

Arrow Pre-arrival checklist

Port: *Aberdeen*

Item / Description	Y	N	N/A
In preparing the passage for arrival in port, has a pre-pilotage information exchange taken place?	✓		
Has the passage plan been updated following receipt of the Shore to Ship Pilot/Master exchange and all the latest navigational warnings?	✓		
Has the ETA been sent with all relevant information required by local regulations (e.g. details of dangerous goods carried)?	✓		
Is it necessary to re-arrange cargo/ballast?		✓	
Have Pre-Arrival Briefings with Bridge Team and Mooring Team's been carried out under VDR Mic	✓		

Has the following equipment been prepared and checked?

Bridge movement book / course and engine movement recorders	✓		✓
Clocks	✓		
Communications: bridge to engine control room and mooring stations	✓		
Signalling equipment, including flags/lights	✓		
Deck lighting		✓	
Mooring winches and lines, including heaving lines	✓		
Pressure on fire main		✓	
Anchors cleared away	✓		
Has the steering gear been tested, and has manual steering been engaged in sufficient time for the helmsman to become accustomed before manoeuvring commences?	✓		
Have the engines been tested and prepared for manoeuvring?	✓		
Has the Pilot Card been completed and are the pilot embarkation arrangements in hand?		✓	
Have VHF channels for the various services (e.g. VTS, pilot, tugs, berthing instructions) been noted and a radio check carried out?	✓		
Has the port been made aware of any special berthing requirements that the ship may have?	✓		

On Arrival:

AIS data updated	✓		
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Any additional checks required by Master?

	Signature	Date	Time
OOW	[REDACTED]	<i>25.06.2020</i>	<i>07.20</i>
Master	[REDACTED]	<i>25.06.2020</i>	<i>07.20</i>

Seatruck Grounding/Stranding checklist

8.3.8 Emergency Checklist 8 – Grounding / Stranding

GROUNDING / STRANDING

- The OOW must call the **Master** immediately after taking priority action to safeguard life
 - The Master must call the **Superintendent** at the earliest opportunity after effecting the ships emergency priorities
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- ME pitch to zero. Note time of grounding
 - Sound the GENERAL EMERGENCY ALARM
 - Inform Engine Room. Sea suction to high
 - Close watertight / fire doors
 - Switch on deck lighting at night
 - Exhibit lights/shapes and make appropriate sound signals
 - Inform vessels in immediate vicinity
 - Inform port authority
 - Inform local Coastguard
 - Fix ship's position and update GMDSS station if necessary
 - Broadcast ALERT and MESSAGE: DISTRESS, URGENCY or SAFETY
 - VHF to Channel 16
 - Fire-fighting equipment ready for immediate use
 - Damage assessment:
 - Sound all compartments
 - Casualties
 - External damage
 - Internal damage (visual inspection where possible) Check all watertight closures, stern glands and access doors remain tight
 - Watertight integrity of hull
 - Engine Room status
 - Fire risk
 - Pollution risk
 - Check depth of water around ship. Determine where the deeper water lies. Determine nature of sea bed
 - Ascertain time and height of tide. Obtain information on local tides and currents, particularly rise and fall.
 - Monitor draughts and compare with flotation draughts
 - If flooding refer to Emergency Checklist 10 - FLOODING
 - If pollution: refer to Emergency Checklist 15 Spills – Damage to Vessel
 - Consider:
 - Possibility of floating off if no damage or if tide rising rapidly. This may be aided by pumping out ballast or adjusting trim
 - Possibility of remaining in position particularly if bottom damage plugged by seabed
 - Ballasting tanks to harden ship in position and reduce wave induced damage
 - Tugs
 - Port of refuge
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- When the emergency is over, broadcast to ALL STATIONS to cancel**

Seatruck Fleet Risk Assessment DK004 Manoeuvring the vessel

Applicable to: (FLEET / CLASS / VESSEL)

Department: (ALL / DK / ENG / CAT)

RA No : (e.g. PAN/GEN/001)

FLEET	DK	FLEET/DK/004
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Activity being assessed:

Date:

MANOEUVRING THE VESSEL	19 th September 2019
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RISK FACTOR	LIKELIHOOD					Severity		Likelihood		
	1	2	3	4	5	1	2	3	4	
SEVERITY	1	L	L	M	M	M	1	Minor	1	Very Unlikely
	2	L	M	M	M	H	2	Moderate	2	Unlikely
	3	M	M	M	H	H	3	Major	3	Possible
	4	M	M	H	H	H	4	Catastrophic	4	Likely
						5		5	Very Likely	

Haz No.	Hazard Analysis			Risk Analysis										Risk Control Action Plan			
	Description	Existing Control Measures	Severity				Likelihood					Risk Factor	Further Control Measures Required	Remedial Action Date	Review Date		
			1	2	3	4	1	2	3	4	5	L				M	H
1	<p>Possible hazards from manoeuvres such as arrival, departure, shifting berths, approaching locks and manoeuvring in restricted/confined water:</p> <ul style="list-style-type: none"> • Collision • Grounding/stranding • Structural failure • Flooding • Marine pollution • Personal injury • Steering failure • Main engine failure • Electrical power failure 	<ul style="list-style-type: none"> • Compliance with company procedures as set out in SMS – vessel familiarisations, deck officer familiarisations, pilotage and ship handling records, master’s standing orders, pre-arrival and pre-departure checklists, critical equipment and systems and relevant SFN’s • Bridge procedures carried out in accordance with SMS, Bridge Procedures Guide and Bridge Team Management Manual • Good communication maintained between bridge team, engine room and mooring/anchoring stations • Bridge team supports the master in terms of passage plan monitoring, speed, weather, traffic, communications • All officers familiar with emergency checklists which are ready to hand 				•								•			

Completed by: SEATRUCK FERRIES LTD

Review Date (max 1 year) 19th September 2020

Seatruck Fleet Risk Assessment DK007 Pilotage Waters

Applicable to: (FLEET / CLASS / VESSEL)

Department: (ALL / DK / ENG / CAT)

RA No : (e.g. PAN/GEN/001)

FLEET	DK	FLEET/DK/007
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Activity being assessed:

Date:

PILOTAGE WATERS	19 th September 2019
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RISK FACTOR	LIKELIHOOD					Severity		Likelihood		
	1	2	3	4	5	1	2	3	4	
SEVERITY	1	L	L	M	M	M	1	Minor	1	Very Unlikely
	2	L	M	M	M	H	2	Moderate	2	Unlikely
	3	M	M	M	H	H	3	Major	3	Possible
	4	M	M	H	H	H	4	Catastrophic	4	Likely
						5		5	Very Likely	

Hazard Analysis			Risk Analysis										Risk Control Action Plan				
Haz No.	Description	Existing Control Measures	Severity				Likelihood					Risk Factor			Further Control Measures Required	Remedial Action Date	Review Date
			1	2	3	4	1	2	3	4	5	L	M	H			
1	<p>Possible hazards encountered in pilotage waters:</p> <ul style="list-style-type: none"> • Narrow channels • Dangers to navigation • Pilot/master interchange (poor communication) • High traffic density <p>The above can lead to:</p> <ul style="list-style-type: none"> • Grounding • Collision • Flooding • Marine pollution 	<ul style="list-style-type: none"> • All deck officers familiar with SMS requirements for bridge watchkeeping, the Bridge Procedures Guide and Bridge Team Management manual • OOW supports the master/pilot by using all available means to monitor the passage and traffic movements/potential hazards: visual identification and bearings, radar (EBL's, VRM's, parallel indexing, ARPA), GPS, echo sounder, AIS, tide and weather conditions • Pilot/master exchange in accordance with SMS 7.19 Navigating with a pilot and Bridge Procedures Guide • Good communications (in English) maintained throughout the bridge team and informing other departments such as engine room where appropriate • Reference: SFN 313 Pilotage Standards 															
2	Pilot transfer	<ul style="list-style-type: none"> • Reference: Risk Assessment Fleet/DK/006 • Reference: SFN 329 Rigging of Pilot Ladders 				•											

Arrow Pre-departure checklist



Form 30

PRE-DEPARTURE CHECKLIST: 5 SERIES (R Class)

Lerwick

Item / Description	Y	N	N/A
Has a passage plan for the intended voyage been prepared?	✓		

Has the following equipment been checked and found ready for use?

Anchors	✓		
Bridge movement book / course and engine movement recorder			✓
Echo sounder	✓		
GPS	✓		
Gyro and magnetic compass and repeaters	✓		
Radars	✓		
Speed / distance recorder	✓		
AIS data updated	✓		
Bridge Windows clean	✓		
Clocks	✓		

Has the following equipment been tested, synchronised and found ready for use?

Bridge and engine room telegraphs, including:	✓		
RPM indicators	✓		
Emergency engine stops		✓	
Thruster controls and indicators	✓		
CPP controls and indicators	✓		
Communications equipment, including:	✓		
Bridge to engine room / mooring station communications	✓		
Portable radios	✓		
VHF radio communications with port authority	✓		
Navigation and signal lights, including:	✓		
Searchlights, signalling lamp, morse light		✓	
Sound signalling apparatus, including:	✓		
Whistles	✓		
Fog bell and gong		✓	
Steering gear, including manual, auto-pilot and emergency changeover arrangements and rudder indicators	✓		

Is the ship secure for sea?

Cargo, and cargo handling equipment secure	✓		
All hull openings secure and watertight	✓		
Cargo/passenger details available	✓		
Stability and draught information available	✓		
All crew on board and all shore personnel ashore	✓		
Are the pilot disembarkation arrangements in place		✓	
Have Pre-Departure briefings with Bridge Team and Mooring Team's been carried out under VDR Mic	✓		

Any additional checks required by Master?

	Signature	Date	Time
OOW	[REDACTED]	<i>24.06.2020</i>	<i>1740</i>
Master	[REDACTED]	<i>24.06.2020</i>	<i>1752</i>

Arrow Master's Standing Orders

1. All deck officers should familiarise themselves with all the bridge publications and in particular :-
 - a. Bridge Procedures Guide
 - b. Bridge Team Management
 - c. Safety of Navigation (MCA)
 - d. All relevant MCA MSNs, MGNs and MINs.
2. A navigational watch should not be handed over to another deck officer if the relieving officer is, for whatever reason, unfit to carry out their duties. If such a situation arises the Master should be informed immediately.
3. All deck officers should be fully familiar with all the bridge equipment before standing a navigational watch.
4. Before any officer takes over a navigational watch they should be fully aware of the following:-
 - a. The vessel's position.
 - b. The vessel's course and speed.
 - c. Any future alterations of course.
 - d. The movement of all traffic in the vicinity, and in particular, any vessels that may require avoiding action to be taken by own vessel.
 - e. Any dangers or navigational hazards.
 - f. The status of all bridge equipment. The relieving officer should be fully aware of any equipment that is not functioning correctly.
 - g. The E.T.A.
 - h. Any future communications to be made.
 - i. Navigational Warnings.
 - j. Weather forecast.
 - k. Any specific orders from the Master.
 - l. Any other relevant information.
5. A navigational watch must never be handed over whilst carrying out a manoeuvre. All manoeuvres must be fully executed before handing over the watch.
6. The charted course and passage plan should be followed as closely as possible at all times.
7. The vessel's position is to be fixed at regular intervals by all possible means available. The vessel's position should be fixed more frequently when navigating closer to land or in the vicinity of any navigational hazards or dangers. Parallel indexing should also be used to monitor the vessel's position whenever possible.
8. All possible action should be taken to avoid a close-quarters situation with another vessel. Any action taken to avoid collision should be positive, made in ample time and have due regard to the observance of good seamanship.
9. The OOW should not hesitate to use the engines when necessary. The engines are always available for immediate use.
10. During the hours of darkness, the watchman should be posted to keep lookout at all times. The watchman may leave the bridge to carry out routine safety and security checks, but must always seek permission from the OOW first.
11. During the hours of daylight, the watchman may leave the bridge to carry out routine maintenance and cleaning duties.

12. During heavy weather, more frequent inspections of the cargo and lashings should be carried out. An extra man should be called to stand lookout if necessary.
13. Whenever the watchman is not on the bridge at sea the OOW must be able to contact him by VHF hand held radio at all times.
14. If visibility falls below 2 miles the Master must be informed immediately. The OOW must adjust the vessel to a safe speed and, when necessary, post extra lookouts. A systematic radar plot should be started for all radar targets in the vicinity.
15. A continuous listening watch should be maintained on VHF 16 and MF 2182. The OOW should also listen to the relevant port VHF channels when within range.
16. The OOW should keep a record of navigational warnings broadcast by coast radio stations or received by Navtex. Any warnings relevant to the ship should be acted upon immediately and the Master informed where necessary.
17. A compass error should be taken at least once a crossing, where possible, and the True, Gyro and Magnetic headings compared.
18. Weather reports and shipping forecasts should be obtained by all available means whenever possible.
19. The vessel's progress should be continually recorded and updated in the Chief Officer's Log Book. The vessel's heading and position should be recorded at every alteration of course and at least every 4 hours when on a constant heading. The weather conditions should be recorded at least every 4 hours and more much more frequently when the vessel is experiencing adverse weather conditions.
20. A record of all external communications, sent and received, should be kept in the GMDSS Log Book. The OOW should also record all tests carried out on GMDSS equipment.
21. Master should be called immediately whenever:-
 - Visibility falls below 2 miles.
 - There is any doubt regarding the vessel's position.
 - There is difficulty maintaining the vessel's course.
 - The movement or proximity of other vessels is causing concern.
 - There is an engine or steering gear failure or malfunction of any essential equipment.
 - There is an emergency – including Fire, Man Overboard or Distress.
 - The vessels motion becomes excessive and there is a potential risk of damage to the vessel or cargo.
 - There is any risk of danger to the environment by pollution.
 - The safety of the vessel is compromised in any way.
 - The OOW has any doubts.

Name of Master	Signature of Master

Seatruck Drill Matrix

This table should be used as an overall planning tool for drills. The indicated intervals are minimum requirements. The Master may increase the frequency and/or expand the type of drills. Please record the date of the drill in the table. Drills should also be recorded in the Chief Officer's Log Book and Official Log Book

TYPE OF DRILL		FREQ (intervals not exceeding)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Abandon Ship		1 m	09	06/20	05	05/30	14/29	29						
Fire Drill (see Note 1)		1 m	09	06/20	05	05/30	14/29	29						
Davit-launched lifeboats (see Note 3)	P	Lower & manoeuvre	3 m											
	S		3 m											
	RB	Lower, manoeuvre & MOB	3 m											
Free-fall lifeboat (see Note 3)	Lower & manoeuvre		3 m		06		03			03				
	Simulated launch		6 m		06						06			
Rescue boat (not lifeboat) (see Note 3)	Lower, manoeuvre & MOB		1 m	19	07	08	08	03/12	12/14	14				
Davit-launched liferaft	Training		4 m	27			14				14			
Key Personnel Disabled		2 m		06		05	14		14					
Damage Control		3 m	14			14			14					
Collision (incl. failure of hull opening above w/l)		12 m							01					
Main propulsion machinery failure		12 m					13							
Main and emergency electrical power failure (see Note 4)		12 m					13							
Grounding		4 m	14				13				13			
MARPOL		2 m	27		27		13		13					
Serious Injury/Helicopter Ops		2 m		20		19		17		17				
Enclosed space rescue		2 m		22		19		17		17				
Enclosed space entry procedure (not rescue)		2 m		22		19		17		17				
Flooding		4 m	14				13				13			
Emergency Steering		3 m	05			05			05					
Liferaft & Survival instruction		2 m		06		05/30		30						
Cargo Shift / DG Leakage		4 m				14				14				
SECURITY (see Note 2)		3 m	05/09		02(search)		24(level)			24				

1. Alternate between Cargo, Machinery Space, Accommodation and Galley. Em'cy fire pump Familiarisation at intervals not exceeding 3 months.
2. Alternate between Security Search, Change of Security Level and Attack on Ship
3. All crew to be familiarised with operation of LB/RB engines at intervals not exceeding 3 months.
4. All crew to be familiarised with operation of Emergency Generator at intervals not exceeding 3 months.

Seatruck Safety Management System Article 7.21 Navigation in Restricted Visibility

General

Masters and deck officers to be familiar with the guidance in the above IMO Circular. Ensure every precaution is taken to avoid Dangerous Situations as described in this circular.

Completion of form 70 – Navigation in Heavy Weather is to be recorded in the Deck Logbook

OOW

Inform Master and Engine Room when heavy weather is forecast or encountered
Inform Engine Room before the onset of heavy weather and additionally before any alteration of course which may cause heavy rolling
Ensure all crew and passengers are warned before the onset of heavy weather

Stability

Ensure strict compliance with the Trim and Stability Book, particularly with regards stability and the instructions to Masters
Improve stability wherever possible
Remove free surface effect (e.g. press-up slack tanks)
Close W/T doors
Ensure scuppers are clear

Cargo

Loading – refuse any cargo unfit for sea transport in the forecast weather
Ensure cargo is secured in compliance with the Cargo Securing Manual.
Check and harden-up cargo lashings at frequent intervals

Deck

Frequently check hull opening securing arrangements and for signs of leakage
Close deck ventilation (where required by the Trim and Stability Book)
Check anchor securing arrangements
Check accommodation ladder securings
Secure all moveable objects above and below decks
Secure the ship's accommodation and close ports and deadlights
Secure all weather deck openings
Secure all mooring lines
Upper deck areas made dangerous by the weather to be declared out of bounds

Navigation

Monitor weather reports frequently
Consider re-routeing
Verify position frequently
Adjust course and speed as necessary
Consider manual steering and engines on standby
Consider heaving-to or seeking shelter

Form

Form 70 – Navigation in Heavy Weather

7.21 Navigation in Restricted Visibility

Scope

Describes the action to be taken when navigating in or near an area of restricted visibility.

Responsibilities

The Master and Officer of the Watch are responsible for ensuring this procedure is implemented.

Definitions

Restricted Visibility - Means any condition in which visibility is restricted by fog, mist, falling snow, heavy rainstorms, sandstorms or any other similar causes.

Look-out - The 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 condition so as to make a full appraisal of the situation and of the risk of collision.

References

International Regulations for Preventing Collisions at Sea (COLREG)
Bridge Procedures Guide (ICS)
Bridge Team Management (The Nautical Institute)
MGN 63 Use of Electronic aids to Navigation
MGN 137 Look-out During Periods of Darkness and Restricted Visibility
MGN 315 Keeping a Safe Navigational Watch on Merchant Vessels
MGN 324 Amendment 1 Navigation: Watchkeeping safety - Use of VHF Radio and AIS
MGN 369 Navigation: Navigation in restricted visibility

PROCEDURE

Completion of form 71 – Navigation in Restricted Visibility is to be recorded in the Deck Logbook
Inform Master
Inform Engine Room
Engines - To stand-by and ready for immediate manoeuvre
Speed - Proceed at a safe speed (as defined by Rule 6 of COLREGs).
Post extra look-out(s)
Helmsman on stand-by
Sound the appropriate fog signal
Exhibit navigation lights
Close all watertight doors
Radars - Functioning correctly. Maintain a constant radar watch. Pay particular attention to the effect that weather conditions are having on radar performance. Use clutter and gain controls with caution. Monitor both short and long range scales. Caution: ARPA information should be used as an aid to collision avoidance and NOT strictly relied upon. Information should always be gathered by all available means.
VHF - Monitor Channel 16. Monitor nearest port channel.
Echo sounder on (in shallow water)
Position - Increase frequency of fixing and monitor vessel's position closely. If fitted, ensure ECDIS is working effectively.
Navigate with extreme caution

Consider:-

Bridge manning: e.g. in congested waters, extra Deck Officers to the bridge to assist.
Anchoring: If the ship's position is in doubt, consider the possibility of anchoring.
AIS: Monitor AIS for additional information. Caution: AIS information should not be used for collision avoidance.
Tidal effect: Consider the tidal set and height of tide
Weather conditions: Consider the effect of other weather conditions, e.g. wind and snow, and how this is affecting the vessel's progress and the performance of radars.
Day/night: Consider the effect that darkness will have on the requirement to keep a proper look-out and a safe speed.

Form:

Form 71 – Navigation in Restricted Visibility

7.22 Passage Planning

Scope

This procedure defines the requirements for passage planning.

Responsibilities

The Master is responsible for ensuring that a plan is prepared and for checking and approving the plan.

References

Bridge Procedures Guide (ICS)
Bridge Team Management