

# Port of Liverpool



# PILOTAGE INFORMATION FOR PILOTAGE EXEMPTION CERTIFICATES



# PILOTAGE INFORMATION FOR PILOTAGE **EXEMPTION CERTIFICATES**

- 1. Examination Criteria
- 2. Buoys in Liverpool Bay and River Mersey
  - information in Liverpool Tide Table
- 3. Mersey Channel Collision Rules
- 4. Courses and Distances
- 5. Prohibited Anchorages
- 6. Liverpool Traffic
- Tidal Sets at Lock Entrances and Cammell Laird 7.
- Garston 8.
- 9. Check-ride Assessment Form
- 10. PEC Application Form

The following documents also included in this pack can be retrieved from The Mersey Docks and Harbour Website: -

- **Pilotage Directions**
- **Navigation Guidelines**
- **General Directions**
- **Notice to Mariners**

# **EXAMINATION COMMITTEE FOR PILOTAGE EXEMPTION CERTIFICATES**

The three members of the Committee are the Chairman, Hydrographic Manager and a First Class Authorised Pilot.

# Chairman

- General Directions. 1.
- 2. Mersey Channel Collision Rules.
- 3. The Prohibited Anchorages
- Navigational Marks in Channel and River 4.
- Shore Based Aids 5.

# **Hydrographic Manager**

- 1. Depths and character of soundings in Sea Channels and River
- 2. Depths of water at Dock Entrances

# **First Class Pilot**

- 1. Tidal sets and procedures for docking at all Dock Entrances and Stages in the River
- 2. Awareness of other Traffic Requirements
- 3. Courses and distances in Channel and River
- 4. The Rise and Set of tides in the Main Channel

# **EXAMINATION OF MASTER AND MATES FOR PILOTAGE** EXEMPTION CERTIFICATES FOR THE PORT OF LIVERPOOL

- 1. No certificate shall be granted unless the Master or First Mate shall:-
- have first satisfied the Company in examination that he has the skill, experience, local knowledge and knowledge of the English Language, sufficient for the purpose of piloting of the vessel, to which the certificate is to relate within the Port or part thereof:
- b) hold a valid Certificate of Competency for the class of vessel to which the Certificate relates:
- c) as a bona fide Master or First Mate of a vessel of substantially the same class as that to which the certificate is to relate, have performed not less than 36 trips (18 in, 18 out), or in respect of any vessel of 95m or less in length that does not carry Dangerous Goods and/or Harmful Substances in bulk 20 trips (10 in, 10 out), at least one such trip being undertaken in darkness, to or from the Port from or to a place outside the Port, within the period of twelve months immediately preceding the application for a Certificate and during each of such trips the applicant has been on watch on the bridge of such vessel; and
- d) prior to a check ride, attend the Marine department at the Maritime Centre, Seaforth, to inspect the latest survey charts.
- 2. A candidate for examination for a Pilotage Exemption Certificate must have in his/her possession:
- a) a current Liverpool Bay Chart
- b) a current River Mersey Chart
- c) a current copy of the General Directions; and
- d) a copy of the Mersey Channel Collision Rules.
- 3. A candidate will be examined in the following subjects and will be required to have a thorough knowledge of:
- a) the procedures for following the General Directions and VHF communications.
- b) the Mersey Collision Rules.
- c) the River Entrances at Gladstone, Langton, Alfred, Garston, Eastham and Cammell Lairds.
- d) all the Stages within the River
- e) the courses and distances between any two places in the Sea Channels and the River.
- f) the rise and fall of the Tides.
- g) the depth and character of soundings in the Sea Channels and River.

- h) the prohibited anchorages and suitable alternatives.
- i) all Shoal areas and other dangers.
- J) the characteristics of all the Buoys, Lights, Marks and Fog Signals (information contained in Tide Table), and
- k) reduction to soundings in the Sea Channels and River, the depth of water on the dock sills and the general use of the Tide Reduction Tables.
- 4. The above examination criteria will be tailored to the Candidates area of operation, which will be entered on his/her Pilotage Exemption certificate.

# The Mersey Docks Group

# Mersey Channel COLLISION RULES

RULES MADE BY ORDER IN COUNCIL OF HER MAJESTY THE QUEEN AT THE COURT AT BUCKINGHAM PALACE THE 20TH DECEMBER 1978 (a) AND AMENDED ON 1ST JUNE 1983 (b) PURSUANT TO THE "MERCHANT SHIPPING ACT, 1894", SECTION 421, SUB-SECTION (2), AND THE "MERSEY CHANNELS ACT, 1897", CONCERNING THE LIGHTS OR SIGNALS TO BE CARRIED, AND CONCERNING THE STEPS FOR AVOIDING COLLISION TO BE TAKEN, BY VESSELS NAVIGATING THE RIVER MERSEY AND THE SEA CHANNELS OR APPROACHES THERETO.

<sup>(</sup>a) S.I. 1978/1914. (b) S.I. 1983/770.

# Mersey Channel COLLISIÓN RULES

# PRELIMINARY

In these Rules, except where the context otherwise requires -

# "Collision Regulations" means;

The Merchant Shipping (Distress Signals and Prevention of Collision) Regulations 1996 (a) and the International Regulations for Preventing Collisions at Sea 1972 set out in Merchant Shipping Notice No. M1642 (COLREG1).

and the several words and expressions to which meanings are assigned by the Collision Regulations shall have the same meanings as in those Regulations.

- 2. Every vessel navigating in any part of the River Mersey or in the sea channels or approaches thereto between the Rock Lighthouse and the furthest point seawards to which such sea channels or approaches respectively are for the time being buoyed on both side shall comply with -
  - (a) these Rules, and
  - (b) the Collision Regulations, except in so far as compliance with these Rules requires otherwise.

# RULES CONCERNING MARKS, LIGHTS, ETC.

- The lights prescribed by these Rules shall be exhibited from sunset to sunrise, from sunrise to sunset in restricted visibility and in all other circumstances when it is deemed necessary and during such times no other lights shall be exhibited, except such lights as cannot be mistaken for the lights specified in these Rules or do not impair their visibility or distinctive character, or interfere with the keeping of a proper look-out.
  - (2) The marks and shapes prescribed by these Rules shall be exhibited from sunrise to sunset.
  - (3) The lights and shapes specified in these Rules shall comply with the provisions of the Collision Regulations.
- 4. A power driven vessel when being towed, shall, if under power, notwithstanding anything contained in Rule 24 (e) of the Collision Regulations, exhibit the lights prescribed by Rule 23 of the Collision Regulations:

Provided that a power driven floating crane shall not be required under this paragraph to exhibit the light prescribed by Rule 23 (a) (iii) of the Collision Regulations.

- A power driven floating crane when under way shall exhibit the lights prescribed by Rule 23 (a) (i) (iii) and (iv) of the Collision Regulations, but shall not be required to carry the light prescribed by Rule 23 (a) (ii) thereof.
- 6. A vessel of 20 metres or over in length, when at anchor, shall, in addition to the requirements of Rule 30 of the Collision Regulations, carry aft where it can best be seen one ball at a height of 4.5 metres lower than the forward ball.
- 7. (1) A vessel, when lying at, or attached to another vessel lying at, any Jetty or Stage to the northward of a straight line drawn from the south end of the Liverpool Landing Stage to the south end of the Woodside Ferry Stage, shall exhibit the lights prescribed by Rule 23 of the Collision Regulations or, as

the case may be, Rule 25 thereof:

Provided that a power driven floating crane shall not be required under this paragraph to exhibit the light prescribed by Rule 23 (a) (ii) of the Collision Regulations.

- (2) A vessel, when lying at any Jetty or Stage to the southward of the said line, or when moored head and stern to buoys permanently fixed, shall exhibit where they can best be seen one white all round light forward and at or near the stern a second white all round light. The forward light shall be 4.5 metres above the after light provided that a vessel under 50 metres in length may carry one such light only, fixed where it can best be seen.
- 8. A vessel exceeding 200 metres in length when under way or at anchor shall, in addition to the lights prescribed by Rule 23 or Rule 30 of the Collision Regulations, exhibit where they can best be seen three red all round lights spaced vertically two metres apart.
- 9. A vessel wishing to warn ships of an unmarked underwater obstruction shall display the lights or shapes provided for in Rule 27 (b) and (d) of the Collision Regulations; additionally, such vessel may use her searchlight to warn on-coming ships as provided for in Rule 36 of the Collision Regulations.

# STEERING AND SAILING RULES

- 10. For the purpose of Rule 9 of the Collision Regulations (navigation in narrow channels), the fairways of the River Mersey and the sea channels or approaches thereto between the Rock Lighthouse and the furthest point seawards to which such sea channels or approaches respectively are for the time being buoyed on both sides shall be taken to be narrow channels.
- 11. A vessel shall not navigate to come into or leave the Main (i.e. The Queens and Crosby) Channel seaward of a line drawn on a true bearing of 071 degrees from the Rock Lighthouse (i.e. a line drawn from the Rock Lighthouse to the west pierhead of the Gladstone River Entrance) at such a time or in such a manner as to hamper traffic passing up and down the Main Channel.

(a) S.I. 1996/75

**b)** 1979 c.39

(c) S.I. 1983/768

(d) 1894 c.60

(e) 1982 c.16

12. A power driven vessel under way, when about to turn round, i.e. alter her course more than 12 points (135 degrees), shall indicate the same by four short and rapid blasts on the whistle followed, after a short interval, if turning with her head to starboard by one short blast or, if turning with her head to port by two short blasts. The giving of the signal so prescribed shall not relieve a vessel of her obligations under the Collision Regulations or these Rules:

Provided that a vessel of less than 50 metres in length shall not be required to give the signal so prescribed unless she is towing one or more vessels and the distance from her stem to the stern of the last vessel towed is 50 metres or more.

# LAUNCHING OF VESSELS

- 13. (1) A shipbuilder or other person (hereinafter call "the shipbuilder") shall not launch a vessel into any part of the River Mersey to the northward of a straight line, drawn from the Eastham Ferry Slip to the north west corner of the North Dock at Garston, unless the requirements of this Rule have been complied with.
  - (2) At least three clear days before the date fixed for the launch the shipbuilder shall, in addition to giving any other notice required by law, give to the Secretary of The Mersey Docks and Harbour Company at the Maritime Centre, Liverpool, notice in writing of the place, day and hour proposed for the launch.
  - (3) Upon receiving such notice The Mersey Docks and Harbour Company shall publish within the Port of Liverpool a notice to mariners, giving particulars of the place, day and hour proposed for the launch, and prescribing the area, which is to be kept clear as provided by these Rules (hereinafter called the "launching area"). The launching area shall be bounded on the shore side by the line of the shore

Manager to the said Company may be necessary, to the southward and another point 300 metres to the northward, of the river end of the launchway, and on the remaining three sides by straight lines so drawn as to include an area of a size sufficient, in the opinion of the said Marine Surveyor having regard to the vessel's tonnage and to other relevant circumstances, in the interests of safety of vessels using the river.

- (4) At least three hours before the time proposed for the launch the shipbuilder shall mark the launching area by anchoring at each angle thereof in the river a mark boat suitable dressed with flags in rainbow fashion from stem to stem.
- (5) Ten minutes before the time proposed for the launch the shipbuilder shall cause each mark boat to exhibit a red flag measuring 2 metres long by 1.5 metres board and inscribed with the word "LAUNCH" (hereinafter called a "launching flag") in large white letters thereon, at such a height being not less than 6 metres above the hull of the mark boat, as to be clear of and to fly well above and distinct from all other flags thereon.
- 14. If the vessel is not launched within thirty minutes, of the launching flags being first exhibited the shipbuilder shall take steps to prevent the vessel being launched upon that day.
- 15. (1) The shipbuilder shall cause each mark boat to continue to exhibit the launching flag until the vessel has been launched and is under control, or, if the vessel is not launched, until there remains no risk of the vessel coming off the launchway of her own accord.
  - (2) As soon as the vessel is under control or there remains no risk of the vessel coming off the launchway, the shipbuilder shall cause the mark boats to be withdrawn.
- 16. The shipbuilder shall take means to bring up the vessel which has been launched and to have her under control within the launching area.
- 17. (1) A vessel anchored or moored, prior to the day of the launch, within the launching area, or in such a position as to swing into it, shall be removed not later than 1 a.m. on the day of the launch.
  - (2) A vessel shall not on the day of the launch, except for the purpose in connection with the launch, be anchored or moored within the launching area, or in such a position as to swing into it, until after the mark boats have been withdrawn.
  - (3) A vessel shall not, except for the purpose of leaving the launching area or for a purpose in connection with the launch, be navigated within the launching area whilst the launching flags are exhibited.

Printing by order of THE MERSEY DOCKS AND HARBOUR COMPANY, W. J. Bowley Secretary

LIVERPOOL JUNE 2002

# **Courses and Distances**

The candidate will be expected to give examples of practical working courses and distances in either inbound or outbound directions in lieu of every buoy to bouy course and distance.

Examples are provided overleaf:

# COURSES AND DISTANCES

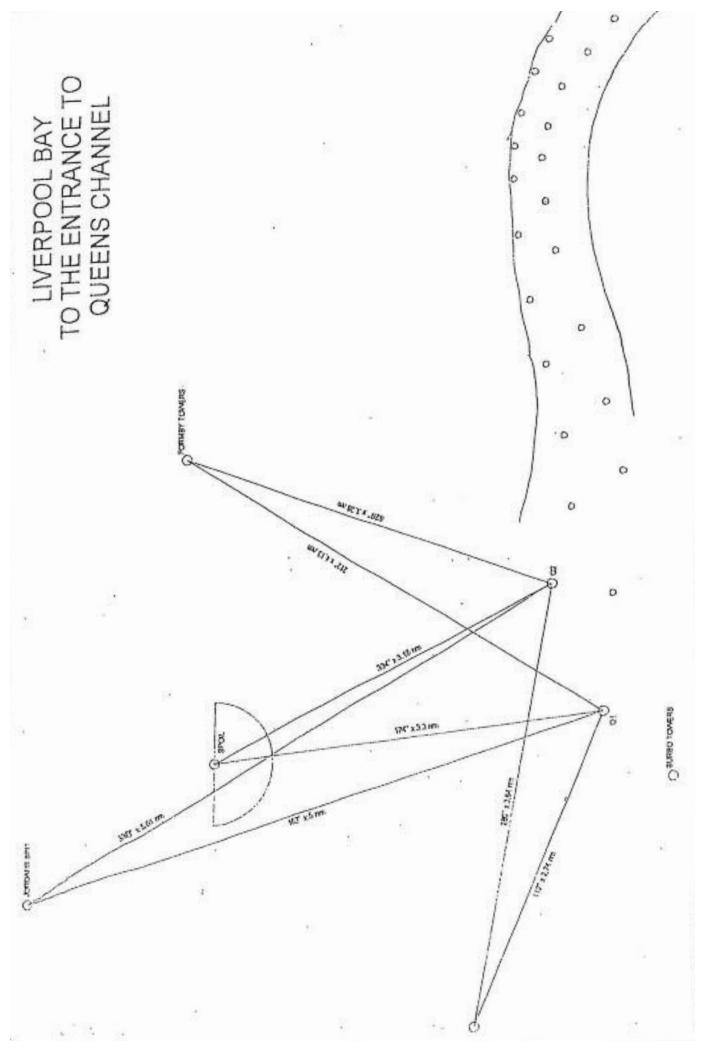
# CHANNEL

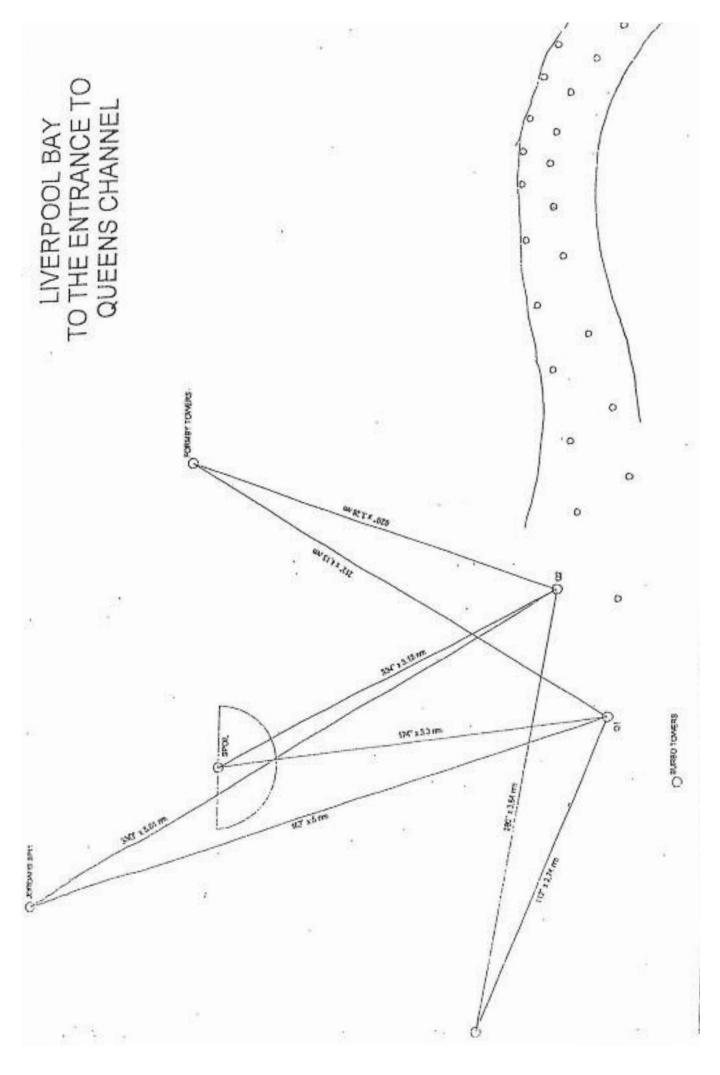
|                  | INWARD |           |
|------------------|--------|-----------|
| COURSES          |        |           |
| 1/2 Mile sth Bar | Q1     | 096 x 2.6 |
| Q1               | Q5     | 092 x 2.0 |
| Q5               | Q11    | 072 x 1.9 |
| Q11              | C1     | 078 x 0.4 |
| C1               | C3     | 085 x 0.4 |
| C3               | C5     | 096 x 0.3 |
| C5               | C7     | 115 x 0.4 |
| C7               | C11    | 130 x 0.8 |
| C11              | C15    | 144 x 0.8 |
| C15              | C19    | 152 x 1.0 |
| C19              | Burbo  | 146 x 0.8 |
| Burbo            | C21    | 138 x 0.8 |
| C21              | Brazil | 140 x 1.5 |
| Brazil           | Tower  | 145 x 0.8 |
|                  |        |           |

| 2 - E   | OUTWARD | )         |
|---------|---------|-----------|
| COURSES | 3       |           |
| Can     | C22     | 322 x 1.2 |
| C22     | C20     | 320 x 1.0 |
| C20     | C18     | 315 x 1.0 |
| C18     | C16     | 320 x 0.6 |
| C16     | Crosby  | 335 x 2.0 |
| Crosby  | C8      | 315 x 0.9 |
| C8      | Beta    | 300 x 0.6 |
| Beta    | C2      | 285 x 0.6 |
| C2      | Q12     | 265 x 0.6 |
| Q12     | Formby  | 255 x 2.0 |
| Formby  | Q2      | 280 x 1.5 |
|         |         |           |
|         |         |           |

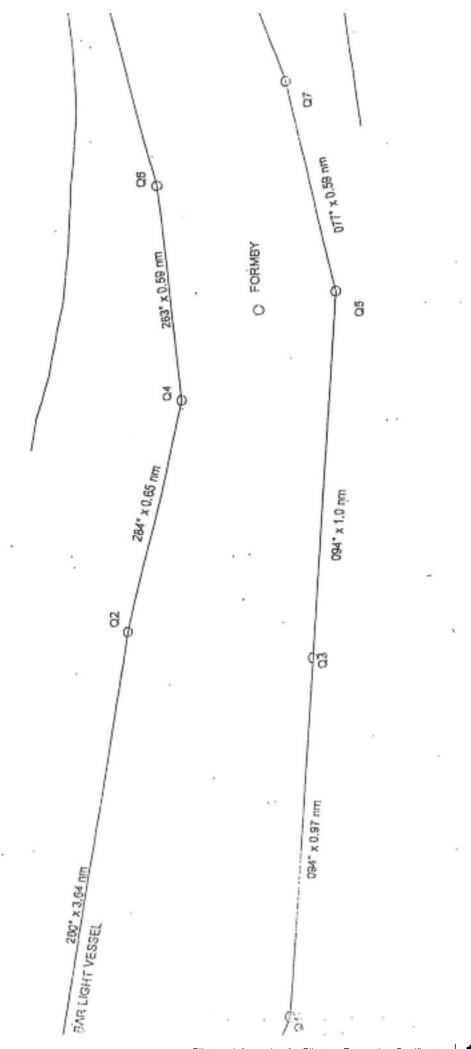
# **LANGTON - EASTHAM**

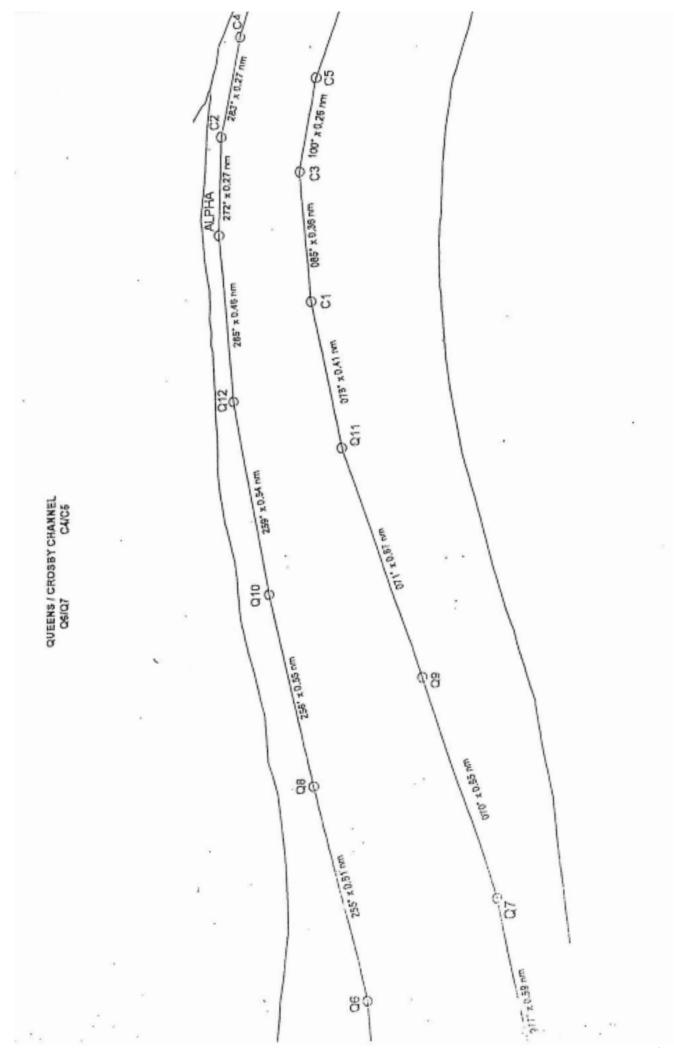
| Langton Lock | Seacombe     | 185 x 1.7 |
|--------------|--------------|-----------|
| Seacombe     | Lairds Light | 165 x 1.6 |
| Lairds Light | Bromborough  | 145 x 1.5 |
| Bromborough  | E1           | 150 x 0.5 |
| E1           | E5           | 160 x 1.1 |
| E5           | E7/6         | 165 x 0.4 |
| E6           | Lock         | 152 x 0.7 |
| E6           | Lock         | +         |
|              |              |           |

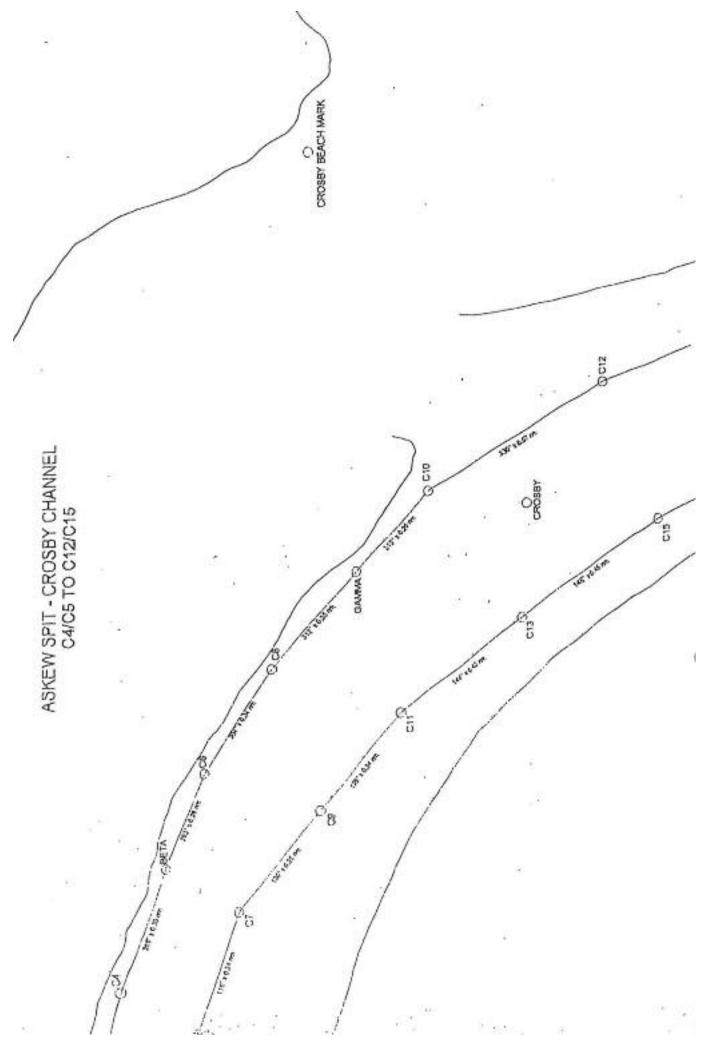


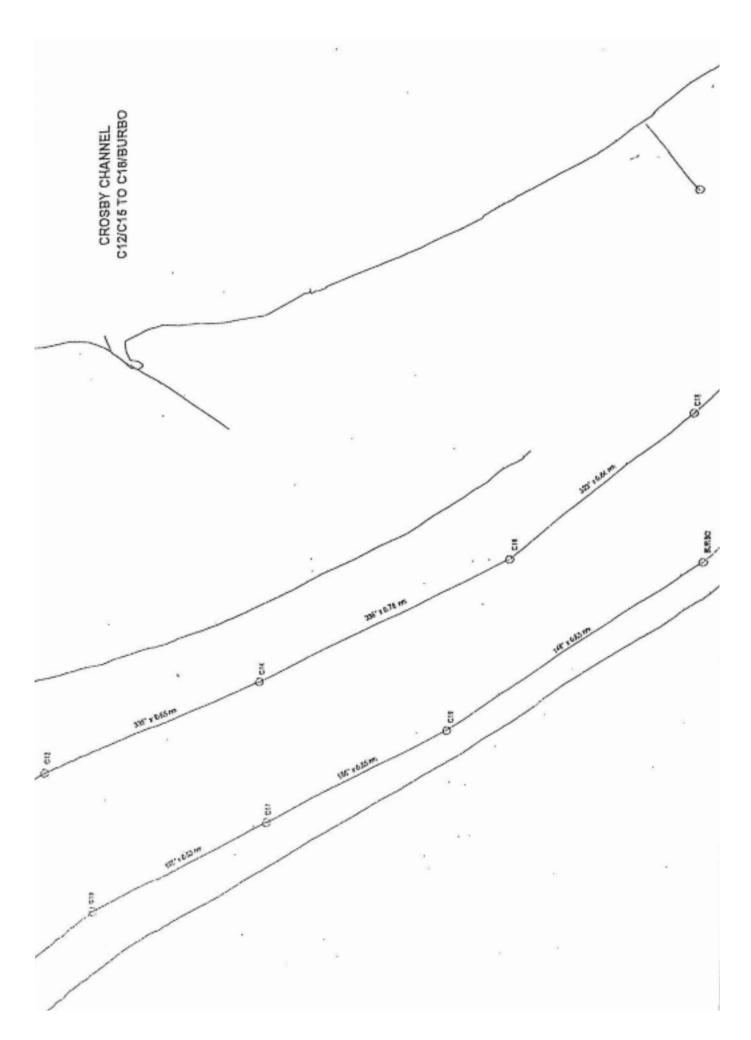


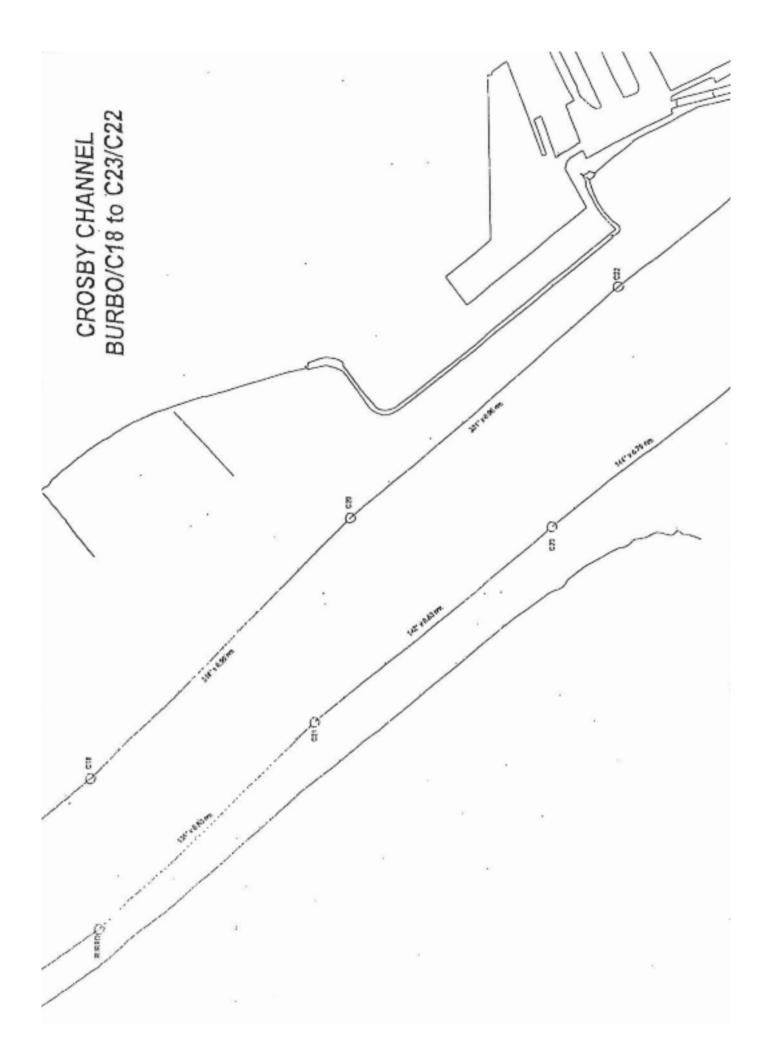
ENTRANCE TO QUEENS CHANNEL Q1/Q2 TO Q6/Q7

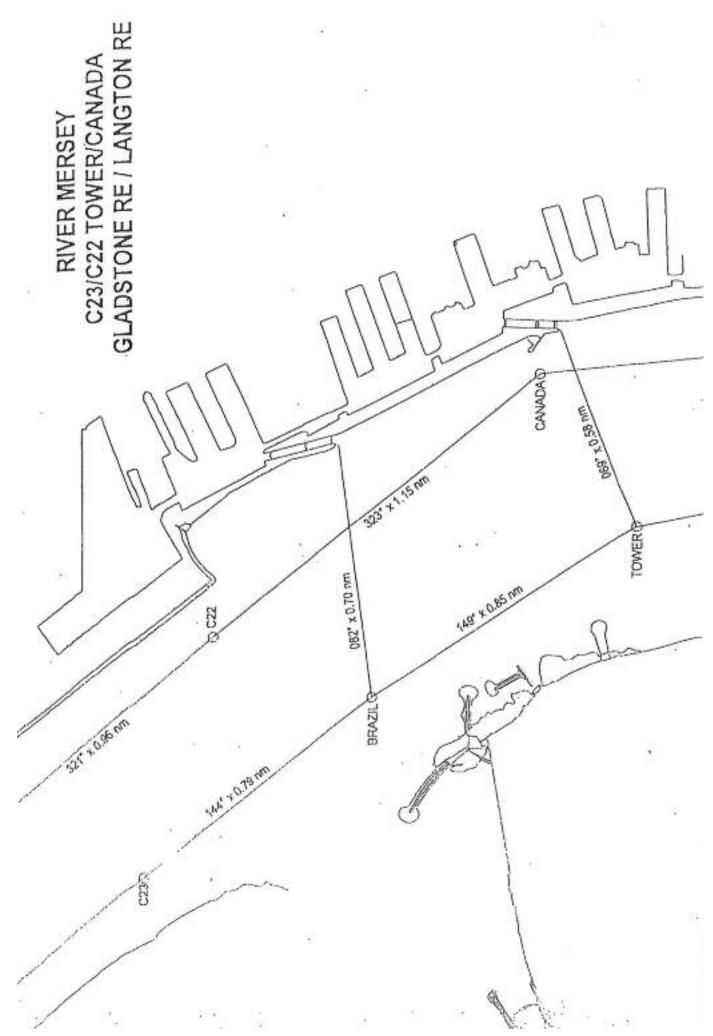


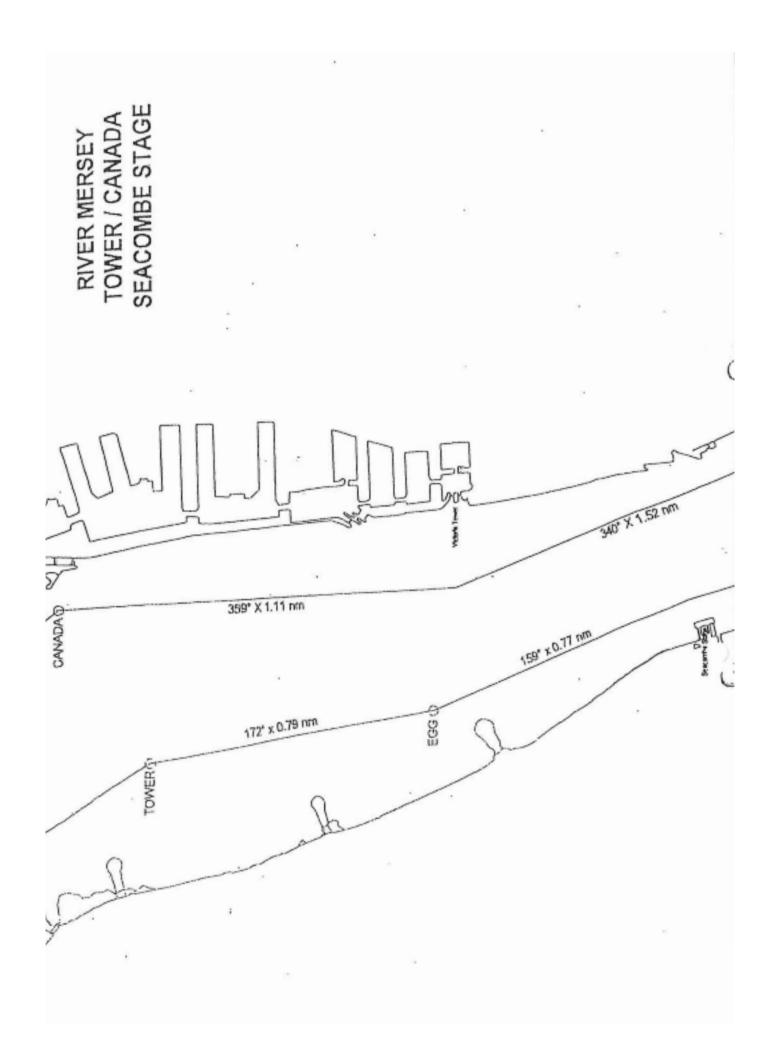


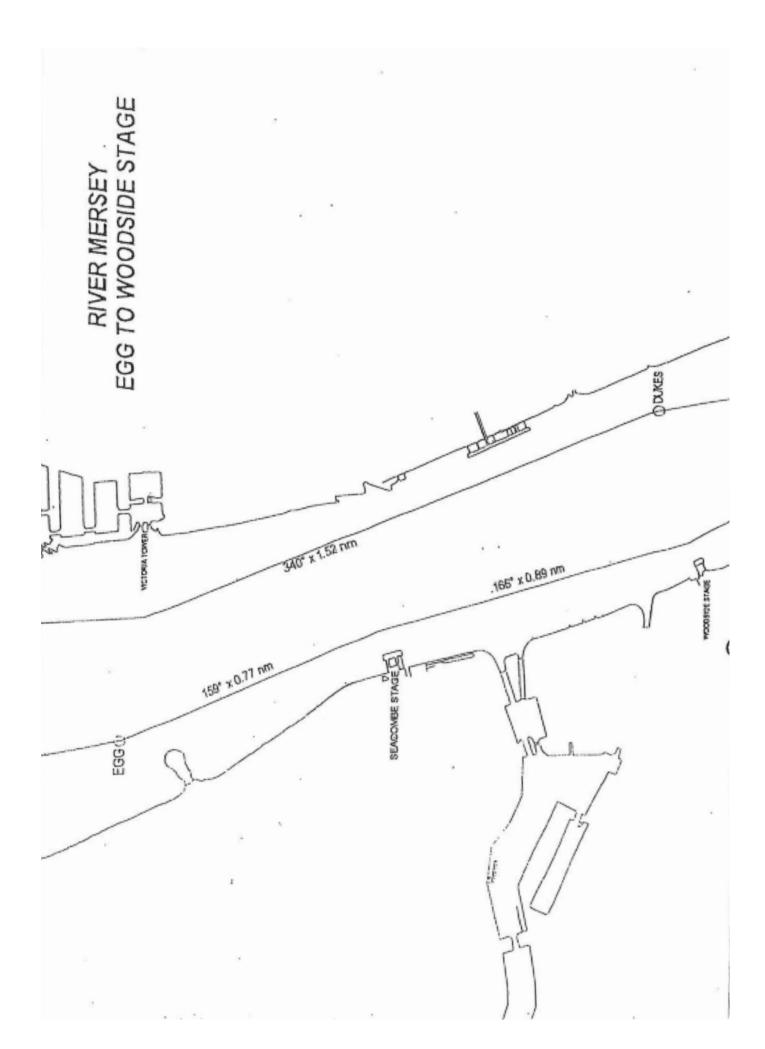


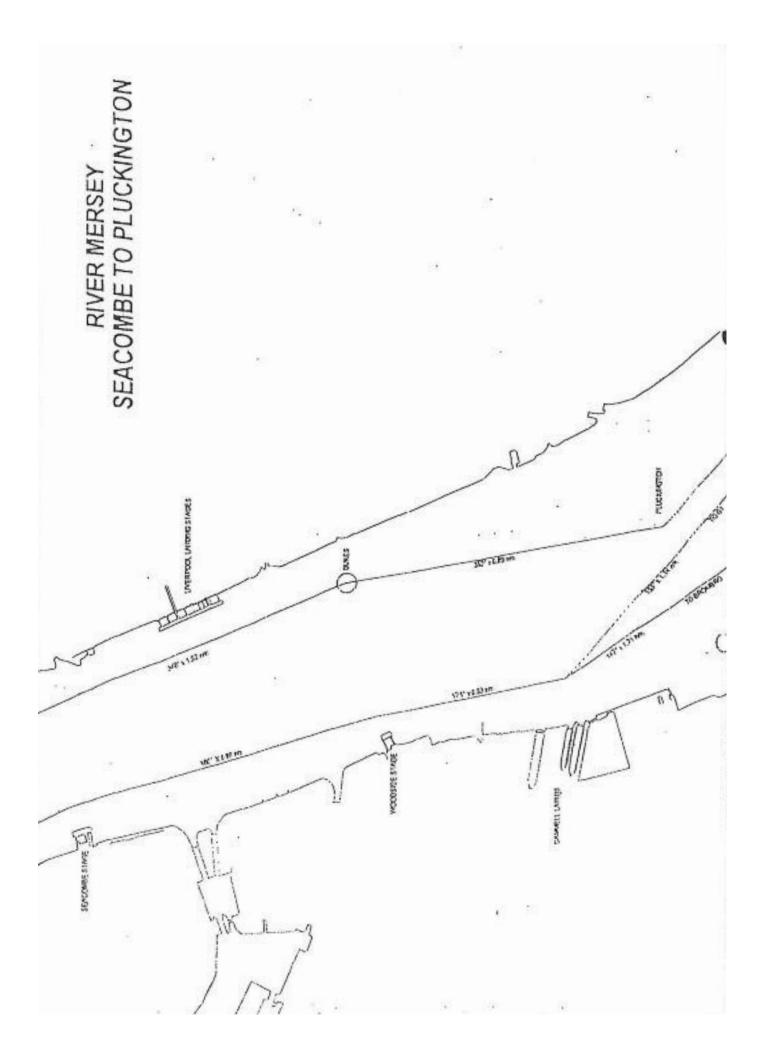


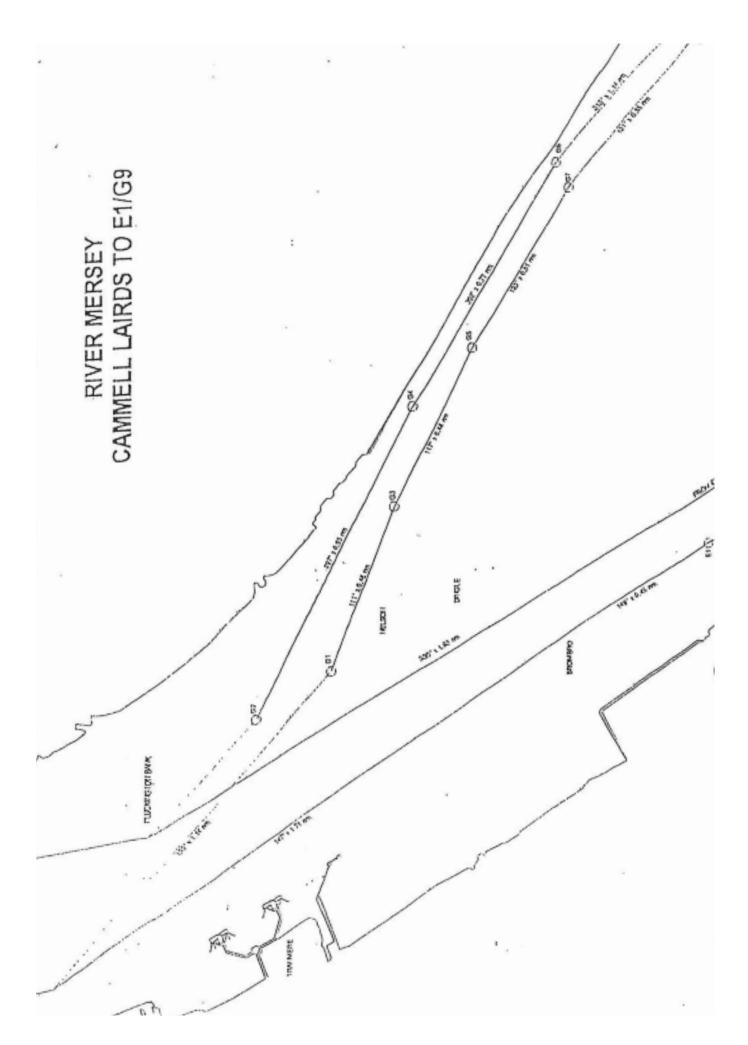


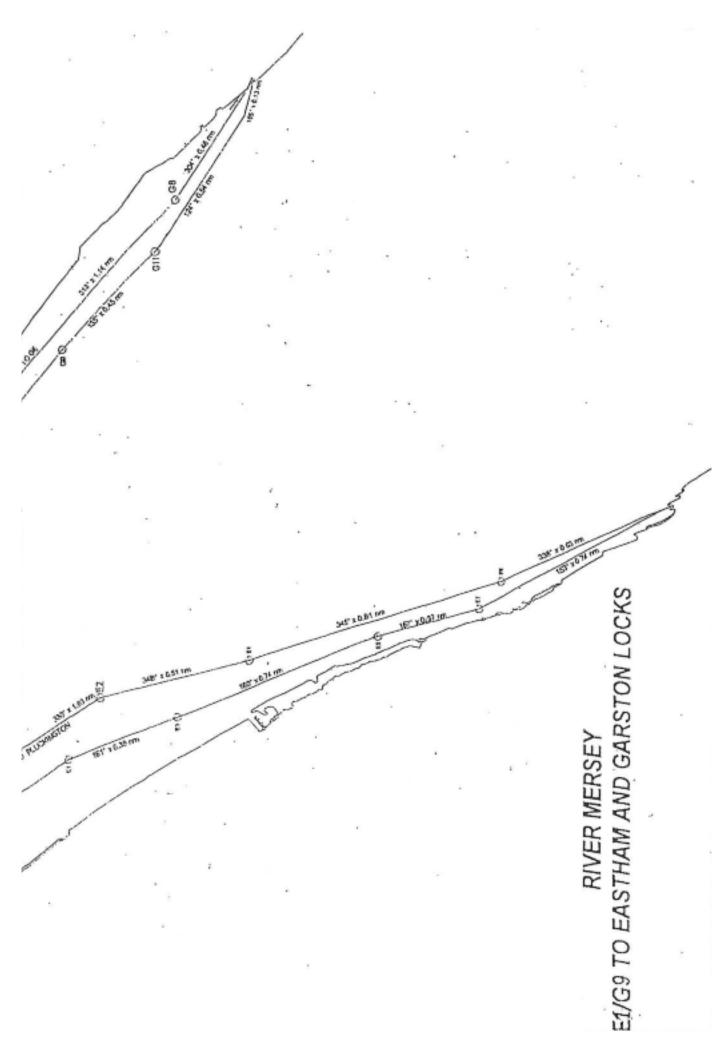












# NOTICE TO MARINERS

# No 8 -2005

# RIVER MERSEY

# PROHIBITED ANCHORAGES IN RIVER MERSEY

This Notice supersedes notices issued for the following areas

## See attached Chart

AREA No.1 River Mersey Tower Buoy- No.4 1956

AREA No.2 River Mersey between Birkenhead and Liverpool -No.8 1967

AREA No.3 River Mersey off Tranmere Oil Stages - No.14 1963

AREA No.4 River Mersey off Dingle Buoy - No. 11 1976

AREA No.5 River Mersey between Otterspool and Shodwell as per letter of 23rd September 1942.

All positions defined are in WGS84 and distances in metres.

# AREA No. 1 TOWER LIGHTED BUOY

Charted Position: Latitude 53° 26' 07.68 N

Longitude 03° 01' 28.75 W

Description:

East Cardinal Pillar buoy with "TOWER" in black letters exhibiting a Very

Quick Flash White (3) every 5 seconds.

Vessels are prohibited from anchoring, fishing or using ground tackle within a sector of 244 metres radius between the bearings of 120° and 210° from the charted position of TOWER buoy.

# AREA No. 2 Between Birkenhead and Liverpool

The prohibited anchorage is re-defined as follows: -

- a) On the north by a line from St. Paul's Church, Seacombe, in a direction 078° True, to the Seacombe Ferry Clock Tower, and thence in the same direction across the river.
- b) On the south by a line drawn from the Port of Liverpool Building (Dome), Liverpool, in a direction 247° True to the south end of the Liverpool Landing Stage, thence in the same direction across the river.
- On the west by a line drawn from the three fixed green lights on the north end of Twelve Quays Landing Stage, to Seacombe Ferry Landing Stage, terminating at the intersections with the northern and southern limits as defined in a) and b)

d) On the east by a line drawn parallel to and at a distance of 91.4 metres from the Liverpool Landing Stage, terminating at the intersections of the northern and southern limits as defined in (a) and (b).

Vessels are prohibited from anchoring, fishing, kedging and dropping up on the tide with the anchor atrip in the area bounded by the imaginary lines

# AREA No. 3 - Off Tranmere Oil Stages

Vessels are prohibited from anchoring, kedging or dropping up on the tide with anchor atrip or fishing enclosed by the imaginary lines joining the following points:-

- (a) 042° distance 244 metres from the south end of the south stage of the Tranmere Oil installation.
- (b) 042° distance 640 metres from the south end of the south stage of Tranmere Oil installation.
- (c) 079° distance, 640 metres from the South Mooring Dolphin of the Rock Ferry Tanker Cleaning Berth.
- (d) 079° distance 244 metres from the South Mooring Dolphin of the Rock Ferry Tanker Cleaning Berth.

# AREA No.4 Off DINGLE LIGHTED BUOY

Charted Position: Latitude 53°22' 08.90 N

Longitude 02° 58' 33.50 W

Description:

Yellow Pillar buoy with "DINGLE" in black letters. Exhibiting a yellow light

group flashing 4 every 12 seconds. Radar reflector.

DINGLE buoy marks the south-western limit of the area in which vessels are prohibited from anchoring, fishing and kedging. The prohibited anchorage is defined as follows: From a position 10 metres north of the south corner of the river wall at a position approximately Latitude 53°22.47' N, 02° 58.53' W across the river in the direction of 217° distance 850 metres. Then 127° distance 200 metres through the charted position of Dingle buoy. From the southern limit towards a point on Dingle foreshore 037° distance 850 metres.

# AREA No.5 - Otterspool to Shodwell

LIMITS OF AREA

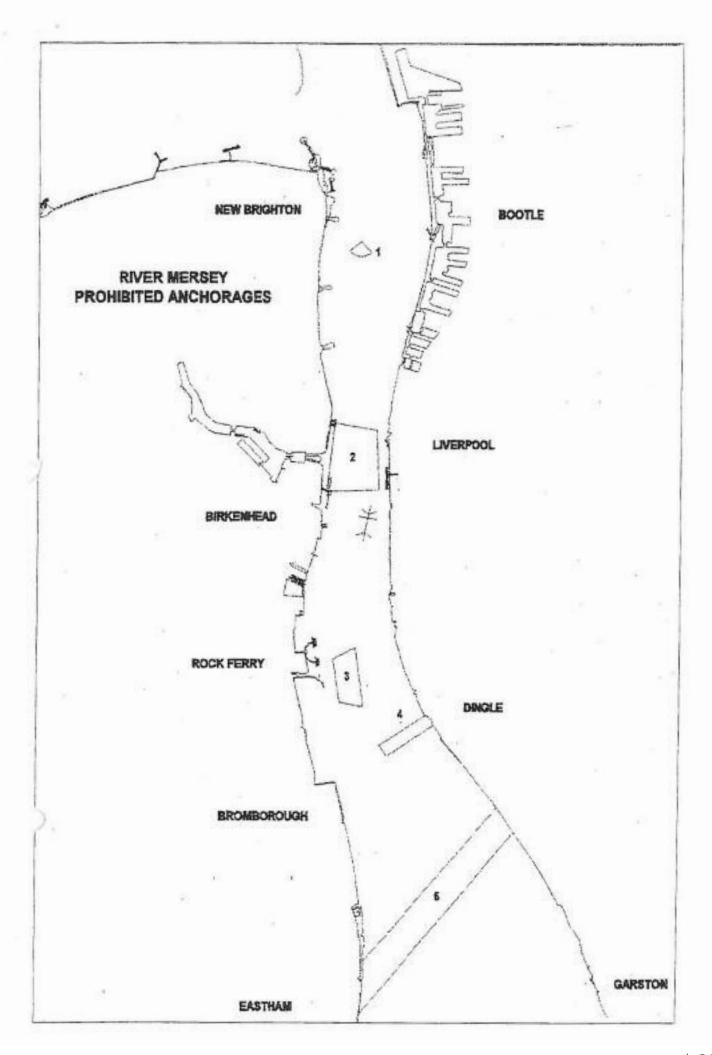
- (a) North-western limit from a position 255° distance 1045 metres from St. Anne's Church, Latitude 53°22.17' North, Longitude 002° 55.82' west across the River Mersey in a direction 199° to the Cheshire shore at Shodwell.
- (b) South-eastern limit From a position 229° distance 830 metres from St. Anne's Church across the river in a direction 199 of to the Cheshire shore at Job's Pier.

Dredging and anchoring within this area is prohibited.

All positions defined are in WGS 84 and distances in metres.

CAPTAIN S. F. GALLIMORE HARBOUR MASTER

14<sup>TH</sup> JUNE 2005



# NOTICE TO MARINERS

NO. 11 - 2005

# RIVER MERSEY

# CORRECTION TO NOTICE TO MARINERS NO. 8

This notice should be read in conjunction with the River Mersey Notice to Mariners No. 8, 14th June 2005 and the following corrections applied.

# AREA No. 2 Between Birkenhead and Liverpool

C) On the west by a line drawn from the three fixed green lights on the north-end of Twelve Quays Landing Stage,

# Should read:

C) On the west by a line drawn from the inverted triangle, three fixed green lights on the North Dolphin of Twelve Quays Ro Ro Terminal,

# AREA No.4 Off Dingle Lighted Buoy

From a position 10 metres north of the south corner of the river wall at a position approximately Latitude 53°22.4₹' N, 02° 58.53' W across the river in the direction of 217° distance 850 metres.

# Should read:

From a position 10 metres north of the south corner of the river wall at a position approximately Latitude 53°22.55' N, 02° 58.17' W across the river in the direction of 217° distance 850 metres.

CAPT. S. F. GALLIMORE HARBOUR MASTER

21 JULY 2005

# LIVERPOOL TRAFFIC

| HOURS<br>BEFORE H.W. | INBOUND TRAFFIC  |
|----------------------|--|
| 6                    |  |
| 5                    |  |
| 4                    | ACL & LARGE CONTAINER VESSEL @ BAR ACL & LARGE CONTAINER VESSEL @ BAR LARGER ALFRED VESSELS @ BAR LARGER ALFRED VESSELS @ BAR          |
| 3                    | ACL & LARGE CONTAINER VESSEL DOCKING @ GLADSTONE<br>ACL & LARGE CONTAINER VESSEL DOCKING @ GLADSTONE                                   |
| 2                    | EASTHAM/GARSTON TRAFFIC @ BAR, CAMMELL LAIRDS VESSELS @ ROCK LIGHTHOUSE VLCCs @ BAR, EASTHAM/GARSTON TRAFFIC @ BAR VLCCs @ FORMBY      |
| 1                    | EASTHAM & GARSTON TRAFFIC @ ROCK LIGHTHOUSE<br>VLCC @ ROCK LIGHTHOUSE<br>DEEP DRAFT BULKERS DOCKING @ GLADSTONE (after ACL has sailed) |
| H.W.                 | VLCCs DOCKING @ TRANMERE   |

|      | OUTBOUND TRAFFIC   |
|------|--|
| 5    |  |
|      |  |
| 4    | VLCCs SAILING FROM TRANMERE  |
| 3    | CONTAINER VESSELS & BULKERS SAILING FROM GLADSTONE CONTAINER VESSELS & BULKERS SAILING FROM GLADSTONE CONTAINER VESSELS & BULKERS SAILING FROM GLADSTONE |
| 2    | LARGER VESSEL SAILING FROM ALFRED  |
| 1    | VLCCs SAILING FROM TRANMERE & CAMMELL LAIRDS TRAFFIC DEPARTS ACLs SAILING FROM GLADSTONE   |
| H.W. |  |

# NOTES SUPPLIED BY FIRST CLASS LIVERPOOL PILOT - MR S. WOOD

The following notes are compiled to assist candidates for restricted PEC examination. The notes are only intended as a guide and as such are merely an outline.

### Large vessels using Gladstone and Langton Locks for Liverpool North Docks 1.

# 1.1 Inward

These vessels can be expected to have a draught of between 9 and 13 metres and to commence the inward passage at a time when the pilot calculates, there will be sufficient under keel clearance to permit safe negotiation of the shoal areas east of Formby Light Float and south of Crosby Light Float.

At least one tug can be expected to assist the vessel swinging off the lock. A second and often a third can be employed to complete the docking procedure. The vessel will normally be safely tied up in the lock by High Water.

### 1.2 Outward

Large and/or deep draughted vessels can be expected to leave the locks at times when the current is least likely to hamper their entry into the river. Consistent with draught implications this may be expected to be as early as two hours before high water and as late as one hour after high water.

Departure from the locks into the river is generally executed bow first with the assistance of one tug. However, there are occasions when a stern first departure is necessary for which two tugs are usually employed. Draughts of these vessels can be similar to those in Section 1.

### 2. Large vessels using Alfred Locks for Birkenhead Docks

### 2.1 Inward

Docking times of such vessels will vary according to draught; tide heightened traffic requirements, but will be such that any such vessel will be safely moored in Alfred Basin by high water. One tug is generally employed to swing such vessels head to tide with a second and sometimes a third used to complete the docking manoeuvre. Draughts of these vessels are generally somewhat less than those in Section 1.

### 2.2 **Outward**

Large vessels will generally enter the river stern first employing two tugs at a time consistent with their draught, the tide height and other traffic requirements.

### 3. Large tankers using Tranmere Oil Terminal

# 3.1 **Inward**

Such vessels can be expected to pass the Bar Light Float at approximately 2 hours before high water and be putting out the first mooring lines shortly after high water. It is normal for such vessels to deploy two tugs on their port side, but three; four or five can be used for VLCCs. All such vessels berth starboard side to the jetty.

### 3.2 Outward

Large tankers can be expected to commence departure from Tranmere Oil Terminal at approximately 4 hours or 1½ hours before high water depending on draught, tide height and traffic requirements. The departure procedure involves swinging the vessel through approximately 1800 off the jetty for which a minimum of two tugs will be utilised.

- 4. Other than in emergencies it is unlikely that any of the above vessels will be able to significantly deviate from their planned passage once this has commenced. Speeds are likely to be relatively low, response time lengthy and manoeuvrability often ponderous.
- 5. PEC examinees must be familiar with and have accurate, practical and safe marks both by day and night for the three principal anchorages within the confines of the river. Such marks must allow the anchorage to be occupied without undue waste of space and without impeding other traffic. The anchorages are:
  - 5.1 Between Tower and Egg Buoys.
  - 5.2 The Sloyne.
  - 5.3 Middle Deep or South River.
- 6. The above notes are not intended to be comprehensive and no responsibility can be accepted by the author, Liverpool Pilotage Services Limited or Mersey Docks and Harbour Company Limited for actual operations differing, even if only slightly from those described above.

# **MEMORANDUM**

# SHIP POSITIONING OFF LIVERPOOL RIVER ENTRANCES

Vessels waiting to enter Gladstone or Langton River Entrances should stern the tide off the relevant bullnose ensuring there is sufficient room for any vessel leaving the locks to pass clear to the south.

The practice of waiting in a position well to the south of the locks is generally to be avoided since it is often difficult when leaving the lock to be certain how much searoom may be needed to execute the departing manoeuvre safely. Furthermore, the extra steaming time required to reach the lock from such a position is likely to cause unacceptable delays to the locking programme.

Adequate warning of vessels leaving the locks stern first should be promulgated and advice passed regarding the best positioning of the waiting vessel.

# **Manchester Ship Canal Lock Operations**

### 1. **Eastham**

Locking operations commence at 4 hours before High Water Liverpool and end at 4 hours after high water. As a general rule outward vessels leave the canal before high water and inward vessels enter after high water.

The canal water level is maintained at approximately that of high water of a 9.1 metre tide Liverpool. Each of the locks at Eastham is fitted with two pairs of mitre gates set to hold the canal water back and one pair set so that they can be deployed to hold the river water back when the river level equals that of the canal. These gates are referred to as the storm gates and when in operation all traffic cease.

### Queen Elizabeth II Oil Dock 1.1

Locking operations depend on sufficient water being available to Float the sliding caisson gates. Generally this is between 3 hours before high water and 31/4 hours after high water.

### **Cammell Laird fitting out Basin** 2.

Normal operations can commence when 6.6 metres of tide is available ceasing at high water. Shipping movements are possible after high water, but this should not be considered usual.

### 3. **Time of Entry and Passage of Main Channel**

The following times are given as a guideline only to vessels berthing at Tranmere Terminal and may differ according to the circumstances. A large deep-drafted tanker inward bound to Tranmere would normally pass the following points at these times viz:-

BAR at 2 hours before High Water

**FORMBY** at 1 hour 30 mins before High Water

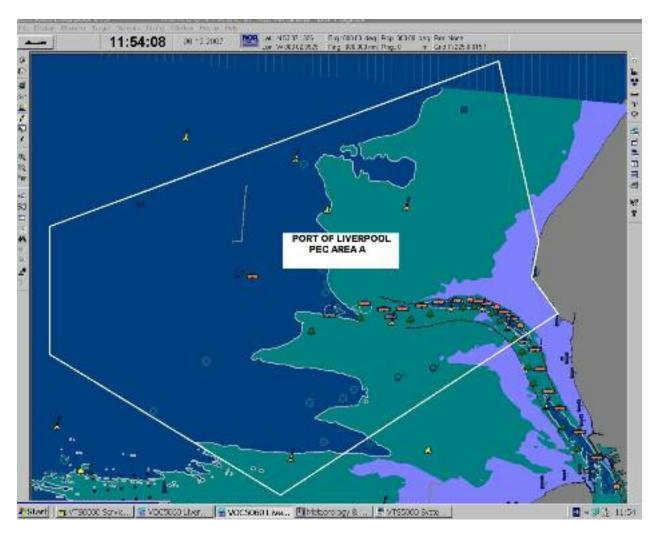
**CROSBY** at 1 hour before High Water

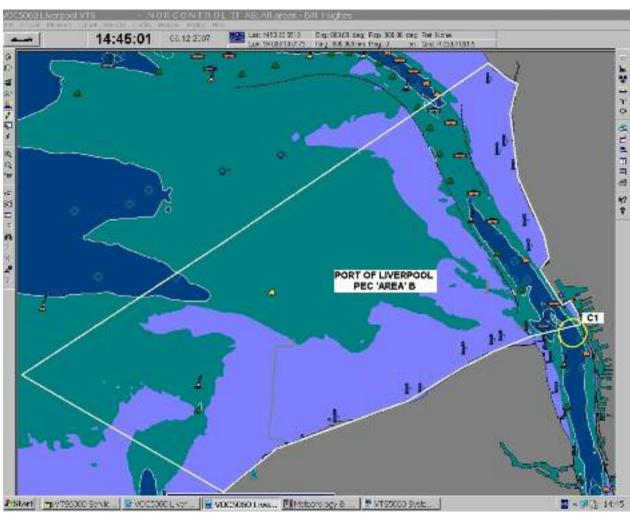
**BURBO** at 45 mins before High Water

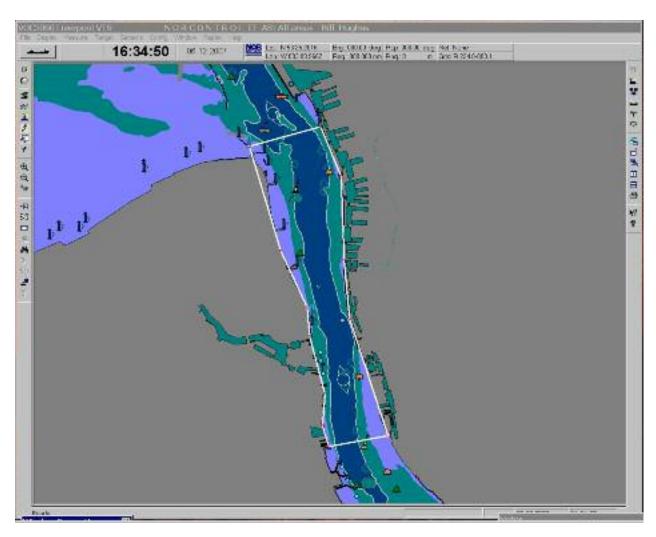
ROCK LT. at 30 mins before High Water

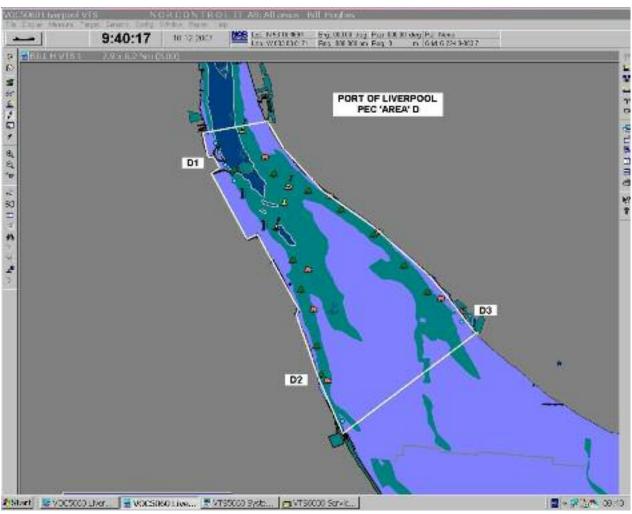
WOODSIDE at 10 mins before High Water

TRANMERE at 15 mins before High Water

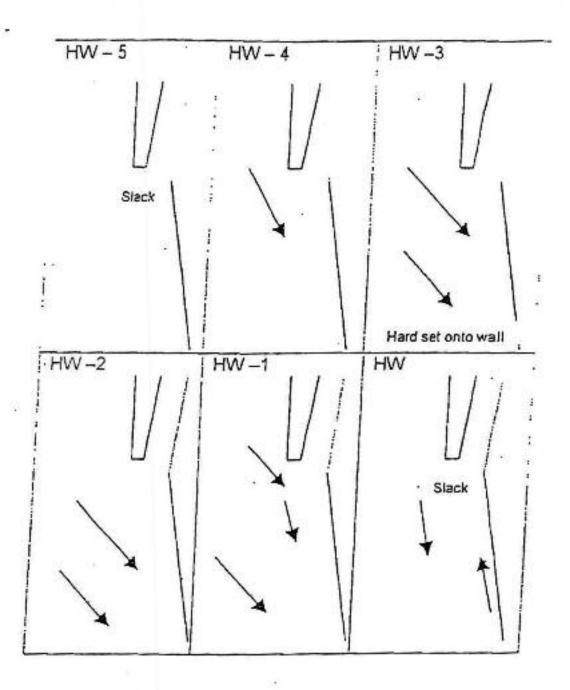






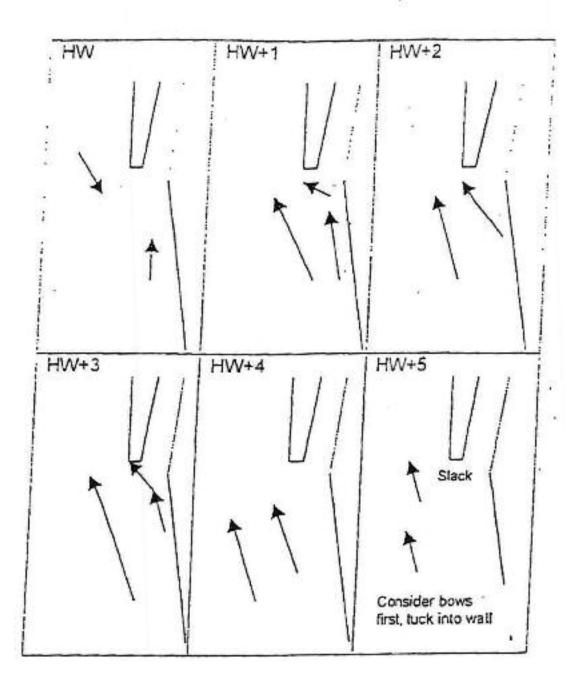


## GLADSTONE FLOOD

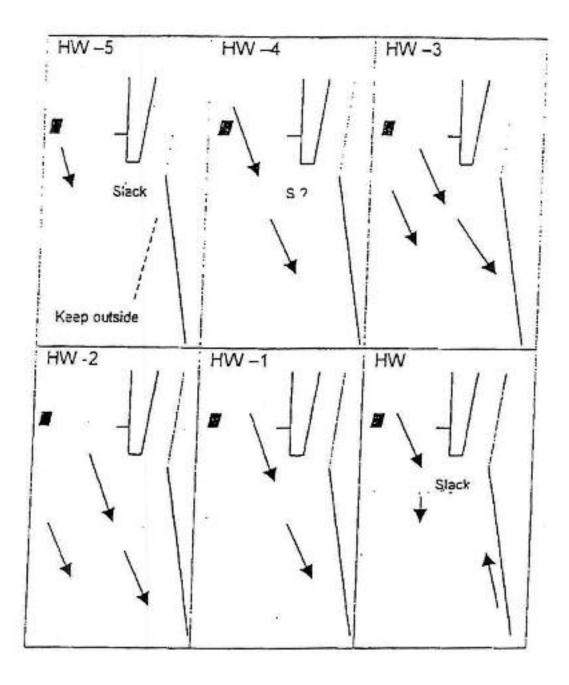


- 1. If anchored mid river vessel swings to flood HW 41/2
- 2.Strong wly winds consider swing to starboard.
- 3. Waiting HW 3 end on to C22 keeps you in main flood.
- 4. Use 2 tugs to swing > 23m

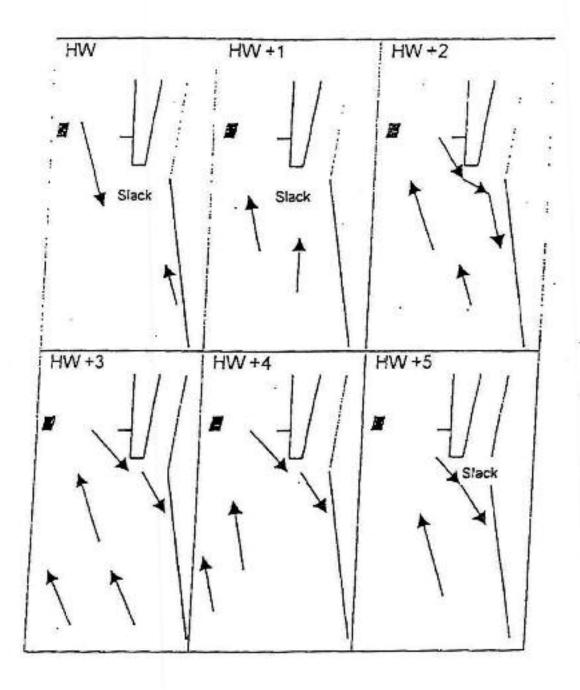
## **GLADSTONE EBB**



## LANGTON FLOOD

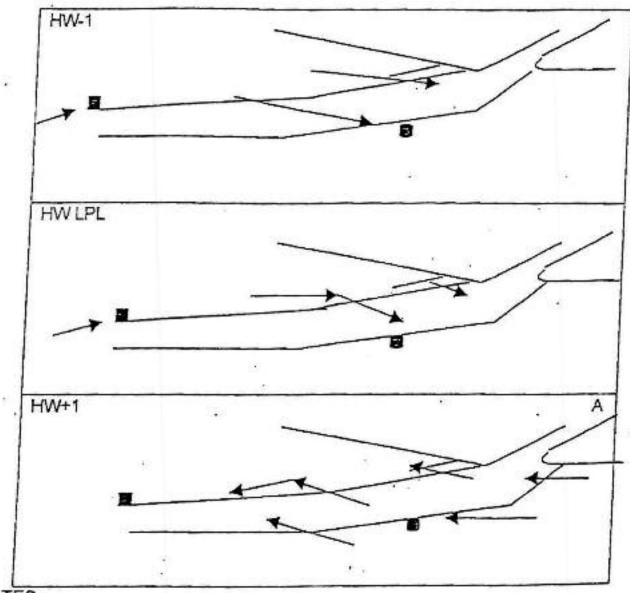


## LANGTON EBB



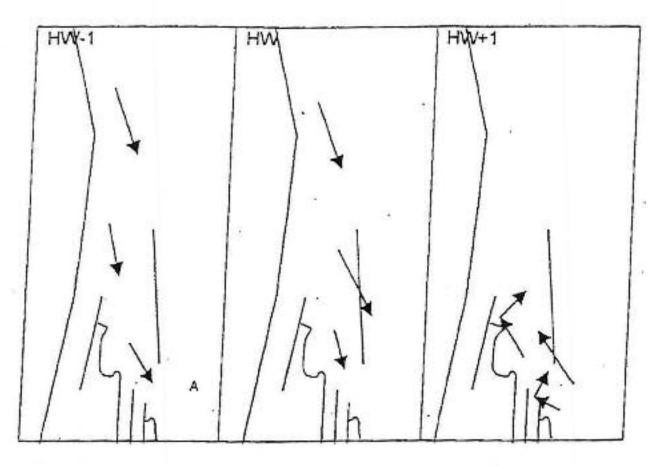
Spin limit: 100m and 6.4m to 4 hours ebb

## Approaches to Garston



- NOTES
- A = Consider locking out on w side to counteract set. > 90m consider tugs. 1.
- 2.
- > 15m beam consider tugs 3.
- > 3000t use tugs

## Approaches to Eastham



## NOTES

- 1. A = This bank covers at 3 hours to HW, prior to that virtually no tide inside the dolphins. .
- Tide turns at 40 mins ebb based on HW Liverpool. 2.
- At HW + 20/30 mins inbound for 50' expect a set off the 3.layby so order stbd headrope & sternline.

# **CAMMELL LAIRDS**

Wet Basin: Straight caisson, opens into south wall

No.7 Dry dock: Flap closing, falls into river

No.6 Dry dock: Flap closing, falls into river

No.5 Dry dock: Curved caisson, opens into north wall

### Saturday 17th January 1998

HW Liverpool 1340 hours

Observations:

At 3 hours to HW, i.e. 1040 hours, a weak flood existed at the entrance to wet basin.

From 1100 to 1117 hours the tide was slack at the entrance.

At 1117 hours, the ebb began to run and caused a flow in towards the entrance of No. 7 dry dock.

At 1130 hours, from the entrance at No. 6 dry dock, the ebb was running straight down river, parallel to the dock entrance.

At 1138 hours, from the entrance at No. 5 dry dock, the ebb was running stronger and towards the Liverpool side (2 hours to HW).



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### DIRECTIONS FOR VESSELS ENTERING THE PORT OF GARSTON.

#### TIDAL INFORMATION:

The datum of predictions for the Port of Garston is "Chart Datum", which is 4.93m below Ordnance Datum (Newlyn), which approximates to the lowest astronomical tide at Liverpool. The times and heights are predictions for Gladsone Dock, Liverpool. These predictions are computed by Proudman Oceanographic Laboratory. (Copyright Reserved) The controlling factor to entering Garston Docks is the depth in the approach channel,

however every effort is made to maintain the channel to Chart Datum, by means of regular dredging.

MHWN MHWS 9.34m above datum 7.45m above datum MLWS MLWN 2.88m

High Water GARSTON = High Water predicted at Alfred Dock + 4.00 minutes

#### ENTRANCE CHANNEL, JETTY, DOLPHIN & DOCKS:

The entrance channel to Garston Docks is marked by leading lights. The lights are mounted on lighting towers on the western guay of Stalbridge Dock, the northern-most light is mounted on the tower situated about midway along the river wall of this quay, the southern-most on the tower at the southern extremity of the quay.

These lights are fixed and red in colour, have a range of 10 miles, and when seen in line, one above the other, mark a course of 125 degrees (T). Each light has an arc of illumination of 10 degrees.

Orange fluorescent strips 3.05m x 0.3m, mounted vertically below these two lights, act as day marks to indicate the same approach.

A Jetty extends from the northern pierhead entrance along the eastern side of the channel for a distance of 137.2m (450 ft), and where it terminates, it is 36.6m (120ft) from the river wall. At night, a fixed red light, with characteristic Fl.R.2s, is exhibited on a lattice tower at the northern end of this jetty.

A dolphin is situated on the western side of Stalbridge Channel, 219.4m (720ft) from the west side of the lock entrance. At night, a green light, with characteristic Fl.G.2s, is exhibited on a pole mast in the centre of the dolphin.

The jetty and dolphin mark the respective eastern and western sides of the southern end of the channel leading to the lock entrance.

The west bullnose of Stalbridge Lock entrance is marked, at night, by two fixed green lights, and Docking signals.

Stalbridge Dock is entered through a lock 84.12m (276 ft) in length and 19.81m (65 ft) in width, the sill is 0.72m below Chart Datum. Vessels of up to 75.0m in length can be locked in through this entrance during the period 3 hours before to 3 hours after High Water (depending on draught). The maximum sized vessel which can be accepted is 152.4m (500 ft) in length and 19.2m (63ft) in beam. Larger vessels enter/leave the Docks in the period approximately 1 hour before to 30 minutes after High Water, when the Docks are open through to the River Mersey.

Old Dock and North Dock are entered via Stalbridge Lock and then a cut from Stalbridge Dock through to Old Dock 45m (147ft) in length and 19.81m (65ft) in width, however the sill is 1.41m above Chart Datum. North Dock is entered by means of a further cut from Old Dock. 30m (98 ft) in width, and although the sill has been removed mariners are advised not to assume a greater depth of water than its original height of 1.50m above Chart Datum.

#### DREDGING OPERATIONS:

Regular dredging of the Stalbridge Channel is necessary, and Masters, and others in charge of vessels must keep clear of the dredger. The dredger carries the shapes and lights prescribed in the Collision Regulations.

#### REGULATIONS FOR ENTERING AND BERTHING AT GARSTON DOCKS:

Vessels entering Garston Docks must obtain docking and berthing instructions before proceeding to dock.

Docking and Berthing instructions can be supplied through (Call sign) "Stalbridge" on Hague Channel 20, or through Liverpool Port Operations (Call sign) "Mersey Radio" on Hague Channels 12, 18 or 22.

Information on depths of water in the Stalbridge Channel and the latest local Notice to Mariners, can also be supplied through these channels.

### Reduced Visibility

Mariners intending to enter or leave the Docks in conditions of poor visibility are advised to contact the duty Piermaster at Stalbridge Marine Control (VHF Channel 20), who will advise what the visibility is at Stalbridge Lock. Vessels will not normally be allowed to navigate in the River Mersey or the approach channels when visibility is reported to be less than 0.3 miles (three cables) in the area through which the vessel intends to navigate. Mariners should refer tro MDHC Notice to Mariners No. 27-2007.

### Docking Signals

A horizontal strip of red light on the western side of the lock entrance signifies the dock is full or the entrance blocked. A horizontal strip of white light signifies vessels can proceed direct to the dock.

No vessel shall enter Stalbridge Channel or proceed beyond "G6" buoy when signals denoting the entrance is blocked, are exhibited.

#### Anchoring:

The nearest safe anchorage is at "Middle Deep", approximately 2.5 miles WNW of the lock

No vessel shall anchor in Stalbridge Channel, nor moor alongside the Jetty at the entrance to Stalbridge Lock, except in the case of sudden emergency.



### PILOT ASSESSMENT OF MASTER OR FIRST MATE PRIOR TO **EXAMINATION FOR PILOTAGE EXEMPTION CERTIFICATE**

| Name of applicant:     |                    |              |        |
|------------------------|--------------------|--------------|--------|
| Rank of applicant:     |                    |              |        |
| Date High              | Water              | Height       | metres |
| From                   | To                 |              |        |
| Berth                  |                    |              |        |
| Name of Vessel         |                    | . Gross Toni | nage   |
| Nett Hazaı             | dous/non Hazardous |              |        |
| LOA Beam               | ı M                | aximum Dra   | ft     |
| Wind Direction:        | Force:             |              |        |
| VHF Reporting with VTS | Yes                | No           | N/A    |
| Pre-arrival            |                    |              |        |
| Bar Light Float        |                    |              |        |
| Q1                     |                    |              |        |
| Crosby Light Float     |                    |              |        |
| Brazil                 |                    |              |        |
| Woodside               |                    |              |        |
| With Lock Entrance     |                    |              |        |

|  | Yes/Good | No/Poor                                 |
|--|----------|---|
| Listoning to 2hr/2hr Proadcasts                                  |          |   |
| Listening to 3hr/2hr Broadcasts Attention to Navigation Warnings | •••••    | •••••                                   |
| Correct use of VHF Channels                                      |          |   |
| Use of Radar   |          |   |
| Awareness of other Vessels                                       | •••••    | •••••                                   |
| Position in Channel  |          |   |
| Position in River  |          |   |
| Speed/Timing   |          |   |
| Awareness of Tidal Sets  |          |   |
| Position off Lock/Stage  | •••••    | •••••                                   |
| Lock Approach  | •••••    |   |
| Lock Mooring   |          |   |
| Manoeuvring in Dock  | •••••    | •••••                                   |
| Berth Mooring  | •••••    | • |
| Passage Plan Pridge Team Management                              | •••••    | •••••                                   |
| Bridge Team Management   |          |   |
|  |          |   |
|  |          |   |
| Pilot Assessors Name:  |          |   |
| Signature:   |          |   |
| Date:  |          |   |



### APPLICATION FOR A PILOTAGE EXEMPTION CERTIFICATE FOR THE PORT OF LIVERPOOL

| 1) Name              | 1 (1)  | of  |
|----------------------|--|---|
| 2) Home Address      | (2)  | being a bona fide   |
| 3) Delete as         | (3) Master/First Mate of the appropriate                       | e ship (4)  |
| 4) Name of Ship      | (5)  | G.T. owned by   |
| 5) G.T. of Ship      | (6)  |   |
| 6) Name and          | of   |   |
| address of owner     | and charted or managed by                                      | (7)   |
| 7) Name and          |  |   |
| address of Charterer | of   | here by make  |
| or Manager           | Harbour Authority for the Policy Holdings Plc, in respect of C | ocks and Harbour Company Limited as the Competent ort of Liverpool and as Agent for Associated British Port Garston Docks pursuant to the Pilotage Act of 1987 for a ate, and to include only the River Entrances or River Berths |
|                      |  | 2   |
| 5                    |  | 4 6 8   |
| Мур                  | personal details are:-   |   |
| Date                 | of birth   | Nationality   |
| Certi                | ficate of Competency held                                      |   |
|                      |  |   |
| Issue                | d by   |   |

#### Confirm that:-

- (a) I have performed as bona fide Master or First Mate of the above ship or any other ship of substantially the same class as the above ship a minimum of 36 trips, (18, in, 18 out), or in respect of any vessel of 95m or less in length that does not carry Dangerous Goods and/or Harmful Substances in bulk 20 trips (10 in, 10 out), at least one such trips being undertaken in darkness, to or from the Port of Liverpool ("the Port" as defined in the Mersey Docks & Harbour Act 1971).
- (b) I have knowledge of the Port's Byelaws, the Port's Marine Control System and the English Language sufficient for the purpose of piloting a ship within the Port.
- (c) The above ship (or any additional ship under 82 metres included on the application) although it is below the 82m compulsory Pilotage limit for the Port that carries Dangerous Goods and/or Harmful Substances as defined in the General Directions for Navigation in the Port of Liverpool (No 6) 2000.

Should my application be successful then I agree:-

- (d) not to navigate any vessel under the authority of any Pilotage Exemption Certificate unless I am properly rested and otherwise in a condition fit to properly and safely navigate such vessel.
- (e) to notify the Company of any absence from duty by me for a period exceeding one month (consecutive days and/or in aggregate) and the reason therefore.
- (f) that I will as soon as reasonably practicable notify the Company of any collision, grounding or other navigational incident which occurs whilst any vessel is being navigated by me and submit a written report on such collision, grounding or incident to the Company.
- (g) to provide to the Company a log of all voyages undertaken in or through the Port of Liverpool by me under the authority of any Pilotage Exemption Certificate.
- (h) to notify the Company as soon as reasonably practical of any defects to navigation lights, buoys or marks within the Port of Liverpool of which I become aware.
- (i) to comply with any relevant statuary provision, Pilotage direction and proper order of any Harbour Master within whose harbour I may navigate pursuant to a Pilotage Exemption Certificate.

Additional ships on which I may serve as a bona fide master or first mate and for which I make application to have included on the Certificate are:-GT Owner & Charterer/Manager The applicant shall enclose with this form a cheque for the appropriate fee made payable to "The Mersey Docks & Harbour Company Limited". This application form should be returned to:-

The Harbour Master The Mersey Docks & Harbour Company Limited Maritime Centre Port of Liverpool L21 1LA

An applicant must produce to the said Harbour Master with this form, the following documents:-

- 1. Certificate of Competency
- 2. Birth Certificate.
- 3. Reference by his/her employer.
- Certificate by the ship's owner, charterer or manager, certifying that the applicant is the bona fide master or first mate of the ship to which this application relates.

| A Pilotage Exemption Certif | icate will only be issued | or renewed after payment | of the appropriate charge |
|-----------------------------|---------------------------|--------------------------|---------------------------|
|-----------------------------|---------------------------|--------------------------|---------------------------|

| Signed | Dated |
|--------|-------|
| Signed | Daicu |



## PORT OF LIVERPOOL PEC TRIPPING LOG

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### **Continuation Sheet**

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