NEW FERRIES AT LYMINGTON: MINUTES OF A MEETING TO DISCUSS BMT PHASE 2 REPORT

Date: 2 April 2009
Location: Royal Lymington Yacht Club
Time: 1000 to 1300
Those Present:

R Willegers	Lymington Harbour Commissioners
P. Allen	Lymington Harbour Commissioners
P. Griffiths	Lymington Harbour Commissioners (Chair)
C. Freeman	Lymington Harbour Commissioners
K. Wicks	Lymington Sea Scouts
R. Jenner	Lymington Town Sailing Club
R. Dent	Lymington Town Sailing Club
R. Russell	Lymington Town Sailing Club
Capt S. Baker	Wightlink
Capt G. Digby	Wightlink
Capt E. Dop	Wightlink
J. Burrows	Wightlink
J. Bence	Lymington Harbour Advisory Group
G. W. Holmes	Royal Lymington Yacht Club
R. Perry	Royal Lymington Yacht Club
P. Laurence	Royal Lymington Yacht Club
M. Derrick	Royal Lymington Yacht Club
Capt. P. Marriott	BMT
Capt. J. Noble	BMT
Dr I. Dand	BMT
Dr J. Lockett	BMT

The meeting was chaired by Mr Griffiths, chairman of the Lymington Harbour Commissioners (LHC) who opened by welcoming all present and thanking the Royal Lymington Yacht Club for their hospitality in providing the meeting room and refreshments. He emphasised that the focus of the meeting was confined to safety of operations on the river and the assessment of marine risk carried out by BMT in their Phase 2 report.

He also pointed out that LHC had requested Wightlink not to operate the new W-class ferries until certain issues concerning their environmental impact on the river had been resolved, but that Wightlink had declined to do so. He further stressed that the LHC does not condone the ferries operating on the river before all issues relating to their operation have been resolved.

Mr Griffiths also clarified that the Commissioners had never stated that they could/would guarantee no adverse impact on leisure users. The Commissioners position from the start was that within their statutory powers they would endeavour to ensure no detrimental impacts on leisure users and that the bulk of risk control measures should fall to Wightlink. Mr Griffiths confirmed that the Commissioners continue to stand by this process.

Before the BMT report was discussed in detail, Dr Dand clarified a point arising from stakeholders assuming a recommendation had been made by BMT regarding speed limits which had clearly caused concern. He stated categorically that BMT had not recommended that the statutory and advisory speed limits on the river be raised and had no intention of doing so. On page 96, Section 7.2.6, first bullet of their Phase 2 report it states that the speed limits on the river should remain

and always be adhered to by all craft. He agreed that recommendation 8 on page 112, Section 8.2, was poorly worded and assured stakeholders that it would be changed in the final version.

The meeting then turned to a detailed discussion of the BMT report, led by Mr Holmes, using the RLymYC comments as an agenda.

1. RLymYC Commentary

In opening the discussion, Mr Holmes recalled that in February 2007 Wightlink had assured the stakeholders that operations of the new W-class ferries would have no adverse impact on safety on the river. The RLymYC adopted a wait-and-see strategy for 6 months by which time the BMT Safety and Risk Assessment study had been commissioned and the Club waited to see if Phases 1 and 2 demonstrated that there would in fact be no adverse effects on river safety. The Club's view was that the study had, to date, shown that there would be a significant adverse impact on the river users from such effects as wind shadow, and the increased space used by the new ferries, including the turbulent area in their wake.

He then stressed that it was important that the wide range of sailing activities on the river should be maintained; the area had an excellent reputation for producing world-class sailing helmsmen and crews and this should not be compromised or restricted by ferry operations.

He then raised the following concerns and suggestions:

- The stakeholders should be consulted on the final Safe Operating Profile (SOP). It should take account of strong tail winds, and not allow passing in the river.
- The safety of operations on the river with the new ferries should be reviewed in the autumn of 2009 after experience gained in the forthcoming sailing season when operations on peak traffic dates has been assessed.
- The SOP should be checked during this period to ensure that it applies to winds from all directions.
- Excessive drift angles should not be used by the ferries anywhere in the river when it is busy because of the space denied to other users.
- The AIS speed trap software should be used to the fullest extent to check that the SOP is being followed and its software enhanced as necessary to allow this.
- The tolerance on the speed limits, presently set at 2 knots (to allow for such things a strong ebb tidal stream increasing the speed through the water of inbound ships above the statutory 6 knots), should be reduced to 1 knot.
- The W-class ferries should have water speed logs that work and give accurate values of speed through the water.
- The safety of the W-class operations should be subject to continuous assessment, as recommended by BMT.

The meeting then began to go through the details of the BMT Phase 2 report and it was agreed that the RLymYC's detailed comments on the report's Conclusions and Recommendations would be used for this. Attention focussed on those Conclusions and Recommendations which were not accepted by the stakeholders.

The first of these was the conclusion that the overall level of risk would be slightly reduced on the introduction of the new ferries. It was asserted that of the 7 "increased risk" scenarios considered by BMT, 5 related to interactions with small craft and one to interactions with moored vessels (RLymSC comments para 1.1.1). After some discussion it became clear that this comment applied to the situation before risk control measures had been applied and that attention should be directed to the situation after the measured had been applied, not the risks before control. When this was agreed, it was found that 3 of the 18 scenarios had an increased risk, two of which were related to the effects of wind shadow and one to the hand-over of control on the ferry bridge.

These were then discussed, the issue of wind shadow receiving most attention. It was agreed that the wind shadow effects would be greater with the new ferries due to their increased windage. BMT pointed out that their observations had indicated that most sailors had dealt with the wind shadow well. As far as the Wednesday Junior Sailing programme was concerned, the statement in Appendix 1 of the RLymYC comments made it clear that the Club would be able to "operate in compliance with the principle of ALARP in these conditions without any changes to its operating procedures".

However, the issue remained of small sailing craft being affected by wind shadow, losing their wind and losing control as a result. This problem was compounded by the fact that, at certain states of the tide (especially at very low water springs) the space in certain parts of the river was limited, especially for a dinghy trying to sail out of trouble. The use of paddles in dinghies was discussed and the problem of using the paddle while sailing was emphasised by the stakeholders. Dr Dand said that the suggestion was mainly aimed at periods when dinghies are becalmed and using paddles would provide a means of propulsion enabling them to move to the side of the river to a moored boat or mooring buoy where they could wait until the ferry had passed. He also said BMT observations had shown that ferry masters would ease down if they saw one or more dinghies in trouble and give them as much space as possible. When the issue of commercial pressures and the need to keep to the timetable was raised, Mr Burrows and his Wightlink colleagues stressed that commercial pressures do not take precedence over safety on the river.

(Post Meeting Note: BMT had addressed the problem of lack of space on the river at certain states of the tide in their Phase 2 report (Sections 6.1.6 and 6.5) and had recommended that, whether passing or not, the ferries should keep to the Transit Marks to give as much room as possible for small boats on either side. This problem clearly needs further observation by BMT at times of increased traffic densities on the river – ***Action: BMT****)*

Further discussion on the ability of Wightlink to keep to a timetable followed and it was agreed that recent time-keeping had been poor. Mention was made by Mr Derrick that before the AIS speed trap was introduced the ferry speeds in the river were higher (about 8 knots) and he asked whether this had helped to maintain schedule? It was pointed out by Captain Baker that increasing speed in the river from 6 knots to 8 knots does little to improve time-keeping (the gain is about 1.5 minutes) so there is no incentive for the Masters to exceed the speed limit for this reason. It was pointed out again by Mr Burrows that there was no pressure on masters to hold to the timetable at the expense of safety on the river.

It was mentioned by Mr Willegers that past experience had shown that the C-class could run to time, except when heavy traffic coincided with times of low

water springs, when speed in the river was reduced for safety and hydrodynamic reasons. However, following the more rigourous enforcement of the speed limit facilitated by the introduction of the AIS system in 2007, it was apparent that schedule punctuality had worsened. This has subsequently been compounded following the introduction of the W-class into service because of the problems associated with the shoreside works not being completed.

Discussion then moved to the next increased risk scenario which dealt with the problems encountered on hand-over from one bridge control location to another. Mr Burrows confirmed that Wightlink were looking into this in order to make the handover flawless, and were reviewing the tolerances on synchronism set at the various control locations to see if they could be changed to improve matters. It was also pointed out that use of the centre con was a risk reduction measure recommended in the BMT report and Capt Digby said that, although it was the Masters' choice as to which control location they used on the bridge, many were using the centre con for the entire southbound passage with change-over to the bridge wing occurring near the terminal northbound for berthing. The bridge wing con is also used for ship movements off the linkspan to the lay-over berths and vice versa. When using the bridge wing con, a lookout was posted on the other bridge wing.

In closing this part of the discussion, Mr Burrows pointed out that the bridge had been designed and fitted out to Lloyds Register requirements, so any changes of the type under discussion had to be made in collaboration with LR.

Mr Derrick asked what the timescale was to solve the hand-over problem and Mr Griffiths said that LHC would incorporate a suitable date in the minutes of the meeting.

Action: LHC

The next item to be discussed was number 8.1.7 on page 6 of the RLymYC document. This was about the control of the W-class, but the stakeholders comments mentioned the incorrect assumption that an increase in the speed limit was recommended. Mr Holmes suggested that a distinction be made in the BMT Phase 2 report between those features of the W-class which made it inherently more safe than the C-class and those risk control measures which have been recommended to make it at least as, if not more, safe than the older vessel. Capt Baker confirmed that the W-class was much quicker to respond to control demands than the C-class and, as the Masters were now used to the response of the vessel and the need to use reduced power on the aft thruster, they were finding the handling of the vessel was excellent. Capt Baker mentioned the potentially dangerous overhangs of the cantilevered main deck on the C-class which could catch and damage small boats; these were not present on the W-class which had smooth vertical sides from the waterline up.

Mr Willegers observed that the C-class had to use large drift angles, even at full power, in Long Reach to counter wind and tide in more challenging conditions. During the recent trials there were several opportunities to observe both classes of vessel transiting the lower reaches of the river at the same time and direction during peak spring ebb cross flows. While the C-class exhibited significant drift angles, observations of the W-class in the same conditions showed that the latter had enough power to avoid the need for large drift angles. In response to a question from Mr Derrick, Capt Baker confirmed that in an empty channel Masters would take the easiest route and might let the W-class take up drift angles (because less power is needed), but if there was traffic in the river, the thrusters

would be used to reduce the drift angles to very low or zero values to allow space for other users.

It was noted by Mr Dent that the new ferries were showing signs of paint damage and he wondered whether this was due to handling problems when berthing. Mr Burrows explained that it was due to the Lymington jetty, not the ship, the former not having been designed for W-class vessels.

Attention then turned to Item 6.2.2 on page 14 of the RLymYC document; this concerned the wind speed limits for the SOP. BMT confirmed that the SOP can be summarised as shown by the Club and the Phase 2 report will be changed to reflect this. *(Post Meeting Note: The final version of the report will also include the Addendum Strong Wind report as an Appendix* ***Action: BMT****)*.

Mr Bence said he had seen the W-class operating in Horn Reach on what appeared to be too high a setting on the aft thruster, producing excessive wash; he asked if the Voith settings used on passage could be recorded routinely in some way. Mr Burrows said that Wightlink did not know if this was possible, but assured the meeting that written instructions had been given to all Masters to use the SOP settings and to make explanatory log entries if they had needed to use a thruster setting outside of the SOP paramaters to provide additional control during a navigation emergency.

As has already been noted, it was the feeling of the stakeholders that the SOP and operations on the river should be monitored and subject to continual review. The stakeholders proposed a review in the autum which would be informed in the light of experience gained during the sailing season and asked that BMT should formally propose how such a review should be framed and draw up a suitable plan including, for example any further trials that might be necessary. Mr Willegers confirmed that, under the PMSC, LHC have a duty to ensure risk management of all operations in the river is subject to continuous assessment and review and the operation of the new W-class ferries is no exception. It was agreed that a formal review be conducted in the autumn and that this should be informed by some further observation and assessment by BMT on peak season traffic dates, and severe weather conditions as masters develop their ship handling skills in the light of operational experience. It was agreed that LHC would formally commission BMT to carry out this action.

Action: LHC

In passing, Wightlink mentioned that they intend to have three months of a 3 boat service, (plus some other dates, such as Bank Holidays when passenger/vehicle traffic levels are high) rather than about 9 months as was the case with the C-class. In response to this, Mr Willegers suggested that Wightlink might like to familiarise themselves with a 3-boat service once the third vessel arrived (it was now on its way) before river traffic density had built up. This would allow them to get an early indication of any problems maintaining a 3-boat service.

Moving to Item 8.2.5 on page 11 of the RLymYC document, dealing with increased Harbour Master patrols, Mr Holmes raised the issue of how to ensure that all river users were familiar with the ColRegs. In reply Mr Willegers mentioned that one role of the Harbour Master patrols was to inform and Mr Holmes confirmed that all members of the Clubs who had had RYA training would be familiar with the Regulations. The concern lay with visitors to the river who may have had no grounding in the ColRegs at all. Capt Noble responded by recalling a study he carried out on the River Thames when the same concern,

having been voiced, was dealt with by the provision, by PLA, of notices on all public slipways advising users of the Regulations.

Mr Bence asked whether the increased Harbour Master patrols recommended by BMT would lead to additional cost for adequate manning. Mr Willegers replied that the additional patrols for the 2009/10 season had required the appointement of an additional seasonal member of staff between April and October. Mr Willegers also reiterated that the requirement for, and presence of, increased patrols was to ensure that LHC properly complied with their PMSC duties for managing safety on the river and that the patrols were there to manage safety for all river users and not just related to the ferries. The additional river patrols will be targeted towards the times when the river is at its busiest, i.e. weekends and evening racing periods. The success of the patrols would be reviewed at the end of the season. Mr Griffiths confirmed that the additional patrols were also there to provide a "meet and greet" service to visiting yachts.

Mr Holmes then raised the issue of Communication of Intent (Item 8.2.6 on page 11 of the RLymYC document) and mentioned that the stakeholders would wish to discuss this matter with Wightlink.

Action: Stakeholders

On this matter, several stakeholders raised the fact that no red ensigns had been seen on the W-class sailings and that the flying of these ensigns is a valuable indication of the direction in which the double–ended W-class is about to move. Some discussion then took place with regard to sound signals and concern was aired about too many sound signals disturbing the Lymington environment.

In response to a request from stakeholders that a sound signal be used just before the thrusters are clutched in prior to leaving (they are de-clutched when the ships are berthed), Capt Digby said that they have to clutch the thrusters in immediately before they leave. This is due to the fact that, when the thrusters are clutched in, the relevant screen on the bridge showing the draughts does not display; therefore the thrusters must be clutched in after the departure draughts have been read, immediately before departure. Capt Digby also assured Mr Holmes that thrusters are de-clutched when the ships are on the lay-over berths.

Mr Willegers mentioned that LHC have asked for sound signals to be used between 08:00 and 20:00 each day prior to leaving the berth because of the difficulties leisure users were experiencing in trying to ascertain when the vessel was leaving the berth. Mr Dent suggested that sound signals were not necessarily essential and could be replaced by light signals. In response, Dr Dand pointed out that mast lights on the W-class are synchronised with the whistle.

2. Plenary Session

The Chairman then moved on to the plenary session when a number of questions were raised from the floor.

Mr Russell

Mr Russell raised the problem of the brightness of the bow lights used by the ferries after dark. These, he said, are very bright and can affect night vision. In reply Capt Baker said that they have two sets of lights which can be used – one set located low on the prow and the other on the sun deck. Wightlink have been

using the prow lights, but are exploring use of the others as these are thought to be less blinding.

(*Post meeting note: LHC byelaw No 59 states that "No person shall exhibit in the Harbour searchlights, floodlights or other bright lights or pyrotechnics other than those indicating emergency or distress, in such a manner as to be liaible to endanger safe navigation, unless the consent of the Commissioners has first been obtained". LHC have given no such consent and are concerned that as currently configured the lights could endanger safe navigation for other users and must not be used. LHC recognise that, in certain circumstances of poor visibility, spotlights may aid safety of navigation but only if they can be configured in such a way as to not impair the night vision of other users.)*

Mr Holmes

Mr Holmes raised the issue of speed in a tail wind and the need to adhere to the speed limits. He pointed out that in the strong wind trials the 6 knot speed limit had been exceeded inbound in the Short Reach Lay-by. Dr Dand stated that the inbound runs later in the day, when the weather had worsened, were part of a learning process. He described BMT observations of this process in which the Master was able to anticipate the known increase in speed from the following wind and, in subsequent inbound runs, gradually adjust the speed up Short Reach Lay-by prior to rounding Cocked Hat bend so that on the last run it was closer to the required value.

Mr Dent

Mr Dent referred to movement of moored boats induced by interaction from passing ferries. He was interested in the magnitude of the movement of the moored vessels and to what extent this could impede other boats passing between moored vessels.

(Post Meeting Note: no measurements or estimates of the amount of movement were made during the trials; attempts will be made in any future trials. Visual observations confirmed that wind was a significant natural factor affecting the unpredictable movement of boats on moorings and that river users were already excercising a degree of awareness in this regard. The old C-class vessels also caused movement due to interaction albeit to a lesser extent)

Mr Jenner

Mr Jenner voiced the concerns of the LTSC about the idea of small boat users having to avoid the ferries, especially when space in the river is limited. He mentioned that Thursday evening and Saturday afternoons were times of concern because sailing events are organised during those periods leading to increased traffic density, especially if there is a coincidental low tide. He felt the club would need to review their operations for the coming season.

Action: LTSC

Mr Derrick

Mr Derrick voiced his continuing concern about the amount of energy in the wake of the ferries, even when the aft thruster was on a reduced rotational speed setting. He described the up-welling vortices in the main body of the wake arising in part from the forward thruster, and the more intense sheets of vorticity at its boundaries. He felt that the disturbance from these turbulent effects were more intense in the vicinity of the river bends and that boats with a

centreboard/keel and/or rudder would be affected by this disturbance. He pointed out that all participants in the sailing trials had mentioned that they had been affected to a greater or lesser degree and he asked that Wightlink should change their operating schedule to take account of these concerns. He further asked for better two-way communication between ferries and users to reduce risk to small boats. Finally he requested that the ferry operation be restricted to a two-boat service with no passing in the river. Mr Perry asked why Wightlink have not been prohibited from passing in the river. Mr Willegers explained that in the case of the C-class operation there were 35 years of service that demonstrated that it could not be reasonabley argued that there was a safety case to prohibit passing. In respect of the W-class the risk assessment work undertaken by BMT to date has not shown a safety justification for prohibiting W-class/W-class passing. That said, it was recognised that the situation will need to be reviewed for peak traffic operation (in particular over low water conditions) in the light of operational experience this summer.

(Post Meeting Note: The implications of 2- and 3-boat operation and their effect on passing and schedule was addressed in the BMT Phase 1 report)

Mr Burrows replied that Wightlink had accepted the BMT Phase 2 report where wake turbulence had been observed and discussed. Wightlink had in fact adjusted their timetables, resulting in fewer sailings. Stakeholders pointed out that, in spite of this, wake turbulence was still present and were of the opinion that its disturbance will be felt further afield than that from the C-class, thereby further reducing usable space in the river.

Mr Jenner

Mr Jenner pointed out that the BMT Risk Assessment had encompassed all river users and had shown that they would be affected by the introduction of the new ferries. He felt the burden of risk fell more to the small boat users than the ferry operator.

Mr Bence

Mr Bence, speaking on behalf of the Lymington Harbour Advisory Group, asked that the recommended removal of moorings from the Cocked Hat bend area should not result in a loss of moorings overall. Mr Willegers replied that there were a number of issues related to the mooring of vessels in this area and they were not soley related to the introduction of the new ferries. Both BMT (Phase 1) and Eagle Lyon Pope (for Wightlink) had flagged this as a potential concern even with the then-existing C-class vessels. Subsequently, LHC had also received feedback from the DfT enquiring whether the placement of swinging moorings within the navigation channel was compatible with LHC's duty under the PMSC for managing safety of navigation. In the light of BMT's further practical experience on the river, particularly in wind, their view that there should not be swinging moorings in this area firmed up. Mr Willegers also confirmed that the moorings in this area would have to be withdrawn in any event to facilitate the introduction of the westerly breakwater and that this area of river had a greater incident rate than any other – most of which are not ferry related. At a recent River User Safety Committee meeting a concern was also expressed that the Cocked Hat corner was an area of restricted waterspace for small sailing boats wishing to get out of the channel to avoid ferries and other craft at busy times. Finally, Mr Willegers reiterated that moorings in this area would need to be withdrawn in the next few years in any case because of the increasing exposure as the saltmarsh continues to recede.

Mr Bence then tabled the following points from the Solent Protection Society:

- The speed limit tolerance of two knots should be reduced to one
- Mr Peter Hebard had produced a paper regarding use of the ferries to reduce the erosion on the river and the SPS commended it to the meeting. The Wightlink masters present replied that their practice is to keep to the centre of the river whenever possible, as suggested by Mr Hebard, and as recommended by BMT.

Capt Dop and Mr Burrows

Mr Burrows mentioned that Wightlink had been party to the data-gathering exercise carried out by BMT and were satisfied that the resultant Phase 2 report was a balanced document. Capt Dop pointed out that many of their Masters lived in the area and several were members of, and sail with, the two Clubs represented at the meeting. He therefore hoped that the polarisation of Wightlink and the stakeholders could be terminated and the two parties could go forward together.

Capt Noble

Captain Noble thanked all at the meeting for the help they had given BMT over the past 16 months, a sentiment that was endorsed by the whole BMT team.

The meeting was brought to a close by the Chairman, asking BMT to produce a draft for further work culminating in a review of safety of operations on the river in the autumn. He then thanked all those present for attending and for their input to the meeting.