# NAVIGATIONAL ADVISORY PANEL REPORT

| NAP Date: | 09 September 2003 | Reference: | | Owner: | HM(U) | | |
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**NAP No.9**

Panel Members:

| Name | Organisation | Name | Organisation | Name | Organisation |
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| Bryan Folkes | Welbeck Wharf | Mike Collins | Seacon Shipping | David Slattery | Pinns Wharf |
| Peter Sargent | Waterman | Julian Parkes | MASM PLA | Christopher Mendoza | HM(U) PLA |
| David Foster<br>John Reid | DHM(U)<br>River Pilot PLA | Ray Blair<br>Chris McQueen | DHM(U)<br>VTS DManager PLA | Richard Carr<br>Nigel Conquest | Pilotage Manager PLA<br>TBNCC DO PLA |

| Reference | Detail | | Observation/Recommendation | |
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| NAP 9 | 1 | The maximum length of vessel recently handled was 116 metres LOA for Kierbeck Wharf. After discharge and in ballast the vessel was swung off Pinn's wharf in the winding hole. On departure the vessel draft was 3.2 m aft and less forward. No vessel on Pinn's wharf during the turn. On arrival vessel loaded draught approximately 4.0m. Vessel of 110m berthed at Kierbeck on a draught of 5.0m. If longer vessels are unable to turn because of conditions or a vessel berthed at Pinn's they are taken stern-first out of the creek. Most usual maximum vessel lengths are 90 -95 m. Not possible to be specific about | 1 | That guidelines for maximum length and draught of vessels navigating in Barking Creek, based on the notes above, be created and promulgated. The guidelines to include 'best practice' recommendations for loading vessels, including the use of draught surveys and setting maximum final loading quantities in order to ensure departure draughts are accurate. The guidelines also to include recommendations on latest departure and arrival times for Creek navigation. |
| | | 2 | HMU to write to all ships agents known to have business in Barking Creek to request they give 4 hours notice in POLARIS of departure when ever possible, but to always instruct masters of their duty to give a minimum of one hour's notice of departure. GD No. 8 to be vigorously enforced. | |
| | | 3 | That additional assistance by suitable ship towage tugs be available for vessels manoeuvring astern in the Creek when cross winds of force 5 or greater are expected. In addition the Creek to be closed to navigation by reporting vessels when visibility inside or immediately outside the Creek entrance is reduced below 2.5 cables. | |
| | | 4 | To incorporate the document 'Revised Barking Creek Vessel Movement Procedure' (Appendix 2) in the VTS Manual. An 'All Pilots' be issued drawing attention to the need to keep TBNC informed of plans for vessel moves in Barking Creek. (Appendix 4) Watermen to contact TBNC as soon as plans for forthcoming vessel moves are known. Duty Officer to ensure he has adequate information with respect to forthcoming vessel movements into and out of the Creek in good time before each HW period. | |
| | | 5 | No additional restriction to be placed on night navigation. | |

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| | | maximum length because draught factor. i.e. a vessel of 116 m on a draught of 4.0m can enter Creek and make turn after passing through flood prevention Barrier, but if a vessel on a draught of 5.0m then length limited to 110m because longer vessel will be unable to make the turn without grounding.<br>Pinn's wharf is the only wharf where cargo is loaded, so sailing draught most important. Usual to swing vessel on arrival, when in ballast, so it is not necessary to swing loaded vessel. | 6 | Controllable CCTV to be installed on top of the flood defence barrier controlled and viewed from TBNC. High intensity fog lights be installed on the Barrier piers, controllable by TBNC. No requirement for additional radar installation. |
| | | | 7 | When the Voluntary Code of Practice for Tug Utilisation on the Thames is next revised, it is recommended that the review consider including the use of ship towage tugs in Barking Creek |
| | | | 8 | Recommended that the Port Hydrographer be requested to carry out a review of data from Silvertown or Tower tide gauge to establish whether there are consistent differences between times and heights of HW compared with Admiralty predictions and Proudman predictions. Particularly, whether there is consistent under prediction of tidal heights. |
| | | | 9 | That Port Hydrographer be requested to update the Barking Creek survey and update topographical data, issue chart corrections as appropriate and report on any river bed obstructions. To review the distribution of surveys and chart corrections to include a wider river community. |
| | 2 | The Panel agreed with the view that maximum draught should be height of tide on departure less the drying height of the berth. It is common and accepted practice for vessels to be 'dragged' across soft mud into centre of the creek on departure. (Such vessels are designed to 'bottom out'). Always more water in creek channel. | | |
| | 3 | It is working policy between the berth (Pinns) and PS, since grounding of vessel last year, that so far as possible a vessel's final loading tonnage is calculated on the tide before departure, when the vessel is afloat, and before final 100 tonnes or so loaded to trim vessel correctly. This has lead to delays to vessels but prevented more groundings | | |

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| | | and failure to clear berth when sailing, because the vessel is not so deeply loaded. | |
| | 4 | Times during which loaded and ballast vessels should be able to enter the Creek or depart a berth was discussed. It was the view of PS that loaded vessels should not sail after HW and preferably 30 minutes before HW. Ships in ballast should be allowed to sail whenever they are afloat because there is if enough water to allow them to leave berth there is always enough water to allow departure from the Creek. If a loaded vessel has to swing for departure it should sail 60 minutes before HW. If leaving the Creek stern first ship should sail 45 minutes before HW and if in excess of 90m LOA vessel should be sailed 60 minutes before. Vessels arriving, if loaded should arrive by HW to have maximum depth on berth, ships in ballast should berth no later than HW +60 minutes. The importance of Thamesmead Tier as a staging point for vessels entering the Creek was emphasized. | |
| | 5 | Weather conditions are a limiting element of navigation in the Creek. The strength and direction of the wind as well as visibility were each considered in some depth. PS noted that if vessels are well equipped he preferred to move them astern | |

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| | | without additional assistance but if a cross wind of greater than force 5, he would call for tug assistance. There are no set berthing/unberthing limits for weather conditions. Assessments depended on the quality and size of the ship, its own manoeuvring aids and whether the ship is light or loaded. Poor visibility also limits navigation in the creek. PS noted that once in the creek provided he could see the banks he could get a vessel to or from its berth. PS normally limited his approach to conditions when visibility was better than 2 cables. After discussion, the Panel came to the conclusion that the limit for navigating above the Barking Barrier for reporting vessels should be visibility better than 2.5 cables in order to ensure consistency with the Thames Barrier restrictions. | |
| | 6 | VTS instructions with reference to Barking Creek are limited to those issued by HMU on 04 May 2000, which resulted from a VTS and ship misunderstanding. There is no overall VTS co-ordination of ship movements into or from the Creek. PLA pilots and Watermen liaise for piloted vessels, giving four hours notice of departure and vessels arriving are tracked so give adequate notice. The problem with self-takers is that they are only required to give one | |

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| | | hour's notice of departure from a berth and often only give the 10 minute notice to departure. It was clear that, although pilots and Watermen were agreeing programmes of departure, TBNC was being left out of the 'loop' After some discussion it was agreed that PS would contact TBNC each day there are movements in the Creek and also liaise with PLA river pilots. PLA river pilots to be requested to keep TBNC informed of likely movements. Local agents to be requested to make Polaris entries to give 4 hours notice of vessels leaving when possible, but always to give ship's master an instruction to give the required minimum of one hours notice, prior to moving. TBNC Duty Officer is to be aware of potential movements and if not comfortable with level of available information to contact pilots and/or Watermen directly. | |
| | 7 | The panel discussed night navigation and came to the conclusion that there should not be further restriction on navigation at night. | |
| | 8 | A discussion was held to consider improved aids to navigation in the Creek. Radar coverage in the Creek is poor; targets cannot be tracked or identified past the flood prevention barrier. Once AIS | |

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| | | is established it may be possible to track vessels. If it is possible to establish a CCTV on the top of the flood defence barrier structure, a single camera is likely to be able to see all ships in all the working berths and their movement. Using predetermined marks it will also be possible to establish limits of visibility. The use of visibility meters was discussed but no recommendation as to their use made. The pilot and waterman on the panel both considered that the establishment of high visibility lights on the Barrier piers would provide a significant safety enhancement during periods of reduced visibility, in a similar way to those on the main river flood defence Barrier. | |
| | 9 | Small ship towage tugs are used in the Creek to assist vessels with no or inadequate manoeuvring aids and when weather conditions dictate. The size of tug used falls outside of the scope of the Voluntary Tug Code because of their small size. It is more common for workboats to be used to give ships an additional push when swinging and berthing. It would be appropriate to consider use of tugs in Barking Creek when the Voluntary Code of Practice for Tug Utilisation is revised. | |

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| | 10 | A discussion on tides was held during which PS opined about the inaccuracy of PLA tide tables. He has kept a record of predicted and actual tides over a period of time and believes that the Proudman tide calculations are more accurate than the Admiralty tide tables used by the PLA. The PLA tide tables generally show a lower predicted tide than Proudman which leads to a lot of apparent tide surges. The variation is up to 0.5m. Noted that the depth gauge on the entrance piers is cill level, this is CD +0.10m. As the Creek is drying this is not a problem. The nearest tide gauge is at Silvertown. All accepted that is adequate and no need for Creek to have own gauge. | |
| | 11 | The latest Creek survey for the working berths at the lower end is dated January 2001. The depths and the size of vessel being swung in the winding hole off Pinn's wharf suggest the 'hole' is larger than charted. In a written submission, the Master of the 'SEA RISS' a regular caller, pointed out that if scrap metal should fall into the Creek during loading at Pinn's wharf, it could travel a long way out into the Creek and become an obstruction to passing ships on a deep draught. The panel recommends a new survey be carried out as soon as possible with topographical data also | |

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| | corrected for the survey. The distribution of new river surveys was also discussed by the Panel. PLA pilots always have the most recent information available, but self-takers and watermen often do not get to see the latest surveys. Although river charts are always available for sale to third parties, should surveys be distributed more widely amongst the river community? | | |
| Panel Chairman: | Christopher Mendoza | Signature: |  |