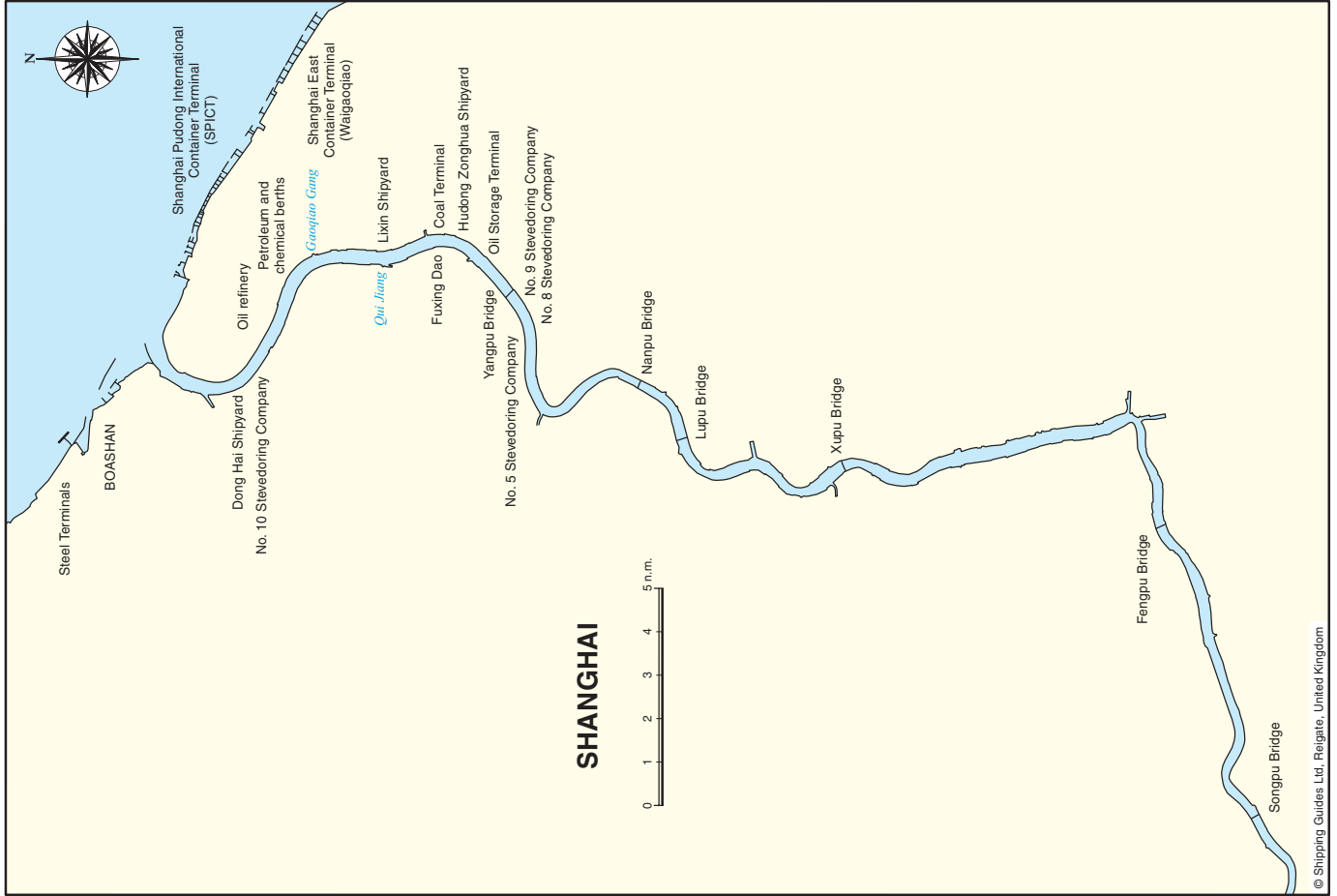
On our passage down-river, our echo sounder read zero for a considerable duration in the channel, despite having pumped out unnecessary ballast water.

From my interaction with a very forthcoming and competent Pilot, below is some useful information:

- Beicao Shuidao is maintained at a depth of 10.0 m. at all states of the tide.
- VTIS Shanghai approves transit of the buoyed channel on the basis that a minimum UKC of 12% of FW draft is maintained by each vessel. Draft is reported to them by the Pilot or ship's Agent.
- As all outbound deep-draft vessels have to exit the sea approach channel on a falling tide, higher engine speed is unavoidable as compared to inbound ships that have the advantage of entering on the flood tide. Consequently, squat effect is inevitably aggravated.
- As a rough guide, an outbound deep-draft ship should preferably sail NOT LATER than approximately 3.5 hours prior to HW Wusong, which ensures that the vessel arrives at Chanjiang Kou Pilot Station approximately 3 hours after HW. Note that HW at the pilot station is approximately 2 hours before HW at Wusong, and a typical transit takes approximately 4 hours from Wei Gao Qiao Berth to sea.
- Entering and leaving Shanghai is always a challenge to the navigator, given the low depth, perennial smog, unreliable navigation marks, unpredictable movements by small craft, strong sets, concurrent arrivals and sailings of large vessels and the general chaos on VHF working channels. However, I am pleased to report that pilotage standards have considerably improved, and the laptop pc-based ECDIS + AIS carried by all pilots is a great reassurance for the bridge team.

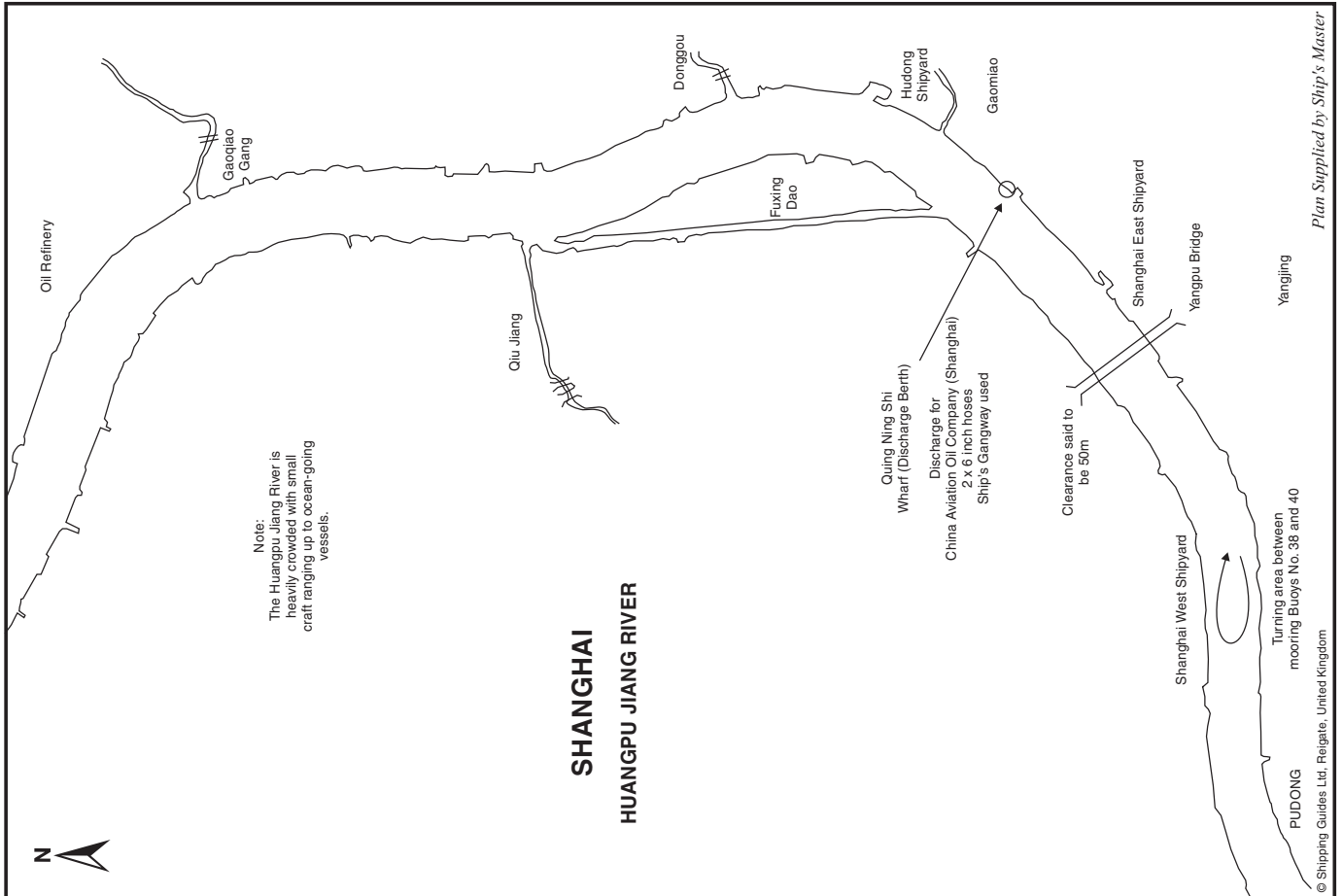
AUTHORITY: Shanghai International Port (Group) Ltd, 18 Yangshupu Road, Shanghai, 200082, China. Tel: +86 (21) 6329 0660. Fax: +86 (21) 6321 7936. Email: contact@portshanghai.com.cn Web: www.portshanghai.com.cn

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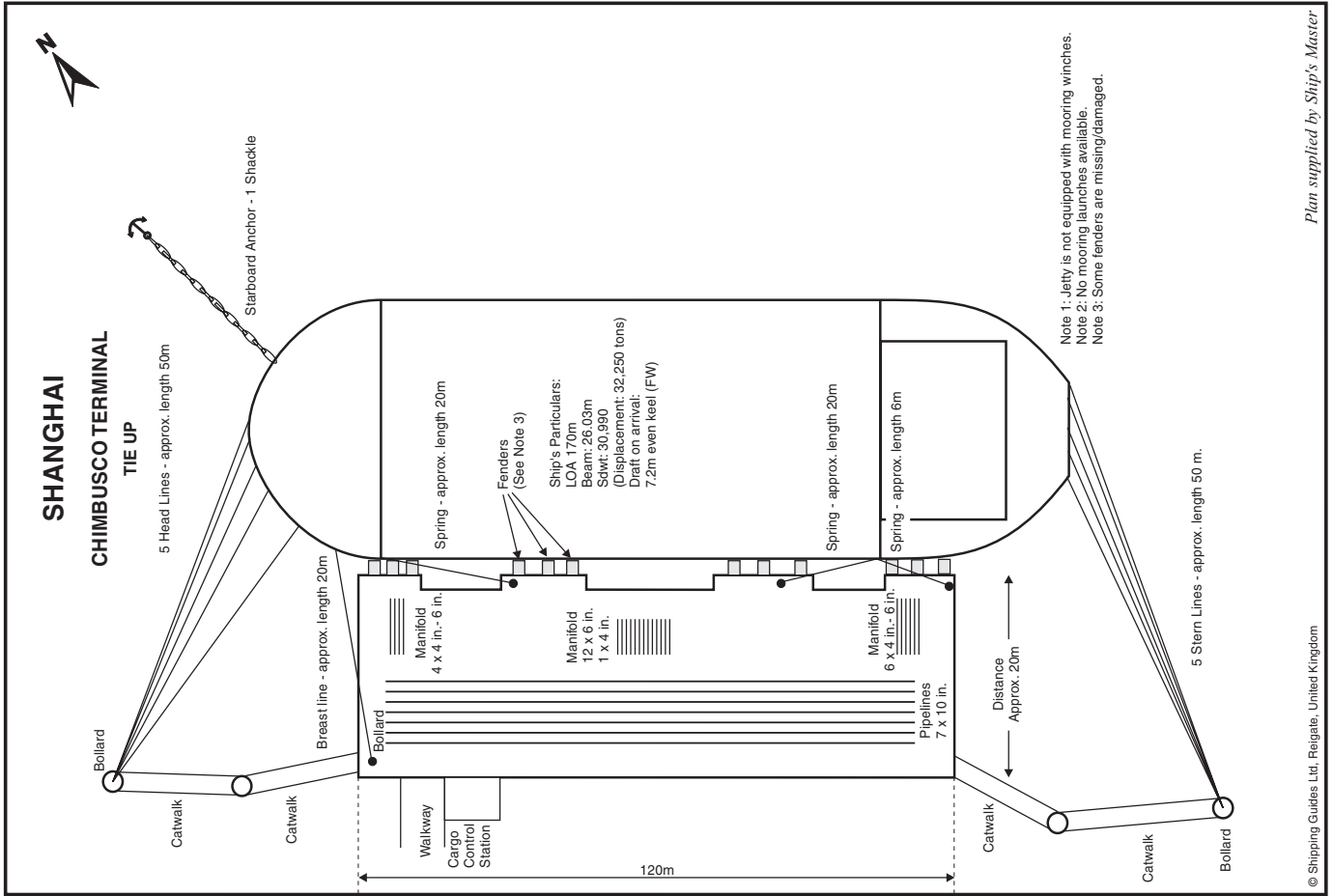
Layout



Plan Supplied by Ship's Master

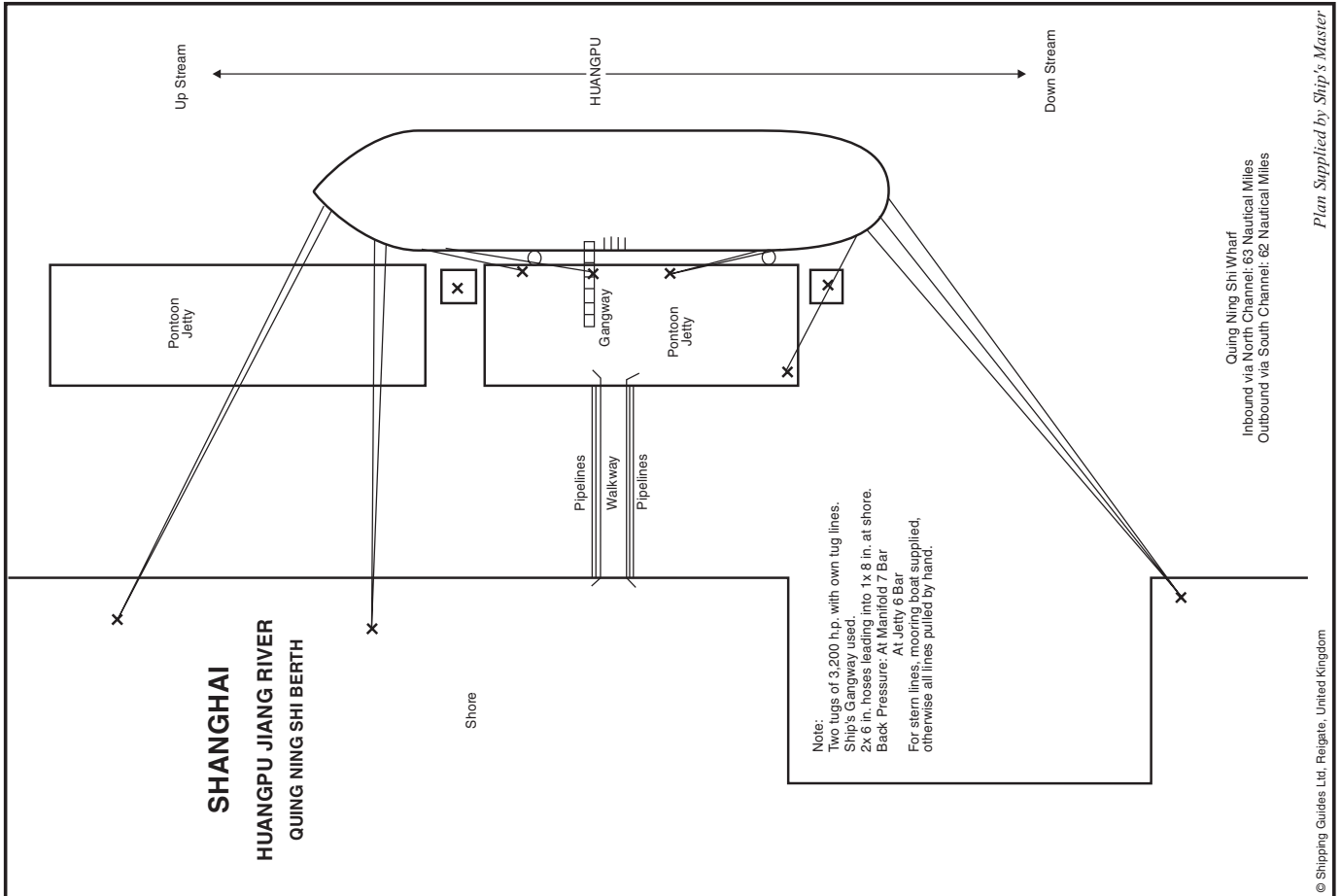
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Huangpu Jiang River



Chimbusco Terminal

Plan supplied by Ship's Master



Huangpu Jiang River

Plan supplied by Ship's Master