Annex 1

Skagern's Watch Manning Level 3 from her Bridge Procedures Manual

2.4 *WATCH MANNING LEVELS*

2.4.1 Watch Manning Levels

The Master shall assign the watch manning levels, as given below, for each stage of the passage in the Voyage Plan. These levels shall continuously be assessed during the voyage and modified as required.

Level 1 OOW

Level 2 OOW

Dedicated Lookout

Level 3 OOW

Master

Dedicated Lookout

Helmsman (If deemed necessary by Master)

Level 4 OOW

Additional Officer

Master

Dedicated Lookout

Helmsman (If deemed necessary by Master)

Members of the Watch shall function as a team with proper information flow between them and duties assigned clearly for position fixing, collision avoidance, communication both external and internal, engine movement ordering and recording of events. Any member noticing any navigational or other irregularities, shall immediately notify the senior member of the watch.

Annex 2

HES General Notice to Pilots No.38/2003 ‘Hatches To Be In Place’

GENERAL NOTICE TO PILOTS
NO. 38/2003

HATCHES TO BE IN PLACE

Gentlemen

Would you all please be reminded of the Humber Navigation Byelaws 1990, No 17: "Hatches to be in Place".

It has recently been brought to our attention that this particular byelaw is not always being adhered to by masters of vessels when underway.

Should a pilot board a vessel to sail from a berth or anchorage, he should ensure the hatches are in place and secured before leaving that berth or anchorage. Your attention is drawn to General Notice to Pilots No. 52/2002.

Any pilot who boards a vessel underway and finds that the hatches are open should ask the master to close and secure them forthwith, explaining the byelaw. VTS should be informed as a matter of course. Should any master fail to comply with the request to close his hatches, then the pilot should obtain guidance from VTS who will direct the vessel to the nearest suitable anchorage.

Safety on the river is paramount and requires co-operation from all. If anyone requires clarification of our byelaws, or any other notice, then do not hesitate to contact myself or Phil Cowing.

Thank you for your kind attention to this matter.

DEPUTY PILOTAGE OPERATIONS MANAGER

28 July 2003

Annex 3

South Tyneside College Pilot Resource Management course syllabus/programme

Humber ABP Pilot Resource Management
2 days duration
Starting Monday Evening

1700 – 1830 Enrolment followed by introduction to course content and simulator bridge equipment.

Tuesday

0830 - 0930 Simulator exercise based on the Humber db in fog/restricted visibility – the vessel starts at anchor.
The Pilot will board and conduct the Master/Pilot exchange before heaving anchor. Communications with the VTS operation and other port services will be highlighted at this time. This exercise is in part familiarisation with simulator equipment.
0930 – 1000 Instructor on the bridge using the radars to look at ground stability, parallel index lines and the curved EBL facility available on modern ARPAs. With particular emphasis on their use on the Humber.
This also concludes the period of familiarisation if there are any questions.
1000 – 1015 Coffee break
1015 – 1100 De-brief above exercise
1100 – 1200 A power point presentation covering the principles of communication and how this relates to successful bridge operations. The presentation highlights effective communication within the bridge team and the barriers to it that may be encountered on a ship.

Lunch break

1300 – 1400 The arrival exercise carries on with the ship moving in the channel getting closer to Immingham. Bridge team activity will be observed with the appointed Master in some role play capacity.
1400 – 1445 De-brief the above exercise which will cover technical and human factors observed in the operation, focussing on aspects of communication.
1445 – 1530 Power point covering the principles of effective management and how management principles should be applied to bridge operations.
1530 – 1545 Coffee break
1545 – 1615 Power point covering the development of situation awareness on the bridge and how man's performance is governed by the brain. The cognitive process in a person accepting the differences between Pilots and ship's staff in gaining situational awareness.

1615 – 1745 A simulator exercise and de-brief in fog/restricted visibility on the Humber db that test the reasoning powers of the bridge team. The vessel departs the Immingham Bulk terminal inward for Hull.
A passage plan also to be prepared departing Riverside Quay for New Holland.

The day's objectives are as follows:
a. To become familiar with the course and simulator equipment,
b. Investigate management and how it relates to the bridge organisation,

c. Greater understanding of communications in general and the importance of good communications on the bridge,
d. A critical look at the Master /Pilot exchange,
e. Ground stabilise the radars using echo reference, GPS input and radar referencing, discuss other methods,
f. An understanding of situation awareness,
g. To refresh/emphasise the importance of bridge team work even on short manned bridges,
h. Emphasise the best approach to Immingham with outbound traffic on an ebb tide,
i. Prepare a passage plan.

Wednesday

0830 – 0900 A power point that looks at assertive behaviour.
0900 – 0915 The Pilot that planned the shifting from Riverside quay gives a briefing to the group explaining his method of unberthing and river transit.
0915 – 1030 Depart Riverside quay for New Holland. Plan departure Immingham.
1030 – 1045 Coffee break
1045 -1115 Debrief the exercise. The de-brief will focus on technical and human factors which includes presentation skills. Video playback will be used to support good/bad teamwork. The technical side of the debrief will cover aspects of passage planning, including deficiencies found and the difference between pilot plans and mariner's plans.
1115 – 1215 Power point showing the development of error chains and how they should be stopped before they affect the work place.

Lunch break

1300 – 1330 A Power point that investigates tiredness, fatigue and stress, particularly how they affect persons in the workplace.
1330 – 1430 Depart Immingham for sea with the Pilot who planned the exercise briefing the team on the operation.
1430 – 1500 De-brief exercise particularly using video playback. The last exercise should demonstrate good team activity.
1500 – 1515 Coffee break
1515 - 1545 A power point on leadership indicating the types of leaders and how their style affects others in the bridge team. Included are elements of attitude shown by the Master and the bridge team members on a ship.
1545 – 1600 Course de-brief – issue completion certificates.

The day's objectives are as follows: Two exercises in the Humber areas.
a. Look at assertiveness, leadership, fatigue and stress,
b. Prepare a passage plan,
c. Use indexing and the map facility to assist monitoring the passage,
d. To present on types and styles of leadership and look at attitude' and how attitude can be linked to leadership style,
e. Look at presentation methods,
f. Obtain course feedback.

Annex 4

Samskip Courier's pilot card

J. Kahrs Bereederung GmbH Co. KG

FORM C10
Pilot Card

MV: Samskip Cour *Date*
Master:

Arrival Port: Departure Port: Agent:

Ship Particulars:

FLAG	ANTIGUA AND BARBUDA	DATE OF BUILD	2006
PORT OF REGISTRY	ST. JOHN'S	DISPLACEMENT	
CALL SIGN	V2BT6	DEADWEIGHT	9300 t
I.M.O. No.	9322578	BOW BULB	YES
MMSI No.	304923000	LOA in mtr.	140,64
OFFICIAL No.	4119	LBPin mtr.	130,00 m
DRAUGHT FWD	DRAUGHT AFT	Breadth molded	21,80 m
Hight keel to top of mast	40.6 m	GRT	7852 t
Hight keel to top of scanner	34.1 m	NET	3363 t
PORT ANCHOR	10 SHACKLES	Summer draft	7,327 mtr
STARBOARD ANCHOR	10 SHACKLES	BOW THRUSTER	700 Kw/952 HP
1 SHACKLE	27,5 METRES	AFT THRUSTER	500 Kw/680hp

PROPULSION PARTICULARS

Type of engine 8400 kW(11424 hp), type of propeller C.P.P. left handed

Engine order	Rpm / pitch settings	Speed (knots) Loaded	Ballast
Full sea speed	500/100%	18	19
Full ahead	500/80%	15	16
Half ahead	500/50%	10	11
Slow ahead	500/20%	6	7
Dead slow ahead	500/10%	3	4
Dead slow astern	500/10%	Emergency full ahead to full astern	47 sec
Slow astern	500/20%	Stop to full astern	23 sec
Half astern	500/80%	Astern power	100% ahead
Full astern	500/100%	Critical rev.	
		Min. RPM	
		Time limit astern	

THRUSTER EFFECT

Thruster	kW(HP)	Time delay for full thrust	Turning rate at zero speed	Time delay to reverse full thrust	Not effective above speed
Bow	700(952)	14 sec	23°/min	49 sec	3 knts
Stern	500(680)	--	--	--	--
Combined	--	20 sec	31°/min	34 sec	3 knts

Remarks:

Pilot Name(Signature): _____

Annex 5

Extract from the International Regulations for Prevention of Collisions at Sea 1972, as amended (COLREGS)

Extract from the International Regulations for Prevention of Collisions) at Sea 1972, as amended. (COLREGs)

General

Rule 2
Responsibility

(a) Nothing in these Rules shall exonerate any vessel, or the owner, master or crew thereof, from the consequences of any neglect to comply with these Rules or of the neglect of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case.

(b) In construing and complying with these Rules due regard shall be had to all dangers of navigation and collision and to any special circumstances, including the limitations of the vessels involved, which may make a departure from these Rules necessary to avoid immediate danger.

Section I - Conduct of vessels in any condition of visibility

Rule 6
Safe speed

Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

In determining a safe speed the following factors shall be among those taken into account:

(a) By all vessels:
(i) the state of visibility;
(ii) the traffic density including concentrations of fishing vessels or any other vessels;
(iii) the manoeuvrability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions;
(iv) at night the presence of background light such as from shore lights or from back scatter of her own lights;
(v) the state of wind, sea and current, and the proximity of navigational hazards;
(vi) the draught in relation to the available depth of water.

(b) Additionally, by vessels with operational radar:
(i) the characteristics, efficiency and limitations of the radar equipment;
(ii) any constraints imposed by the radar range scale in use;
(iii) the effect on radar detection of the sea state, weather and other sources of interference;
(iv) the possibility that small vessels, ice and other floating objects may not be detected by radar at an adequate range;
(v) the number, location and movement of vessels detected by radar;
(vi) the more exact assessment of the visibility that may be possible when radar is used to determine the range of vessels or other objects in the vicinity.

Rule 7
Risk of collision

(a) Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. If there is any doubt such risk shall be deemed to exist.

(b) Proper use shall be made of radar equipment if fitted and operational, including long-range scanning to obtain early warning of risk of collision and radar plotting or equivalent systematic observation of detected objects.

(c) Assumptions shall not be made on the basis of scanty information, especially scanty radar information.

(d) In determining if risk of collision exists the following considerations shall be among those taken into account:
(i) such risk shall be deemed to exist if the compass bearing of an approaching vessel does not appreciably change;
(ii) such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large vessel or a tow or when approaching a vessel at close range.

Rule 8

Action to avoid collision

(a) Any action taken to avoid collision shall be taken in accordance with the Rules of this Part and shall, if the circumstances of the case admit, be positive, made in ample time and with due regard to the observance of good seamanship.

(b) Any alteration of course and/or speed to avoid collision shall, if the circumstances of the case admit, be large enough to be readily apparent to another vessel observing visually or by radar; a succession of small alterations of course and/or speed should be avoided.

(c) If there is sufficient sea-room, alteration of course alone may be the most effective action to avoid a close-quarters situation provided that it is made in good time, is substantial and does not result in another close-quarters situation.

(d) Action taken to avoid collision with another vessel shall be such as to result in passing at a safe distance. The effectiveness of the action shall be carefully checked until the other vessel is finally past and clear.

(e) If necessary to avoid collision or allow more time to assess the situation, a vessel shall slacken her speed or take all way off by stopping or reversing her means of propulsion.

(f) (i) A vessel which, by any of these Rules, is required not to impede the passage or safe passage of another vessel shall, when required by the circumstances of the case, take early action to allow sufficient sea-room for the safe passage of the other vessel.
(ii) A vessel required not to impede the passage or safe passage of another vessel is not relieved of this obligation if approaching the other vessel so as to involve risk of collision and shall, when taking action, have full regard to the action which may be required by the Rules of this Part.
(iii) A vessel the passage of which is not to be impeded remains fully obliged to comply with the Rules of this Part when the two vessels are approaching one another so as to involve risk of collision.

Rule 9
Narrow channels

(a) A vessel proceeding along the course of a narrow channel or fairway shall keep as near to the outer limit of the channel or fairway which lies on her starboard side as is safe and practicable.

(b) A vessel of less than 20 metres in length or a sailing vessel shall not impede the passage of a vessel which can safely navigate only within a narrow channel or fairway.

(c) A vessel engaged in fishing shall not impede the passage of any other vessel navigating within a narrow channel or fairway.

(d) A vessel shall not cross a narrow channel or fairway if such crossing impedes the passage of a vessel which can safely navigate only within such channel or fairway. The latter vessel may use the sound signal prescribed in Rule 34(d) if in doubt as to the intention of the crossing vessel.

(e) (i) In a narrow channel or fairway when overtaking can take place only if the vessel to be overtaken has to take action to permit safe passing, the vessel intending to overtake shall indicate her intention by sounding the appropriate signal prescribed in Rule 34(c)(i). The vessel to be overtaken shall, if in agreement, sound the appropriate signal prescribed in Rule 34(c)(ii) and take steps to permit safe passing. If in doubt she may sound the signals prescribed in Rule 34(d).
(ii) This Rule does not relieve the overtaking vessel of her obligation under Rule 13.

(f) A vessel nearing a bend or an area of a narrow channel or fairway where other vessels may be obscured by an intervening obstruction shall navigate with particular alertness and caution and shall sound the appropriate signal prescribed in Rule 34(e).

(g) Any vessel shall, if the circumstances of the case admit, avoid anchoring in a narrow channel.

Section III - Conduct of vessels in restricted visibility

Rule 19

Conduct of vessels in restricted visibility

(a) This Rule applies to vessels not in sight of one another when navigating in or near an area of restricted visibility.

(b) Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel shall have her engines ready for immediate manoeuvre.

(c) Every vessel shall have due regard to the prevailing circumstances and conditions of restricted visibility when complying with the Rules of Section I of this Part.

(d) A vessel which detects by radar alone the presence of another vessel shall determine if a closequarters situation is developing and/or risk of collision exists. If so, she shall take avoiding action in ample time, provided that when such action consists of an alteration of course, so far as possible the following shall be avoided:
(i) an alteration of course to port for a vessel forward of the beam, other than for a vessel being overtaken;
(ii) an alteration of course towards a vessel abeam or abaft the beam.

(e) Except where it has been determined that a risk of collision does not exist, every vessel which hears apparently forward of her beam the fog signal of another vessel, or which cannot avoid a close-quarters situation with another vessel forward of her beam, shall reduce her speed to the minimum at which she can be kept on her course. She shall if necessary take all her way off and in any event navigate with extreme caution until danger of collision is over.

Rule 35
Sound signals in restricted visibility

In or near an area of restricted visibility, whether by day or night, the signals prescribed in this Rule shall be used as follows:

(a) A power-driven vessel making way through the water shall sound at intervals of not more than 2 minutes one prolonged blast.

(b) A power-driven vessel underway but stopped and making no way through the water shall sound at intervals of not more than 2 minutes two prolonged blasts in succession with an interval of about 2 seconds between them.

(c) A vessel not under command, a vessel restricted in her ability to manoeuvre, a vessel constrained by her draught, a sailing vessel, a vessel engaged in fishing and a vessel engaged in towing or pushing another vessel shall, instead of the signals prescribed in paragraphs (a) or (b) of this Rule, sound at intervals of not more than 2 minutes three blasts in succession, namely one prolonged followed by two short blasts.

(d) A vessel engaged in fishing, when at anchor, and a vessel restricted in her ability to manoeuvre when carrying out her work at anchor, shall instead of the signals prescribed in paragraph (g) of this Rule sound the signal prescribed in paragraph (c) of this Rule.

(e) A vessel towed or if more than one vessel is towed the last vessel of the tow, if manned, shall at intervals of not more than 2 minutes sound four blasts in succession, namely one prolonged
followed by three short blasts. When practicable, this signal shall be made immediately after the signal made by the towing vessel.

(f) When a pushing vessel and a vessel being pushed ahead are rigidly connected in a composite unit they shall be regarded as a power-driven vessel and shall give the signals prescribed in paragraphs (a) or (b) of this Rule.

(g) A vessel at anchor shall at intervals of not more than one minute ring the bell rapidly for about 5
seconds. In a vessel of 100 metres or more in length the bell shall be sounded in the forepart of the vessel and immediately after the ringing of the bell the gong shall be sounded rapidly for about 5 seconds in the after part of the vessel. A vessel at anchor may in addition sound three blasts in succession, namely one short, one prolonged and one short blast, to give warning of her position
and of the possibility of collision to an approaching vessel.

(h) A vessel aground shall give the bell signal and if required the gong signal prescribed in paragraph (g) of this Rule and shall, in addition, give three separate and distinct strokes on the bell immediately before and after the rapid ringing of the bell. A vessel aground may in addition sound an appropriate whistle signal.

(i) A vessel of 12 metres or more but less than 20 metres in length shall not be obliged to give the bell signals prescribed in paragraphs (g) and (h) of this Rule. However, if she does not, she shall make some other efficient sound signal at intervals of not more than 2 minutes.

(j) A vessel of less than 12 metres in length shall not be obliged to give the above-mentioned signals but, if she does not, shall make some other efficient sound signal at intervals of not more than 2 minutes.

(k) A pilot vessel when engaged on pilotage duty may in addition to the signals prescribed in paragraphs (a),(b) or (g) of this Rule sound an identity signal consisting of four short blasts.

Annex 6

MGN 315, Keeping A Safe Navigational Watch on Merchant Vessels

Maritime and Coastguard Agency

MARINE GUIDANCE NOTE

MGN 315 (M)

KEEPING A SAFE NAVIGATIONAL WATCH ON MERCHANT VESSELS

Notice to Owners, Operators, Managers, Masters and Officers of Merchant Vessels

This notice should be read in conjunction with MGN 137 (M+F) and MGN 202 (M+F)

Summary

This Merchant Guidance Notice (MGN) gives guidance on the application of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended (**STCW 95**)[1] regarding the keeping of a safe navigational watch.

Key Points

This notice gives information and guidance on the keeping and maintaining of a safe navigational watch in accordance with the requirements of STCW 95 and its associated code (**STCW Code**).

The areas that this notice covers are:
General application for Masters and officers in charge of a navigational watch;
Fitness for duty;
Performing the navigational watch;
Watch arrangements, handing over the watch and taking over the watch;
Maintaining a safe look-out and relationship with the look-out;
Restricted visibility, safe speed, stopping distance and vessel at anchor;
Certification.

1.0 Introduction

1.1 This notice contains guidance for officers in charge of a navigational watch, which Masters are expected to supplement as they consider appropriate. It is essential that officers of the watch (**OOW**) appreciate that the proper performance of their duties is necessary in the interests of the safety of life and property at sea and the prevention of pollution to the marine environment.

[1] Available from the Publications Department, International Maritime Organisation, 4 Albert Embankment, London SE1 7SR

1.2 It is the responsibility of Masters, and companies owning or operating UK registered seagoing vessels, to ensure that the principles applying to the keeping of a safe watch, as detailed in STCW 95 are followed.

1.3 The Master shall not be constrained by the shipowner, charterer or any other person from taking any decision which, in the Master's professional judgment, is necessary for safe navigation. It is the duty of the Master of every vessel to ensure that watchkeeping arrangements are adequate for maintaining a safe navigational watch at all times.

1.4 The International Chamber of Shipping (**ICS**) Bridge Procedures Guide is established as the principle guide to best watchkeeping practice and includes additional guidance on bridge resource management and the conduct of the bridge team including the use of passage planning, integrated electronic navigation systems and the use of GMDSS.

1.5 This notice, which should be read in conjunction with STCW 95 and ICS Bridge Procedures Guide, highlights the Maritime and Coastguard Agency (**MCA**) concerns and interpretations with respect to what constitutes the 'Keeping of a Safe Navigational Watch' in the light of recent maritime accidents and incidents.

1.6 The Annex to this notice lists relevant publications.

2.0 General

2.1 The OOW is the Master's representative and is primarily responsible at all times for the safe navigation of the vessel and for complying with the International Regulations for Preventing Collisions At Sea (**ColRegs**).

2.2 It is of special importance that the OOW ensures that at all times an efficient look-out is maintained and that ColRegs are complied with.

2.3 Officers and Masters are reminded that the vessel must at all times proceed at a safe speed.

2.4 The vessel's engines are at the disposal of the OOW and there should be no hesitation in using them in case of need. Where possible, timely notice of intended variations of engine speed should be given to the duty engineer. The OOW should know the handling characteristics of the vessel, including the stopping distance, and should appreciate that other vessels may have different handling characteristics.

2.5 Officers in charge of a navigational watch are responsible for navigating the vessel safely during their periods of duty with particular concerns for avoiding collision and stranding. The OOW shall also be aware of the serious effects of operational or accidental pollution of the marine environment and shall take all possible precautions to prevent such pollution.

2.6 Masters, owners and operators are reminded that the MCA considers it dangerous and irresponsible for the OOW to act as sole look-out during periods of darkness or restricted visibility.

2.7 The factors to be considered before the dedicated bridge look-out can be dispensed with are detailed in paragraph 8.3. It is implicit in STCW 95 that at all times when a ship is underway a separate dedicated look-out must be kept in addition to the OOW.

3.0 Fitness for Duty

3.1 The Merchant Shipping (Hours of Work) Regulations 2002 (**the Regulations**) apply to all seafarers employed or engaged in any capacity on board a seagoing vessel and includes officers and ratings assigned to bridge watchkeeping duties.

3.2 In summary, and unless covered by an exception, the Regulations provide for a minimum of 10 hours rest in any 24 hour period and 77 hours in any seven day period.

Hours of rest may be divided into no more than two periods, one of which should be at least six hours long, and the intervals in between should not exceed 14 hours.

3.3 The watch system shall be such that the efficiency of watchkeeping personnel is not impaired by fatigue. The Master shall take into account the quality and quantity of rest taken by the watchkeepers when determining fitness for duty.

3.4 It is the overall responsibility of the Master and the responsibility of every watchkeeping officer and rating to ensure that they are sufficiently rested prior to taking over a navigational watch. It is the responsibility of the owner or operator to ensure that the vessel is manned with a sufficient number of personnel so that a safe navigational watch can be maintained at all times by appropriately qualified and rested personnel in all foreseeable circumstances.

3.5 In circumstances where the Regulations cannot be met there should be established procedures and contingencies in place to ensure that the vessel is brought to or remains in a place of safety until a safe navigational watch can be established. In some circumstances this may require delay to a vessel's departure.

3.6 Watchkeepers should ensure they remain alert by moving around frequently and ensuring good ventilation. Marine Accident Investigation Branch (**MAIB**) reports have shown that it is all too easy to fall asleep, especially while sitting down in an enclosed wheelhouse.

3.7 The OOW shall be free from the effects of alcohol and any other substance, including prescription drugs or other medication that may have a detrimental effect on the officer's judgments.

4.0 Performing the Navigational Watch

4.1 The officer of the navigational watch shall:

- keep the watch on the bridge
- in no circumstances leave the bridge until properly relieved by an appropriate officer
- continue to be responsible for the safe navigation of the vessel despite the presence of the Master on the bridge until informed specifically that the Master has assumed the con and this is mutually understood
- notify the Master when in any doubt as to what action to take in the interests of safety
- continue to be responsible for the safe navigation of the vessel despite the presence of a pilot on board
- if in any doubt as to the pilot's actions or intentions, seek clarification from the pilot; if doubt still exists, they should notify the Master immediately and take whatever action is necessary until the Master arrives
- not undertake any other duties that would interfere or compromise the keeping of a safe navigational watch
- ensure there are no distractions caused by the use of domestic radios, cassettes, CD players, personal computers, television sets, mobile phones, etc
- have available at all times, the services of a qualified helmsman

- in areas of high traffic density, in conditions of restricted visibility and in all hazardous navigational situations ensure the vessel is in hand steering

- keep in mind that the perceptions of watchkeeping officers on different types and sizes of vessels may vary considerably when assessing a close quarter situation and the time in which avoiding action should be taken

- keep a proper record during the watch on the movement and activities relating to the navigation of the vessel

- station a person to steer the vessel and to put the steering into manual control in good time to allow any potentially hazardous situation to be dealt with in a safe manner. Officers are further reminded that when the vessel is in automatic steering it is highly dangerous to allow a situation to develop to the point where the OOW is without assistance and has to break the continuity of the look-out in order to take emergency action

- use the radar at all times in areas of high traffic density and whenever restricted visibility is encountered or expected and shall have due regard to its limitations. Radar should be available for use at all times to enable the officers to use the equipment in clear weather so as to fully appreciate the limitations of the equipment

- at sufficiently frequent intervals during the watch check the vessel's position, course and speed using all appropriate navigational aids and means necessary to ensure that the vessel follows the planned track

- take fixes at frequent intervals. These fixes shall be carried out by more than one method whenever circumstances allow. The largest scale chart on board, suitable for the area and corrected with the latest available information shall be used. This includes local navigation warnings, and temporary and preliminary notices to mariners

Mariners are also reminded of the requirement to use the latest editions of all supporting navigational publications such as charts, list of lights, list of radio signals, pilot books etc. Such publications should be fully corrected.

5.0 Watch Arrangements

5.1 The composition of a navigational watch should comprise one (or more) qualified officers supported by appropriately qualified ratings. The actual number of officers and ratings on watch at a particular time will depend on the prevailing circumstances and conditions.

5.2 At no time shall the bridge be left unmanned without a qualified watchkeeping officer.

5.3 Factors to be taken into account when composing a bridge watch:

- fatigue

- weather conditions and visibility

- proximity of navigational hazards which may make it necessary for the officer in charge of the watch to carry out additional navigational duties

- use and operational condition of navigational aids

- whether the vessel is fitted with automatic steering

- whether there are radio duties to be performed

- unmanned machinery space (**UMS**) alarms, controls and indicators provided on the bridge, procedures for their use and limitations
- any unusual demands on the navigational watch that may arise as a result of special operational circumstances

In circumstances where a single man bridge is considered permissible support personnel should be readily and immediately available should assistance be required. There should be an established and continuously available means of communications for the watchkeeper to summon such assistance at all times.

6.0 Handing Over the Watch

6.1 The OOW shall:

- ensure that the members of the relieving watch are fully capable of performing their duties
- ensure that the vision of the relieving watch is fully adjusted to the light conditions
- ensure that all standing orders and the Master's night orders are fully understood

6.2 The OOW shall not hand over the watch:

- if there is reason to believe that the relieving officer is not capable of carrying out the watchkeeping duties effectively, in which case the Master should be notified
- when a manoeuvre is in progress until such action has been completed

7.0 Taking Over the Watch

7.1 The relieving officer shall:

- prior to taking over the watch verify the vessel's estimated or true position
- confirm the vessel's intended track, course and speed
- note any dangers to navigation expected to be encountered during the watch
- be aware of prevailing and predicted tides, currents, weather, visibility and the effect of these factors upon course and speed
- note any errors in gyro and magnetic compasses
- note the status of all bridge equipment
- note the settings of bridge/engine controls and manning of engine room
- be aware of the presence and movement of vessels in sight or known to be in the vicinity
- give watchkeeping personnel all appropriate instructions and information which will ensure the keeping of a safe navigational watch, including maintenance of a proper look-out

8.0 Look-out

8.1 The ColRegs require that every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of risk of collision.

8.2 The look-out must be able to give full attention to the keeping of a proper look-out and no other duties shall be undertaken that could interfere with that task. The duties of the look-out and helmsman are separate and the helmsman should not be considered to be a look-out except in small vessels where an un-obstructed all round view is provided at the steering position and there is no impairment of night vision or other impediment to the keeping of a proper look-out.

8.3 In certain circumstances of clear daylight conditions the Master may consider that the OOW may be the sole look-out. On each occasion the Master should ensure that:

- The prevailing situation has been carefully assessed and it has been established without a doubt that it is safe to do so;
- Full account has been taken of all relevant factors including but not limited to:
    - state of the weather
    - visibility
    - traffic density
    - proximity of dangers to navigation
    - the attention necessary when navigating in or near traffic separation schemes
    - design and layout of the bridge
    - arcs of visibility
    - radar equipment fitted and their limitations with respect to navigation
    - other duties that the officer may have to engage in and which could be a distraction from the keeping of a proper look-out such as:
        - operation of GMDSS and other communications equipment such as cell phones and email systems
        - navigational maintenance such as completion of logs and other record keeping and correction of charts and publications
        - routine testing and maintenance of bridge equipment

In any event, an OOW acting as sole look-out should always be able to fully perform both the duties of a look-out and those of keeping a safe navigational watch. Assistance must be immediately available to be summoned to the bridge when any change in the situation so requires.

8.4 It is of special importance that at all times the officer in charge of the navigational watch ensures that a proper look-out is maintained. In vessels with a separate chartroom the officer in charge of the navigational watch may visit the chartroom, when essential, for a short period for the necessary performance of navigational duties, but shall first ensure that it is safe to do so and that a proper look-out is maintained.

9.0 Relationship Between the OOW and Look-out

9.1 The OOW should consider the look-out as an integral part of the Bridge Team and utilise the look-out to the fullest extent.

9.2 As a way of fully engaging the look-out's attention consideration should be given to keeping the look-out appraised of the current navigational situation with regard to expected traffic, buoyage, weather, landfall, pilotage and any other circumstance relevant to good watchkeeping.

10.0 In Restricted Visibility

10.1 When restricted visibility is encountered or expected, the first responsibility of the OOW is to comply with the ColRegs with particular regard to the keeping of a look-out, sounding of fog signals, proceeding at a safe speed and having the engines ready for immediate manoeuvre.

10.2 In addition the OOW shall:

- inform the Master
- ensure that a dedicated look-out is posted at all times
- exhibit navigation lights
- operate and use the radar
- put the engines on standby

11.0 Safe Speed and Stopping Distance

11.1 The ColRegs require that every vessel shall at all times proceed at a safe speed so that proper effective action can be taken to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

11.2 In cases of need, the OOW shall not hesitate to use the engines to reduce speed further and allow more time for consideration and assessment of a developing situation. However, timely notice of the intended variations of engine speed shall be given to the engineers where possible or effective use made of UMS engine controls.

11.3 Whatever the pressure on Masters to make a quick passage or to meet the wishes of owners, operators, charterers or port operators, it does not justify vessels and those on board them being unnecessarily put at risk. The MCA is concerned that proper standards be maintained and will take appropriate action against officers who jeopardize their vessels or the lives and property of others. Such action may lead to fines and/or the suspension or cancellation of their certificates.

11.4 In the well known case of THE LADY GWENDOLEN, the Court of Appeal stated that "excessive speed in fog is a grave breach of duty and vessel owners should use their influence to prevent it." Because of their failure to do so, it was held in that case that the owners could not limit their liability.

12.0 Vessel at Anchor

12.1 The OOW shall:

- determine and plot the vessel's position on the appropriate chart as soon as practicable

- when circumstances permit, check at sufficiently frequent intervals whether the vessel is remaining securely at anchor by taking bearings of fixed navigation marks or readily identifiable shore objects. The use of carefully chosen transits can give an almost instant indication as to whether the vessel's position has changed

- ensure that a proper look-out is maintained

- ensure that inspection rounds are made periodically

- observe meteorological and tidal conditions and state of sea, notify the Master and undertake all necessary measures if the vessel drags anchor

- ensure the state of readiness of the main engines and other machinery complies with the Masters requirements

- ensure the vessel exhibits the appropriate lights and shapes and that appropriate ColRegs sound signals are made

- avoid placing reliance on guard zones when using radar in lieu of a look-out as this is not considered acceptable practice.

In all the above circumstances it remains the Master's responsibility to ensure that the anchor watch to be kept is appropriate to the prevailing conditions.

13.0 Certification

13.1 The Regulations require that any officer in charge of a navigational watch shall be duly qualified in accordance with the requirements of STCW 95. It is the responsibility of the owner or operator, and Master to ensure that every navigational watchkeeping officer is appropriately qualified with respect to the size of the vessel and limitations in area of operation. Under no circumstances is it permitted for an un-qualified person to take charge of a navigational watch.

13.2 Similarly STCW 95 Section A-II/4 requires that every rating forming part of a navigational watch on a seagoing vessel of 500gt or more shall be required to demonstrate competence in the duties associated with the keeping of a safe navigational watch at the support level. This competence is evidenced by the issue of a Navigational Watch Rating Certificate. No rating should be assigned to navigational watchkeeping duties unless suitably qualified.

13.3 A qualification demonstrates that the holder has reached a minimum level of competence as defined in STCW 95. However, it does not imply that the holder has achieved all the necessary management or operational experience particular to a vessel, its operation or operational area. In considering an officer's or rating's qualifications due consideration should also be given to an individual's experience with respect to the vessel type and/or area of operation(s). In some circumstances it may be prudent to 'double-up' a watch or provide additional supervision to a qualified watchkeeper whilst particular operational experience is achieved.

Further Information

Further information on the contents of this Notice can be obtained from:

Seafarer Training and Certification Branch
Maritime and Coastguard Agency
Spring Place
105 Commercial Road
Southampton
SO15 1EG

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Fax : +44 (0) 23 8032 9252
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MCA Website Address: www.mcga.gov.uk

File Ref: MC 049/044/0010

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Safer Lives, Safer Ships, Cleaner Seas

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Annex

Mariner’s attention is drawn to the following publications relating to this notice:

- International Regulations for Preventing Collisions at Sea 1972 (ColRegs)
- STCW 95, Code Sections A-VIII/2 Part 3, 3-1,3-2 and A-II/4
- ICS Bridge Procedures Guide

Annex 7

MGN 299, Interference With Safe Navigation Through The Inappropriate Use of Mobile Phones

MARINE GUIDANCE NOTE

MGN 299 (M+F)

INTERFERENCE WITH SAFE NAVIGATION THROUGH INAPPROPRIATE USE OF MOBILE PHONES

Notice to: Shipowners, Ship Operators, Charterers, Masters, Ships' Officers, Fishing and Leisure Vessel Skippers, Shipping Agents, Pilots, Port Authorities, Ship Chandlers, Tug Operators, Bunkering Providers etc

Summary

There is growing concern that the use of mobile phones at inappropriate times is distracting Bridge Management Teams from their primary duties of navigating and conning their vessel

Key Points

- Interference, in this context, relates to the distraction caused by making or receiving mobile phone calls at inappropriate times during the conduct of the vessel's navigation and conning.
- Such activity is liable to demand the attention of bridge personnel when full attention should be devoted to the safe and efficient navigation of the vessel.
- Many individuals and organisations with business with the vessel, expect an instant response to their phone calls without being aware of the demands this places on the personnel responsible for the vessel's safe navigation.
- Ship operators are recommended to have procedures in place, in the vessel's safety management system, as part of International Safety Management (ISM) Code compliance, to regulate the usage of mobile phone on ships' bridges.
- Consideration should also be given to prohibiting all mobile phone usage when navigational requirements demand the individual attention of all those responsible for the safe conduct of the vessel.

Introduction

1. Concerns have been raised with the Maritime and Coastguard Agency (MCA) in recent months about the use of mobile phones aboard ships and the subsequent interference with navigation. Such interference is not related to difficulties of a technical kind but rather to the effect of mobile phones on navigation and conning of the vessel, by demanding the attention of bridge personnel, at inappropriate moments.

2. The MCA initially received anecdotal evidence via the Confidential Hazardous Information Reporting Programme (CHIRP)[1] but latterly this has been substantiated with the publication of the Marine Accident Investigation Branch (MAIB) Report[2] into the Grounding of the "Attilio Ievoli" in the Western Solent, in June 2004.

3. The MAIB Report clearly states (Section 2.4.2) that a mobile phone was in use on the bridge for the majority of the time between the pilot disembarking and the vessel grounding. It further states that it was known that the Master made some, if not all, of the calls during this period. With the remainder of the bridge team unclear of their relative responsibilities for navigation, and the master distracted on the telephone, no one appeared to have been concentrating on the safety of the vessel.

4. On this particular subject, the Report calls for a restriction on the use of mobile phones in the approaches to a port, for both incoming and outgoing calls. This could be achieved by designating pilotage, and other restricted waters, as 'red zones', in which outgoing mobile telephone calls are prohibited, and incoming calls are diverted to a message service. Use of this technique, or similar control measures, ensures that mobile telephones are not a distraction for the bridge team at a time when they should be concentrating fully on the navigation of the vessel.

5. The ease of communications between ship and shore via mobile phones, in coastal and port approach areas, has resulted in excessive demands being placed, at times, on ships' masters and officers by having to deal with enquiries from a wide range of organisations and individuals who have business with the vessel. These include, but not necessarily limited to, the shipowners and operators themselves, charterers, chandlers, port officials and shipping agents.

6. Those with business with the ship should understand that they will be attempting to contact a working environment during times when safety critical operations may be undertaken. Calls should only be made to a ship when absolutely necessary and there should be no expectation of an instant response.

7. One of the Recommendations in the MAIB Report is directed at the International Chamber of Shipping (ICS) to encourage its member shipping companies to introduce a routine of limited use of mobile phones in pilotage and other restricted waters.

8. The MCA strongly endorses this Recommendation and encourages the development of a procedure to cover the use of mobile phones in such situations to be incorporated, where appropriate, into the vessel's safety management system, as part of International Safety Management (ISM) Code compliance.

9. Additionally, consideration should be given to the prohibition of all mobile phones from the bridges of ships when navigational requirements demand the individual attention of all those responsible for the safe conduct of the vessel when navigating, for example, in:

- Areas of high traffic density,
- Conditions of restricted visibility,
- The vicinity of offshore installations and other structures, or
- The approaches to ports, harbours or anchorages.

10. In conclusion, there is a compelling need for clarity of purpose when conducting the safe navigation of a vessel which endorses the requirement for an active management policy for the use of mobile phones on the bridges of ships at all times, but especially when the navigation risks are higher.

[1] http://www.chirp.co.uk
[2] www.maib.dft.gov.uk/publications/investigation_reports/2005/Attilio_Ievoli.cfm

Navigation Safety Branch
Maritime and Coastguard Agency
Spring Place
105 Commercial Road
SO15 1EG

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File Ref: MNA 139/002/0052

Published: October 2005

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The MCA is an executive agency of the Department for Transport

Annex 8

General Notice to Pilots (No 43), “Use of Mobile Phones in Prohibited Areas”

GENERAL NOTICE TO PILOTS

NO. 43/2003

USE OF MOBILE TELEPHONES IN PROHIBITED AREAS

Gentlemen

Two recent cases of mis-use of mobile telephones in prohibited places requires us to remind you all that mobile telephones should be switched off when on any of the refineries or the decks of tankers.

The refineries' regulations prohibit the carrying of mobile phones when on their premises and, to that end, all contractors and visitors are required to hand in their mobiles at the security building at each terminal. As pilots we have dispensation to carry our phones, provided they are turned off. If we abuse this privilege then we will not be allowed to carry our phones at the refineries.

When pilots are attending tankers, they should ensure that their mobiles are turned off before they leave the pilot launch to board the vessel and are not turned on again until they are on the bridge of the ship and have asked the master if it is in order for them to turn it on. Mobiles should be turned off prior to the vessel berthing and not turned on again until pilots have left the refinery. An exception to this can be to turn the mobile on in a designated area on the ship to call for a taxi, or make other urgent calls, as required. If a pilot is required urgently, he will be called via VTS, Humber.

On no account should a mobile be used in a vehicle transiting the jetty.

Pilots attending tankers from shore should ensure that their mobiles are turned off before they arrive at the security gate. It is planned that security officers will ask the pilot to confirm that their mobile is, indeed, off. When disembarking from the vessel at sea, the mobile should be turned off when transiting the vessel's open decks.

Strict individual discipline is required in this matter.

Thank you for your co-operation in this matter.

DEPUTY PILOTAGE OPERATIONS MANAGER

10 October 2003

Annex 9

General Notice to Pilots No.06/2003 “Bridge Procedures”

GENERAL NOTICE TO PILOTS NO. 06/2003

Gentlemen

BRIDGE PROCEDURES

During a recent incident an outbound vessel made contact with a buoy and shortly after grounded in the vicinity of the No. 31 Buoy.

At the time of the incident there was only the Master and Pilot on the Bridge. The vessel was navigating in restricted visibility.

A contributing factor to the incident was that the Pilot had the helm and was therefore unable to devote his attention to the radar and indeed take an overview of the situation.

In such circumstances it is incumbent on the Pilot to ensure that the Master provides a helmsman and that the pilot himself is free to monitor the radar and overall conduct of the vessel's navigation.

The ICS Bridge Procedures Guide 3.4.2 states, "in areas of high traffic density, in conditions of restricted visibility and in all other potentially hazardous situations, the helmsman should be available on the bridge, ready at all times to take over steering control immediately."

Modern vessels, in particular those designed for river transits, which have River Radar and rate of turn indicators at the helm seat, can be steered by the Pilot as he gets an overview from this position.

DEPUTY PILOTAGE OPERATIONS MANAGER

17 January 2003

Annex 10

HES Notice to Mariners No. H.42/2006 “Sound Signals In Restricted Visibility"

ASSOCIATED BRITISH PORTS

P.O. Box No. 1, Port House, Northern Gateway, HULL HU9 5PQ

NOTICE TO MARINERS

No. H. 42/2006

RIVER HUMBER

SOUND SIGNALS IN RESTRICTED VISIBILITY

MARINERS ARE ADVISED that any vessel navigating within the River Humber is bound by the International Regulations for Preventing Collisions At Sea currently in force. The Humber Navigation Byelaws 1990, Part I paragraph 6 states, "Nothing in these Byelaws shall affect the operation of the Collision Regulations or the duty upon the master of a vessel to comply therewith."

To that end, **MARINERS ARE FURTHER ADVISED** that when operating in or near an area of restricted visibility in the River Humber, they are required to use the sound signals prescribed in Rule 35 of the International Collision Regulations.

There are no exceptions to this rule. Any vessel which cannot comply for any reason should advise VTS Humber immediately in order that appropriate action, which may include termination of the passage, can be taken and other traffic warned.

HARBOUR MASTER, HUMBER

27th June 2006

Annex 11

Humber Estuary Services - Memorandum dated 16 August 2006

ABP

HUMBER ESTUARY SERVICES
MEMORANDUM

OUR REFERENCE	YOUR REFERENCE	DATE
M.09L-06 PIL.198-02-06		16 August 2006

All Humber Pilots
c/o The Pilot Lobby
Port House
Hull

Gentlemen

COLLISION BETWEEN THE MV "SKAGERN" AND MV "SAMSKIP COURIER" – 7 JUNE 2006

As most of you are probably aware we have recently suffered a major collision in the River Humber between two piloted vessels in poor visibility. This incident is being fully investigated by the MAIB, who will be producing a full report. I do not intend to go into too much detail about the incident here due to that full investigation taking place, however, I feel it is pertinent that you should be advised of the following:

- Both vessels were fitted with modern radars and were very well equipped for conducting pilotage passages in poor visibility. The "Samskip Courier" is a very modern ship; only a few weeks old; and, although the "Skagern" is 22 years old, she is well equipped. Therefore, poor or inadequate equipment cannot be blamed.

- Fog signals were not being sounded on either vessel which is in contravention of the International Collision Regulations. Notice to Mariners No. H.42-2006 makes particular reference to the use of sound signals on the Humber.

  It has come to my attention that a number of pilots believe we are only paying lip service to the sound signal requirements. Please be assured that this is not the case. Any pilot who fails to observe the sound signalling requirement on this river will most certainly face disciplinary action. It is my intention that we will be carrying out spot checks on the use of whistle signals in the near future to enforce this policy.

- The role of the bridge team, their level of co-operation and, indeed, experience should be one of the factors taken into account when determining the safe speed, especially in restricted visibility. A vessel with a fully switched-on and swept-up bridge team used to working with and including the pilot in that framework should allow for a faster "safe speed" than on a vessel with a poor bridge team, where information flow is slow and assistance rendered to the pilot limited. The International Collision Regulations apply fully on the Humber and particular attention should be paid to rules 6 and 19 as a major factor in determining "safe speed". Whilst the master remains in command of his vessel the pilot has the local knowledge and wherewithal to give good advice to the master based on location in the river, proximity of hazards and the peculiarities of the currents and depths in that area. The actual ship speed can be varied during the passage but should always remain safe.

Once you find yourself concerned about another vessel's intentions or, indeed, your own position, then the speed should be reduced to keep it "safe" and, if necessary, all way should be taken off and the vessel be stopped using astern propulsion, if required. If a collision is to happen, the slower the speed the better. The combined speed of the "Skagern" and "Samskip Courier" was approximately 23 knots.

If a pilot finds himself disorientated in the river, then reduce speed immediately and seek help from VTS. If a close quarters situation is quickly developing with another vessel, where emergency action is required, altering course out of the channel is a consideration and is preferable than to collide with another ship. Whilst no-one wishes to collide with a navigational mark, again, it is preferable to do so than to hit another vessel. Most of the navigational buoys in our estuary can be slipped and, again, this action should be part of any passage planning to deal with unforeseen circumstances. The bottom of the Humber is, in the main, sand or mud and in the lower reaches, to my knowledge, we have no large rocks or boulders which could tear the bottom out of a ship and for that we have to be thankful.

- The importance of the bridge team in plotting other ships, the use of parallel index techniques and keeping a good visual and radar lookout cannot be over-emphasised. The pilot can advise the lookout of approaching navigational marks and/or vessels and their position can be confirmed and visibly checked.

We cannot afford complacency. As pilots on the Humber we offer a professional service and must be prepared to take positive and immediate action in the event of another vessel not doing what is expected.

Fortunately, circumstances like the one we have just experienced are very rare and it has to be pointed out that the ship's master and his crew are required to play a great role in the pilotage of their vessel and ultimately it remains the master's responsibility for what happens. However, should a pilot find himself with little or no co-operation from the bridge team, then the safe speed would indeed be very much slower than on a vessel where full co-operation was being experienced. Should any pilot find himself on a vessel where co-operation with the bridge team is so poor that he is uncomfortable about proceeding in the prevailing circumstances and conditions, then he should report to VTS and the passage should be either not started or, if underway, the vessel will be directed to an anchorage.

Once the MAIB have completed their inquiries and the report of the incident published we will review our training needs.

Regards

PILOTAGE OPERATIONS MANAGER

Copy to: *- via email*
- via email
MAIB