ANNEX A

Ship's pilot information card and rudder supplement

ANNEX 3 PILOT INFORMATION

USE OF CELL PHONES IS PROHIBITED ON THE BRIDGE DURING NAVIGATION.
USE OF WALKIE-TALKIES SHOULD BE KEPT TO MINIMUM.

M/T STOLT *TERN* **CALL SIGN:** *ZCMT9*

① ARR ☑ Shifting ☐ DEP ☐

② **PORT:** HOLYHEAD **DATE:** 01-12-04 (③ d d - m m - y y)

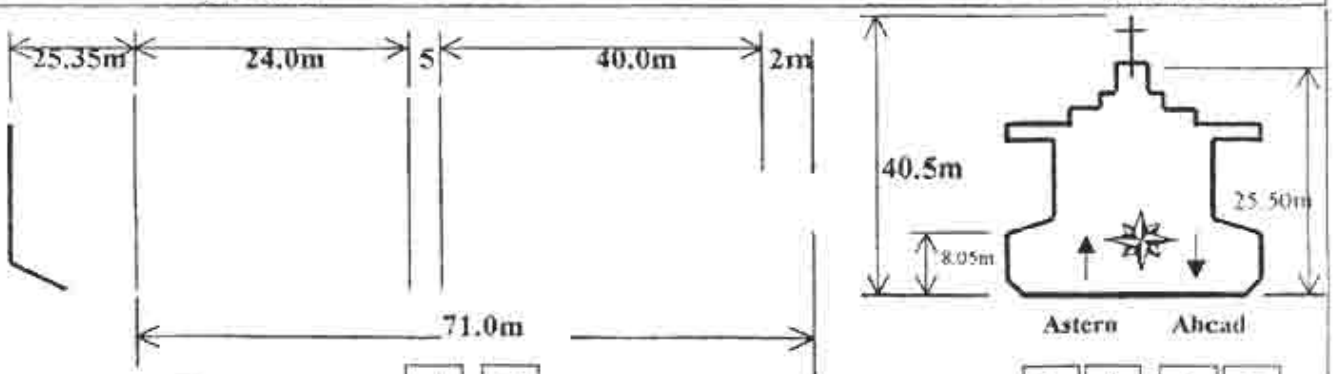
Draft ④ **F=** 5.90 m **DEADWEIGHT:** 4,759 MT Summer

⑤ **A=** 6.50 m **GROSS TONS:** 3,206 RT

⑥ **M=** 6.20 m **DISPLACEMENT:** ⑦ 6,564 MT At DRAFT

SHIP'S PARTICULARS

LOA:	*96.35 m*	**Propeller:**	*Controllable Pitch*	**Stbd Anchor:**	*9 Shackles*
Breadth:	*15.33 m*	**Rudder:**	*Becker Rudder*	**Port Anchor:**	*8 Shackles*



Freeboard: ⑧ 1.51 m **AIR DRAFT** ⑨ 34.00 m

ENGINE TYPE Four Stroke Diesel Engine **BHP =** 2,999 kW @ 560 RPM

Maneuvering Engine Order	Pitch %	SPEED LOADED	SPEED BALLAST
FULL SEA SPEED	*90*	13.2 knots	13.7 knots
Maneuvering Full AHEAD	*75*	12.5 knots	13.0 knots
HALF AHEAD	*50*	9.0 knots	10.0 knots
SLOW AHEAD	*30*	6.0 knots	6.5 knots
DEAD SLOW AHEAD	*15*	3.0 knots	3.5 knots
DEAD SLOW ASTERN	15	TIME LIMIT ASTERN	*Unlimited*
SLOW ASTERN	30	FULL AHEAD-FULL ASTERN	*10 seconds*
HALF ASTERN	50	CRITICAL REVS	*N/A*
FULL ASTERN	75	MINIMUM REVS	*400*
SPEED MAY VARY ACCORDING TO PREVAILING WEATHER, SEA AND LOAD CONDITIONS.		ASTERN POWER	*1500kW / 50% Ahead Power*

ANNEX 3 PILOT INFORMATION (Cont.)

STEERING PARTICULARS

RUDDER TYPE -	*Becker Rudder*
MAXIMUM ANGLE -	*65 Degrees*
TIME HARD OVER - HARD OVER -	*24 Seconds (with 2 Hydraulic Pumps)*
BOW THRUSTER TYPE -	*Electro-Hydraulic* **450HP**
0-MAX -	*2 Seconds*

CHECK IF ABOARD AND READY

ANCHORS — PORT ☑ STBD ☑

WHISTLES — FORE ☒ AFT ☑

RADARS — 3cm ARPA ☑ 10cm ARPA ☑

SPEED LOG ☑

ENGINE TELEGRAPHS ☑

RUDDER INDICATOR(S) ☑

RPM/PITCH INDICATOR(S) ☐

RATE OF TURN INDICATOR(S) ☑

GYRO ☑ **ERROR** 0.2°E ~~W~~

GPS ☑

LORAN ☒

DECCA ☑

OTHER ☒

AIS ☑

Echo Sounder ☑

SSAS ☒

DEFECTS/OTHER INFORMATION

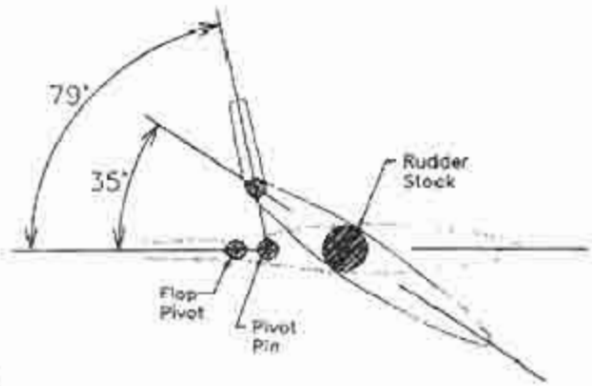
CPP – Bow goes to Starboard when pitch astern!
Zero Pitch Position has slight sternway.
EXTREMELY RIGHT-HANDED!

Lifesaving Appliances Located in Bridge Portside under the seats.

RECEIVED BY: Pilot _____ Signature & X _____ Name _____ Master

PLEASE ADVISE THE DUTY OFFICER IF YOU PREFER TEA, COFFEE OR SOFT DRINK.

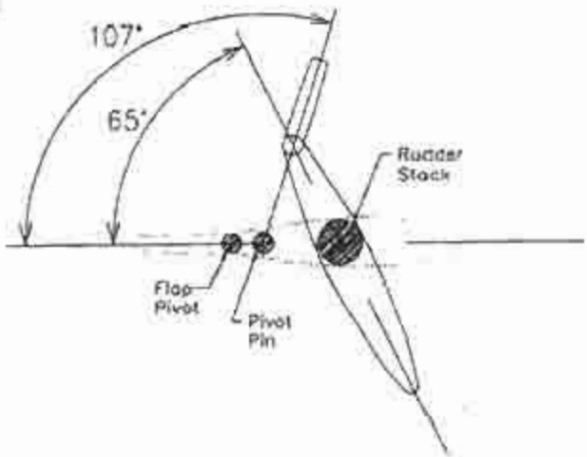
RUDDER ARRANGEMENT



BECKER RUDDER ANGLES

RUDDER ANGLE	FLAP ANGLE	TOTAL RUDDER ANGLE
0	0	0
5	12	17
10	22	32
15	30	45
20	36	56
25	40	65
30	42	72
35	44	79
40	45	85
45	45	90
50	45	95
55	44	99
60	44	104
65	42	107

MAXIMUM RUDDER ANGLE FOR NAVIGATION
ABOVE 3 KNOTS



OPTIMUM RUDDER ANGLE FOR BERTHING / UN-BERTHING
BELOW 3 KNOTS

DWG /FILE NO.: 2W-1730.DWG

Received by:

Pilot | Pilot 2 | Pilot 3

PILOT CARD SUPPLEMENT
BECKER RUDDER

HIS SHIP HAS A HIGH LIFT RUDDER. Therefore smaller than usual rudder commands should be given – as a guide use one-third (1/3) of the normal command given.

EDUCE SPEED GRADUALLY.

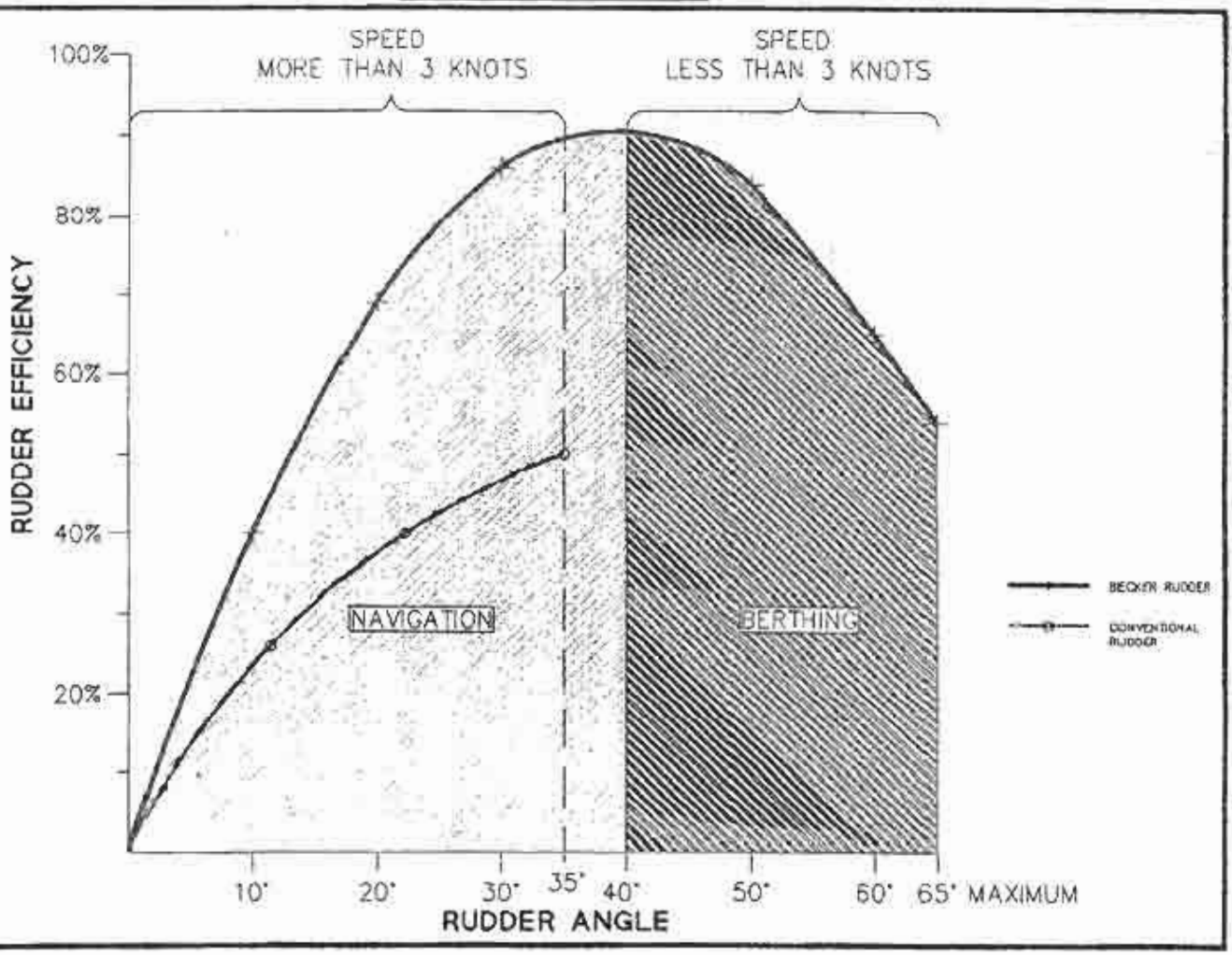
CLOSELY MONITOR "RATE-OF-TURN".

LO NOT REDUCE SPEED WHEN THE HEADING IS CHANGING.

SE OF RUDDER:

- ALWAYS KEEP A POSITIVE WATER FLOW TO THE RUDDER
- Never use more than 35 degrees when the ship is doing more than 3 knots thru the water.
- Closely monitor rate of turn and steer accordingly.

EFFICIENCY CURVE



ANNEX B

Port master/pilot information exchange and passage plan

Stena Line

HOLYHEAD PORT AUTHORITY

PASSAGE PLAN

MASTER / PILOT INFORMATION EXCHANGE

Ship Details

Ship's Name M.T. STOLT TERN	Date: 1.12.04
Gross Tonnage 3206, 1559 N	Report ETA/ETD
LOA 76 M. Beam 15.3 M. Draft 6.1 M.	Agent.

Pilotage Service Details

Boarding Point STA. 0930.	
Boarding Date/Time	
Actual Arr/Dep Time ETA: 1215	
Disembarkation Point	
Disembarkation Time	

Passage Details

Tidal Information

HW Time:	1239	Height:	5.2	Least UKC on Passage:	
LW Time:	1857	Height:	1.7	Depth (Chart):	

Squat Considerations:

Expected Weather Conditions

CALM

Pilot card Served:	✓
Turning and Handling characteristics Discussed with master:	✓
Hazardous cargo on board:	FEL
Tug Number, Type and disposition:	(AFON BRANT) 1110 - 1120
VHF Channel: 16 ☐ 61 ✓ Other:	8
Passage and Berthing Plan agreed with Master:	✓

Other Relevant information(s) required:

Wardage area:

Local & to Al in force / Navigational Cautions:

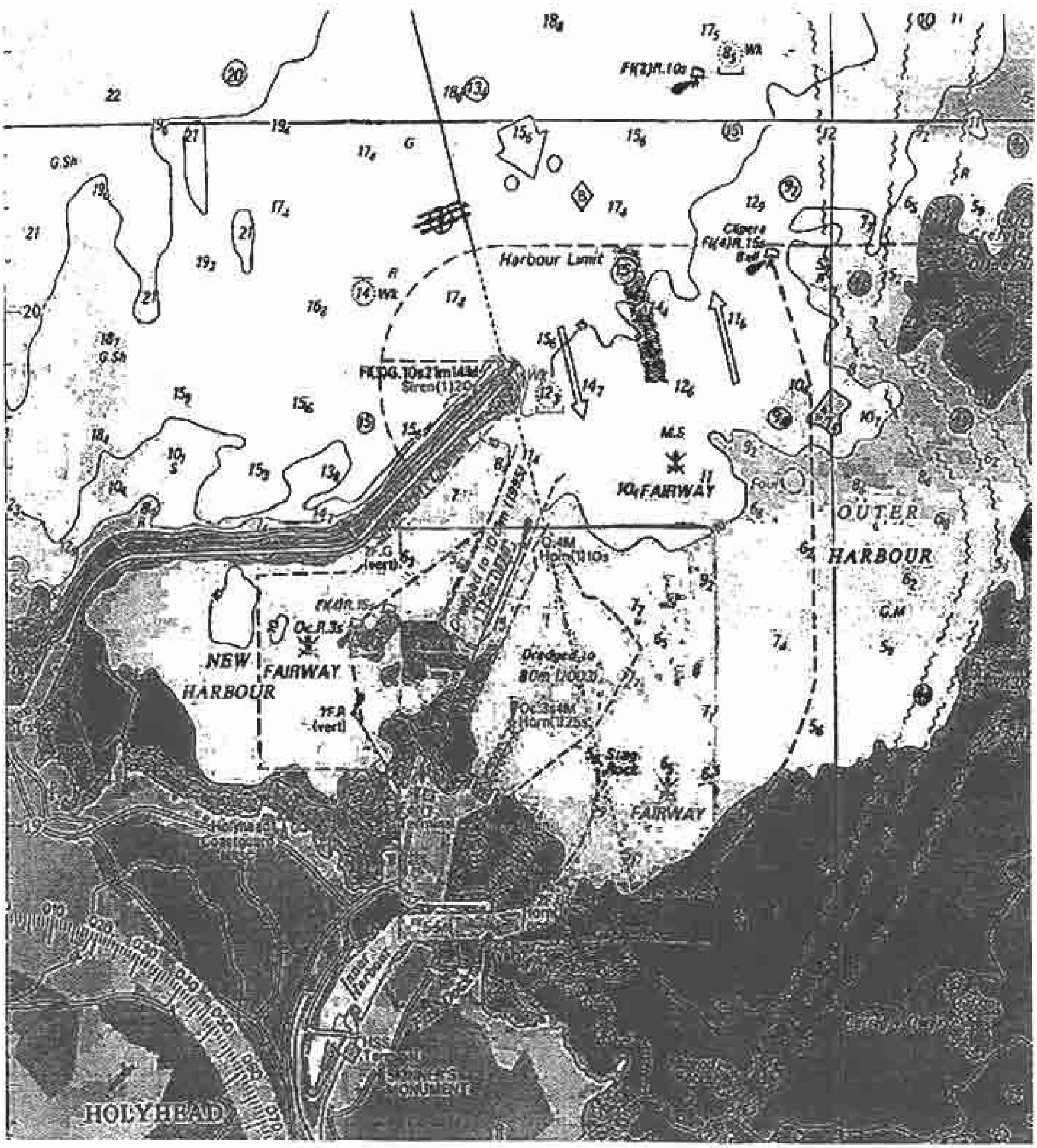
0940 - 1115 BOW ON GRAVEL SAT (BKWTR. END)
(BALLAST TRANSFER FROM FORD TO AFT TANKS)

BERTH DRAFT 6.4 F. 6.4 M.

Defects (If any) agreed with master: -NIL-

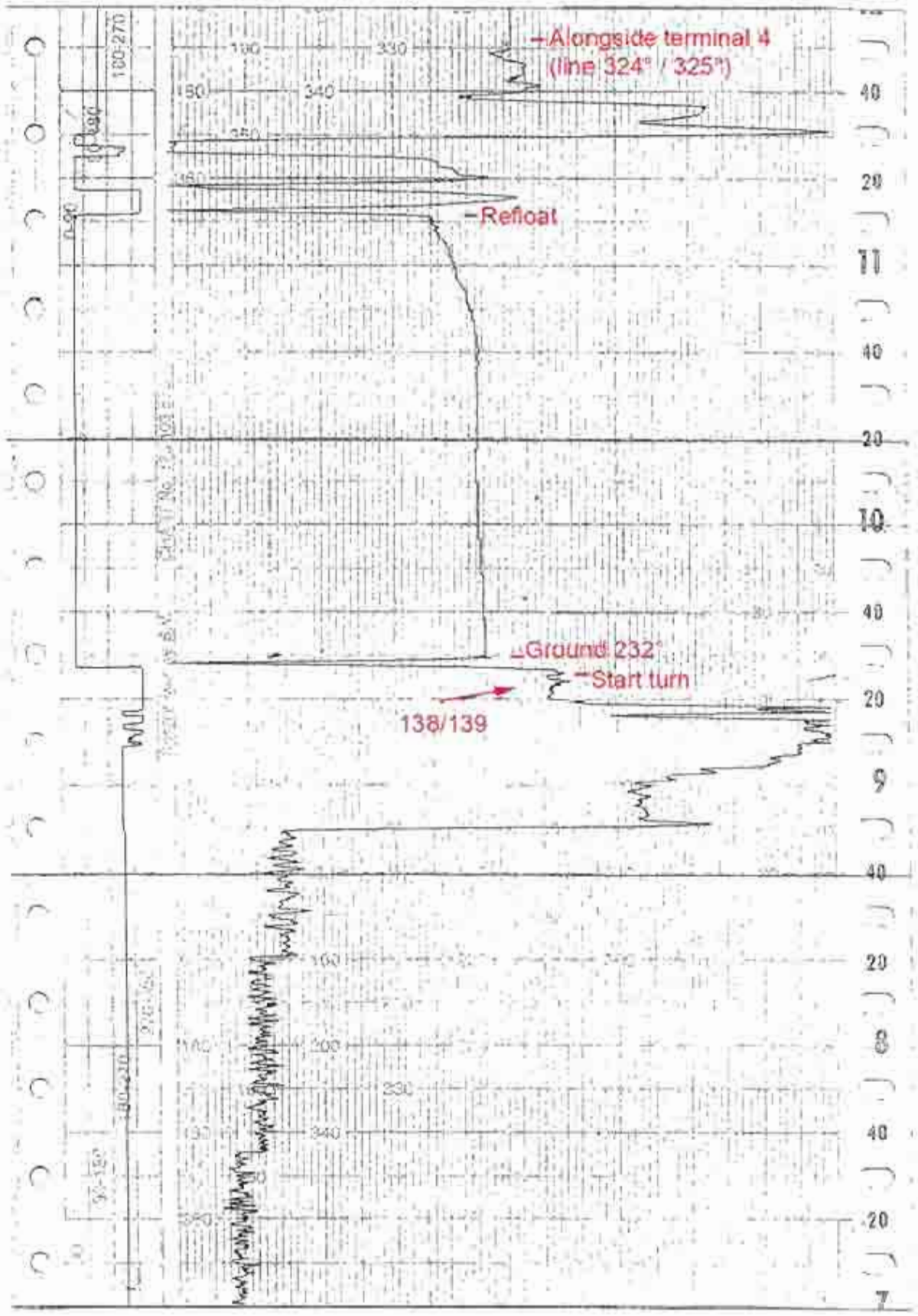
Pilots Name:	Masters Name :
Signature :	Signature :

Authorised Pilot has safely conducted the above vessel: Master


Harbour Limit
FAIRWAY
OUTER
HARBOUR
NEW
HARBOUR
FAIRWAY
FAIRWAY
HOLYHEAD

Copy of the course recorder from *Stolt Tern*

10 mins slow
10° low



Copy of the passage plan from *Stolt Tern*

IN PORT & RESTRICTED WATERS PASSAGE PLAN

Stolt-Nielsen Transportation Group B.V.

M/T STOLT TERN **ZCMT 9** **VOY : 537**

PORT :	*HOLYHEAD*	*FROM : HOLYHEAD PILOT*		*TO : HOLYHEAD PORT*	
MAST RAISED	YES	MAST LOWERED			
DRAFT	FWD :	AFT :		CHECKLIST COMPLETED :	YES ~~NO~~
PORT VHF CH:	HOLYHEAD PORT CONTROL & PILOT VHF 16,14				
CHARTS :	2011			CORRECTED TO:	NTM 46/04
PUBLICATIONS:	' ALRS VOL 6/1 ' ALL VOL A ' ADMIRALTY TIDE TABLE VOL 1' GUIDE TO PORT ENTRY ' NP 40			CORRECTED TO:	NTM 46/04

EMERGENCY ANCHORAGE: WILL BE DECIDED UPON USING THE PILOT ADVICE/MASTERS' DECISION DEPENDING UPON - THE PREVAILLING CONDITIONS/TYPE OF EMERGENCY.

FROM:	TO:	TRUE HDG	DIST.ON LEG	DEPTH OF CHANNEL	WIDTH OF CHANNEL	REFERENCE POINTS	REMARKS Significant nav marks, reporting points etc.
Pilot stn	Port limit	127	1.40	17.0 m		*None*	
Port Limit	East Bwater	232	0.30	14.7 m		*None*	*HOLYHEAD PORT CONTOL VHF.CH.14 / 16*
East Bwater	Red Buoy	252	0.45	11.6m		*None*	
Red Buoy	End Jetty	177	0.15	7.7m		*None*	
End Jetty	Terminal 4	142	0.15	7.5m		*None*	
	DISTANCE =		2.5	N. Miles			

MINIMUM DEPTH OF WATER : 7.5 Meters		MINIMUM UNDERKEEL CLEARANCE:	
SQUAT CALCULATION (12.0 Kts) : 0.7 x SPEED SQUARRED / 100 = 1.00 Meters		TIME HIGH WATER :	TIME LOW WATER :
NAVIGATIONAL NOTES:(gps datum error etc.)	See updated Navtex Nav Warnings.		
MAX TIME FOR FIX FREQUENCY ALL LEGS : EITHER 15 MIN, 10 MIN, 6 MIN, 3 MIN (CIRCLE ONE)		PREPARED BY:	2/O A. Mira
CHARTS CHECKED FOR TEMPORARY NAV. WARNINGS. YES ~~NO~~		APPROVED BY:	Capt. F.Prudenciado 11-27-05

READ BY OFF. OFF

ANNEX E

Copy of the port's risk assessment for grounding

PORT MARINE SAFETY CODE RISK ASSESSMENT

Port: Holyhead | Date: May 2004 | Assessment No.PMS/2/007 (PMS/At Risk/Serial No.)

Zone: 1,2, 3 & 4

PERSONS OR PROPERTY AT RISK:
Commercial Vessel/Craft under way..

PERCEIVED HAZARD OR RISK.
Grounding.

RISK ASSESSMENT (TICK NUMBER)

HAZARD SEVERITY			LIKELIHOOD OF OCCURRENCE			
	5	VERY HIGH		5	VERY LIKELY	
☒	4	HIGH		4	LIKELY	
	3	MODERATE		3	QUITE POSSIBLE	= 4
	2	SLIGHT		2	POSSIBLE	
	1	NIL	☒	1	UNLIKELY	

EXISTING CONTROL MEASURES
Port Hydrographic survey. Local Notices to Mariners. Adequate navigation marks Competent pilots. Observance of speed limits. Correct pilot/master exchange of information.

ADDITIONAL CONTROL MEASURES RECOMMENDED

RESULTS AFTER RECOMMENDATIONS IMPLEMENTED

HAZARD SEVERITY			LIKELIHOOD OF OCCURRENCE			
	5	VERY HIGH		5	VERY LIKELY	
	4	HIGH		4	LIKELY	
	3	MODERATE		3	MODERATE	=
	2	SLIGHT		2	POSSIBLE	
	1	NIL		1	UNLIKELY	

Review Date: May 2005

Name:

Signature

Position: Harbour Master

RISK RATING		ACTION AND TIMESCALE
1 – 5	TRIVIAL	No action is required.
6 – 10	TOLERABLE	No additional controls are required. Monitoring is required to ensure that the controls are maintained.
11 – 15	MODERATE	Efforts should be made to reduce the risk, but the costs of prevention may be taken into account. Risk reduction measures should be implemented within a defined time period. Where the moderate risk is associated with extremely harmful consequences, further assessment may be necessary to establish more precisely the likelihood of harm as a basis for determining the need for improved control measures.
16 – 20	SUBSTANTIAL	Activity should not be started until the risk has been reduced. Considerable resources may have to be allocated to reduce the risk. Where the risk involves work in progress, urgent action should be taken.
21 – 25	INTOLERABLE	Activity must not be started or continued until the risk has been reduced. If it is not possible to reduce risk even with unlimited resources, the activity has to remain prohibited.

5.5. Table 3 -Hazard Risk Criteria

The scores for hazard severity are as follows:

Score	Severity	People	Property	Environment	Port Business
1	Nil	None	Negligible (< £2k)	Negligible (< £2k)	Negligible (< £2k)
2	Slight	Minor (single slight Injury)	Minor (> £2k)	Minor (> £2k)	Minor (> £2k
3	Moderate	Slight (multiple moderate or single major injury)	Moderate (> £20k)	Moderate Tier 1 (small Operational) oil spill or environmental amenity impaired	Moderate Bad local publicity or short-term loss of dues, revenue, etc. (> £20k)
4	High	Serious (multiple major injuries or single	Serious (> £200k)	Serious Tier 2 (regional assistance) oil spill, localised flooding or multiple amenities impaired)	Serious Bad wide-spread publicity, temporary port closure or prolonged restriction of navigation (> £200k)
5	Very High	Major (more than one fatality)	Major (> £2,000k)	Major Tier 3 (national assistance) oil spill, wide-spread flooding or extensive damage to amenities	Major Port closes, navigation seriously disrupted for more than 1-2 days. Long term loss of trade. (>£2,000k)

It does not necessarily follow that a serious property damage will also involve serious multiple or major injuries to people or do serious damage to the environment. However, the most likely consequence should be considered.

5.6. Table 4 - Likelihood of Occurrence

For this project frequency is divided into 5 categories, with defined scores as follows:

Score	Frequency- Likelihood of occurrence	Period
5	Very likely	1 or more times per month
4	Likely	1 or more times in a 6 month period
3	Quite possible	1 or more times in a year
2	Possible	1 or more times in 10 years
1	Unlikely	Less than once in 100 years

Hazard Severity X Frequency of occurrence (Table 1 x Table 2) = Risk Rating

ANNEX F

Copy of the port's directions for pilotage and PECs

STENA LINE PORTS LTD. HOLYHEAD HARBOUR.

Holyhead Pilotage Directions.

These Pilotage Directions are given by the Holyhead Port Authority in pursuance of Sections 7 and 8 of the Pilotage Act 1987. Nothing contained in these directions relieves the Master of his overriding obligation to ensure the safe conduct of his vessel.

1. Pilotage is compulsory for all vessels of a length exceeding 40 metres.

2. Pilotage applies within all areas of the harbours of Holyhead and part of the sea as defined in the Harbour Bye Laws.

3. A vessel requiring the services of a pilot shall give, where possible 24 hours notice of ETA by contacting the Harbour Authority , Channel 16 (call sign "Holyhead Port Control"), working Channel 14 or telephone Port Control on 01407 606700, fax 01407 606622.

4. The Harbour Authority needs to be confident that there is a clear practical assignment of responsibility for the safety of piloted vessels and recommends that all shipowners should adopt detailed passage planning within the pilotage area so as to discharge this responsibility.

5. Stena Line Ports Ltd. Holyhead, as Competent Harbour Authority may additionally require a vessel to use the services of a pilot if:

   a) A vessels equipment is sub-standard.

   b) The vessel has a history of difficulty in manoeuvring.

   c) Adverse weather is prevailing or expected.

   d) It becomes apparent that the Master of the vessel is unfamiliar with the harbour or he is not performing to the satisfaction of the Harbour Authority.

   e) The services of a tug are required.

   f) A vessel is carrying hazardous cargoes.

Pilot Boarding Station.

If, in the opinion of the Harbour Master and Authorised Pilot, it is unsafe to board a vessel at the boarding station due to weather or unsuitability of the boarding point, the vessel may, if it safe to do so, be led into the Harbour Limits by the pilot boat and under the direction of the Authorised Pilot by VHF radio and there he may either board or lead the vessel into the berth.

Pilotage Exemption Certificates.

As directed by the Pilotage Committee a Pilotage Exemption Certificate may be issued to bona fide Masters or First Mates of vessels where pilotage is compulsory under the Holyhead Pilotage Directions provided the following criteria are observed:

a) Master/First Mate requesting exemption to have completed 10 visits into and 10 visits out of the port, of which 5 into and 5 out must be in darkness, within a period of not less than 6 months. Certain types of craft may be excluded.

b) Production of a valid satisfactory Medical Certificate.

c) Production of a Certificate of Competency entitling the applicant to act as Master or First Mate of the required vessel.

d) Production of a letter from the vessels Marine Superintendent / Senior Master stating that he is satisfied with the candidates ship handling abilities in the vessel/s to which the exemption certificate shall apply.

e) Successfully complete a Pilotage Exemption examination conducted by persons appointed by the Harbour Authority to ensure they have sufficient experience, skill and knowledge including adequate command of the English language. The examination will include, but is not confined to the following matters:-

1. Their competence to navigate safely in the harbour and to manoeuvre safely on to and from the berths.

2. Their knowledge of local bye-laws and regulations, local Notices to Mariners, tidal and geographical conditions and buoys and other navigation marks.

3. Their understanding of the effects of wave/wash on other vessels and the shoreline.

4. Their knowledge of vessel reporting procedures in the harbour.

5. Their knowledge of Port Emergency procedures.

Special Operations.

For special operations such as dredging or surveying the entry and exit requirements for a Pilotage Exemption Certificate may be changed at the Harbour Masters discretion.

Additional Requirements for Exemption Holders.

As directed by the Harbour Authority, a PEC holder may be required, when piloting a vessel on to a berth or in an area they have not previously visited or may be unfamiliar with, to complete 3 visits in and 3 visits out as Observer Master/First Mate with an authorized pilot or exemption holder familiar with that area/berth. On completion of these visits the exemption holder must indicate in writing to the Harbour Authority that they are confident in their ability to discharge their duties safely in that area/berth.

Revocation or Suspension of Pilotage Exemption Certificate.

The Harbour Authority may revoke or suspend a Pilotage Exemption Certificate granted by it if it appears the holder has been guilty of any incompetence or misconduct.
Before doing so the Authority will give the holder notice in writing of its intention to do so, stating the reasons for which it proposes to act, and shall give him reasonable opportunity of making representations.

Renewal of Pilotage Exemption Certificates.

Holyhead Pilotage Exemption certificates may be renewed annually provided that:-

1. The exemption holder has completed 4 visits into and 4 visits out of the port as bona fide Master or First Mate in each 6 months period prior to the renewal date. (e.g. a minimum of 8 visits in and 8 visits out of the port annually)

2. There has been no pilotage or berthing incident involving the exemption holder.

3. The exemption holder must satisfy the Harbour Authority that they have been bona fide Master or First Mate during their entries and exits from the port by completion of form HPEC1 recording qualifying entries and exits countersigned by the vessels Marine Superintendent/Senior Master. Form HPEC1 must be completed and returned to the Harbour Master within 10 days following 30th June, and 31st December in each year.

Exemption holders whose certificates have expired will be required to resit the pilotage exemption examination or carry out such entries and exits from the port as required by the Harbour Authority.

Pilotage Committee.

A meeting of the Holyhead Pilotage Committee will be held every three months to discuss any matters relating to pilotage, navigation and berthing of vessels within the Harbour Authority area of Holyhead.

Captain
Harbour Master
Holyhead
Dated: August 2003.

ANNEX G

Copy of the master's review checklist of bridge procedures

	BRIDGE PROCEDURES	N/A	<25	<50	<75	<100
31.	Has the present Master posted standing orders?					✓
32.	Have all the present bridge officers read and signed the Master's standing orders?					✓
33.	Do the bridge officers understand the requirements of the Master's standing orders?					✓
34.	Is the bridge order book appropriately used?					✓
35.	Has a list of watchkeepers and their work hours been posted?					✓
36.	Is a passage plan available for the following?:					
a	In port and restricted water movements.					✓
b	Pilot to Pilot.					✓
37.	Are the above completed for all ports?					✓
38.	When producing the passage plan, does the navigating officer use the listed publications?					✓
39.	When producing the passage plan, does the navigating officer indicate the following?:					
a	Parallel Indexing can be used.					✓
b	Squat & dist. off.					✓
c	Danger areas.					✓
d	Emergency anchorages.					✓
e	Go no Go areas.					✓
f	T&P notices.					✓
g	Reporting requirements.					✓
h	Max draft and air draft.					✓
40.	Is the passage plan verified by the Master and all Nav.Offs.?					✓
41.	Are "Bridge Team Management" procedures discussed?					✓
42.	Are run charts updated with T&P notices.					✓
43.	Are pre-arrival and pre-departure checks carried out at the appropriate times?					✓
44.	Are other tests on bridge equipment carried out as required?					✓
45.	When arrival and departure tests are carried out, is the bridge and engineroom staff working together?					✓
46.	Where appropriate, are UMS changeover procedures recorded in the log book?					✓
47.	Do the respective bridge watchkeeping officers understanding the reporting requirements of the GMDSS?					✓
48.	Are all GMDSS test procedures carried out? Refer to instructions at the front of the GMDSS log.					✓

	BRIDGE PROCEDURES (Cont.)	N/A	<25	<50	<75	<100
49.	Are there procedures in hand to ensure that all bridge officers maintain their skills in the following as required by STCW?					
a	Celestial navigation (except North Sea Trade Ships)	F				
b	Compass work					✓
c	Radar plotting					✓
d	Visual signaling					✓
e	Rule of the road					✓
f	Man overboard					✓
50.	Does the Master check the above is being carried out?					✓
51.	Is the bridge manned as per company and flag state requirements?					✓
52.	Are all watchkeepers fully qualified? (including the crew)					✓
53.	Can bridge watchmen understand orders, e.g., steer, report sightings?					✓
54.	Among other items, are the following being recorded in the appropriate log?					
a	Departure draft with density and FWA (last berth).					✓
b	Reference to Cargo Handling Manual Annex 4.					✓
c	Reference to tank cleaning operations.					✓
d	Dates and positions double bottoms were flushed.	F				
e	Time master "takes command" of the bridge.					✓
f	Master's inspection of accommodation, galley, and stores.					✓
g	Stowaway searches as appropriate.					✓
h	Names of officers and crew joining and leaving the ship.					✓
55.	Are the following available for use, and in good condition?					
a	Ships bell with clapper.					✓
b	Gong and striker.	F				
c	Balls and shapes.					✓
d	Hand lead line.	F				
56.	Do deck officers fully understand their administrative duties?					✓
57.	Are these duties carried out correctly?					✓
58.	Do all the duty officers know the setting on the engineroom dead man alarm?					✓

ANNEX H

Extracts of the ship's bridge procedures

Pilotage

The O.O.W. is responsible for seeing that all Pilot's helm and engine orders are correctly carried out. The presence of a Pilot on the bridge does not relieve an O.O.W. of his responsibilities for frequently fixing vessel's position. Proper helm orders can be found in Doc. #: 107 - IMO Standard Marine Vocabulary.

Team Management Port Passages

One of the most common critical situations which involve the Bridge Team, is arrival in port. To ensure a safe arrival, the Master should brief his team in sufficient time such that all personnel are acquainted with the facts, and have time to think about his/her role.

The port passage plan should be discussed and any particular dangers highlighted with necessary safety steps to be taken. Job delegation should be discussed such that everyone on the team knows what he/she is expected to do during the operation. If any of the team is unsure of the required role then this is the time to speak up, so the situation can be resolved. The Master should instruct the team members as to the safety margin which should be allowed in case he makes a mistake. It is possible, that even the most experienced Master can miss some navigation point or floating object, even a ship, therefore team members must know that they can give appropriate warnings. If the Master does not encourage open discussion within the team, it can become divided and of little use, all team members should therefore actively participate in the briefing.

The team discussion should include the various checks which must be made prior to arrival to ensure that all services are working. This may and probably will require the presence of a representative from the technical department. Deficiencies should be reported and corrected prior to arrival.

On arrival, the Pilot immediately becomes part of the Bridge team, therefore he should contribute to the planning by giving freely of his knowledge, as will the ship staff give freely of ship conditions to the pilot. The ship personnel should ensure that all relevant ship information is at hand and easily available both for the pilot's and ship staff's use.
The pilot should be given all assistance so that he can quickly familiarize himself with the characteristics of the ship, and with the operation of the various navigational instruments on the bridge. The Ship's officers must assist the pilot in the same manner that they would assist the Master during standby.

The ship personnel should expect the pilot to:

explain his intentions with regard to the way he intends to handle the ship.
possibly presenting a passage plan with courses.

advise on mooring requirements as appropriate.

advise on any local conditions, traffic regulations, and VTS reporting requirements.

advise the bridge team before making any changes to his plan.

advise the bridge team of any changes regarding traffic, weather, visibility, etc.

In many circumstances it may not be easy to extract this information from a pilot as he may consider he is revealing "trade secrets", however, a diplomatic approach should be tried by the team members. In some cases it may be diplomatic to remind the Master that he has forgotten to conduct his briefing with the pilot.

The briefing should be:	Say what you intend doing.
The plan should be:	Unless the safety of the ship is to be compromised. Do what you said you intended to do.

Reference publication 121 Bridge Team Management.

In addition to the above, small ships in NW European Trade (formerly known as SNIES Fleet) shall follow the guidelines given below

- *Special care and attention has to be taken for the exchange of information procedures. (Checklists #3 & #4)*
- *When equipped with an advanced rudder, a hard copy of the rudder card has to be presented to the Pilot.*
- *Checklist #3 has to be duly signed for receipt by all pilots and the rudder card supplement should also be signed for receipt.*
- *A proper record that an exchange of information has taken place and receipt of rudder card by the pilot shall be verified by a logbook entry.*
- *Pilots should not be allowed to steer and/or have access to machinery controls.*
- *Only when a licensed local helmsman is assisting the pilot can the ship's crew be relieved from its steering duties.*
- *When such Helmsman requires short relief, the pilot should not be distracted from his duties and another member of the bridge shall take over.*
- *Pilot's performance should be closely monitored by the Master and any concern must be promptly brought to the attention of the pilot. A follow up report, identifying these concerns must be sent to the Marine and Safety Services Department of SNTG B.V.*
- *Excessive use of personal mobile phone by pilots during transmit should not be permitted.*
- *On ship's equipped with advanced rudder, the rudder limit switch should be in operation (max 45°) when the ship is at speeds above 3 (three) knots.*
- *The rudder limit switch should be tested prior to departure and the procedure should be verified with a logbook entry. The limit switch shall only be overridden during berthing.*

ANNEX I

Extracts from the national occupational standards for marine pilots

GENERIC KNOWLEDGE

G1	Anchors and anchoring
G2	Blind pilotage techniques
G3	Bridge procedures
G4	Buoyage systems
G5	Cargo types and precautions
G6	Chartwork and corrections
G7	Coastal navigation
G8	Definition of 'an act of pilotage'
G9	Distress and emergency signals
G10	Dry-docking criteria and procedures
G11	Echo sounders and logs
G12	Effects of weather and tide on vessels
G13	Embarkation and disembarkation techniques
G14	Gyro and magnetic compasses
G15	Hydrodynamics; ship handling and manoeuvring theory
G16	Hydrography
G17	IMO operational guidance for officers in charge of a navigational watch
G18	International codes of practice
G19	International Regulations for the Prevention of Collision at Sea (as amended)
G20	Legislation and understanding liabilities
G21	Lines of responsibility
G22	Loadline Regulations and watertight integrity
G23	Marine structures
G24	Means of communication
G25	Meteorology
G26	Mooring criteria
G27	Nautical terminology
G28	Operation and limitations of navigational equipment
G29	Personal stress and fatigue awareness
G30	Pollution and environmental awareness
G31	Port functions; other port operations
G32	Priorities and roles of Master and Pilot
G33	Propulsion plant, engineering and safety systems
G34	Search and rescue procedures; survival at sea
G35	Ship strength and construction
G36	Ship stability
G37	Steering and manoeuvring systems
G38	Tidal theory
G39	Tugs and towage
G40	Types of vessels
G41	Use of personal protective equipment

STANDARDS FOR MARINE PILOTS

Unit and Element Titles

1 Planning an act of pilotage

1.1 Acquiring relevant data to facilitate the act of pilotage
1.2 Preparing the port pilotage plan
1.3 Re-assessing the plan and modifying as necessary

2 Embarking and disembarking

2.1 Preparing for pilot transfer
2.2 Transferring a pilot underway
2.3 Transferring a pilot when not underway

3 Assessing standards on the piloted vessel

3.1 Evaluating the conduct of the vessel prior to boarding
3.2 Assessing the vessel's condition and evaluating the crew
3.3 Evaluating and responding to deficiencies

4 Co-operating with the bridge team and functioning within it

4.1 Exchanging relevant information
4.2 Assessing the bridge team's capabilities
4.3 Integrating with the bridge team

5 Liaising and communicating within the port

5.1 Communicating by radio
5.2 Communicating by other means
5.3 Co-operating with other port team members

6 Transiting the pilotage district

6.1 Determining the vessel's position
6.2 Monitoring the vessel's progress
6.3 Navigating vessels

7 Manoeuvring vessels in harbours and their approaches

7.1 Handling different types and sizes of vessel
7.2 Manoeuvring in different locations and conditions
7.3 Working with tugs
7.4 Arriving at and departing from berths, buoys, moorings, locks, and anchorages

8 Reacting and responding to problems and emergency situations

8.1 Assisting in the management of ship-board malfunctions and problems
8.2 Dealing with emergencies
8.3 Facilitating problem-solving

9 Managing personal and professional conduct and development

9.1 Maintaining professional standards
9.2 Improving personal performance

LOCAL KNOWLEDGE

L1	Anchorages: names, locations, depths of water and limitations
L2	Awareness and consideration of other vessel movements
L3	Bridges and overhead obstructions
L4	Bye-laws and local Notices to Mariners
L5	Channels and fairways
L6	Characteristics of berths and locks
L7	Coastal topographical features
L8	Compulsory and non-compulsory pilotage; limits of pilotage area
L9	Conspicuous radar targets
L10	Depths of water, with locations of shoals, wrecks and other obstructions and dangers
L11	Dredging and survey operations – frequency of operations and the craft involved
L12	Duties and responsibilities of others
L13	Fog and visibility signals
L14	General and Harbour Master's directions
L15	Hydrographic data
L16	Lights – characteristics, range and angles/arcs of visibility
L17	Local regulations regarding dangerous goods and hazardous cargoes
L18	Magnetic variation
L19	Mooring and berthing arrangements
L20	Navigational marks
L21	Other electronic aids
L22	Overtaking and passing procedures
L23	Pilot boat characteristics
L24	Port emergency and counter pollution plans
L25	Port facilities, such as water, craneage and methods of discharge
L26	Sources of meteorological and tidal information
L27	Tidal streams and currents
L28	Tugs: names, types and characteristics; procedures
L29	VTS systems and reporting points
L30	Weather conditions and forecasting; wind and its effect in different locations

Element 4.1 Exchanging relevant information

Element summary

The exchange of information is essential for a safe and efficient passage, and should include any recent information which may not have been received by the vessel, or the pilot, or which becomes available during the course of the passage which may influence decision making and review of the port pilotage plan.

Additional knowledge required

In addition to the knowledge components listed at the start of this unit, the following will also need to be properly understood for this specific element:

Generic	G4	G5	G7	G14	G16	G25	G30	G36	G38	G39	G40
Local	L1	L2	L3	L4	L5	L6	L9	L10	L12	L13	L14
	L15	L16	L18	L19	L20	L21	L22	L24	L25	L27	L29
	L30										

Performance Statements

The following standards must be achieved for a pilot to be considered competent at **exchanging relevant information:**

1 An early exchange of information should be made, to include an explanation of the following, as appropriate:

- agreed port pilotage plan
- the critical stages of the passage
- contingencies
- expected traffic
- nature of the intended berth
- lock(s) that need to be transited
- port operations in progress
- recent local Notices to Mariners
- Defective navaids

2 Known deficiencies should be ascertained as early as possible, as well as the vessel's berthing requirements or mooring plans.

3 The vessel's current position should be verified with the Master and the movements of other vessels in the immediate vicinity established.

4 The Master should be apprised of the level and type of support required.

5 Handling and manoeuvring information relating to the vessel should be obtained as soon as possible. This includes provision of the Pilot Card.

6 The Master should be advised of any navigational changes in the port and its approaches.

7 The port pilotage plan should be exchanged and discussed with the Master, amending the vessel's own passage plan as necessary.

8 The plan should be agreed between Master and pilot and explained to the bridge team.

9 During the passage the bridge team should be kept informed and advised of the pilot's intentions.

10 Hazrep and Schedule 2 forms should be sighted where appropriate.

Element 4.2 Assessing the bridge team's capabilities

Element summary

This element deals with the effectiveness of the bridge team and its size. The level of expertise and interest may vary dramatically, as will the Master's ability and willingness to co-operate with the pilot.

These observations will assist the pilot and ensure that extra care is taken if any deficiencies are observed. Verbal communication with members of the bridge team may highlight potential problems, particularly with multinational crews.

Additional knowledge required

In addition to the knowledge components listed at the start of this unit, the following will also need to be properly understood for this specific element:

Generic G7 G11 G14

Performance Statements

The following standards must be achieved for a pilot to be considered competent at **assessing the bridge team's capabilities:**

1 The involvement of the Master during the passage should be ascertained, as well as his level of participation and presence on the bridge.

2 The welcome received by the pilot upon arrival on the bridge should be evaluated in professional terms.

3 The existence of the vessel's own passage plan should be ascertained

4 The number of persons comprising the bridge team should be ascertained and their respective duties clarified, including the person who is to be the primary interface with the Pilot.

5 The efficiency, division of responsibilities and co-operation of the bridge team should be evaluated. The standard of communications between team members and their understanding of English should also be noted.

6 The team's familiarity and expertise in the use of bridge equipment should be observed.

7 The bridge team's level of preparedness for the anticipated pilotage transit and their degree of understanding of the requirements of the port pilotage plan should be noted.

8 The bridge team's willingness to respond promptly to the pilot's orders and requests should be noted, as should their general level of interest.

9 If a bridge team member repeatedly fails to comprehend instructions or has difficulty in performing his normal duties, the matter should be reported to the Master and, if appropriate, to the Harbour Master at the earliest opportunity.

10 The effectiveness and accuracy of navigational routines should be observed. Where appropriate this will include the plotting of the vessel's track and position on an up-to-date, corrected chart, and the recording of passage information such as timings and engine movements.

11 The handling of the vessel throughout the passage should be noted, as should the Officer of the Watch's responsiveness to the Master's or pilot's instructions.

12 The helmsman's competence and comprehension of orders should be observed, paying particular attention to the repeating back of helm orders. The rudder indicator and vessel's heading should be monitored to ensure that the helmsman is responding properly to orders.

13 Additional person(s) acting as lookout should be requested as necessary, with due regard to the prevailing weather conditions.

14 Ongoing checks should be made to ensure that the vessel's track and progress is effectively and frequently monitored.

15 Communications with the vessel's mooring parties and the level of understanding by those in charge should be observed.