CHECKS ON BOARD

Preventive measures to reduce deficiencies

DEUTSCHE FLAGGE

Rev. 01/2024 **1/2**

BRIDGE TEAM

Navigational Bridge

Bridge Team Management

Assigned to:

☐ Master ☐ C/O ☐ __NWO ☐ other:

☐ C/E ☐ __TWO _____

Remarks / Findings:

Date: **Initial** **Signature:**

It is normal for some technical systems to fail from time to time. Failures are therefore part of managing the bridge. In such a case:

Use the available ISM tools of the company!

Be aware: an inspection pursues two main objectives:

1) The ship was safely navigated into the port(s).
2) The ship can be safely navigated to the next port(s).

The inspection thus aims at both: the past & future.

Further details: see enclosed information sheet.

01. **Passage Plan** ❐ ☑ ❐ ☒

Plan is completed berth-to-berth, readily available, signed by all OOW & approved by Master. Plan reflects e.g. UKC, tide calculation, weather reports, navigational hazards & current warnings, parallel indexing, changes of charts, methods and frequency of position fixing, special navigation & radar marks & emergency anchorages / ports, speed limits, reporting points / VTS, way points, wheel over points etc.

02. **NAVTEX & SAT-C EGC** ❐ ☑ ❐ ☒

Systems operational and live with correct stations selected, OOW aware of current warnings related to the passage plan, if switched off: controlled process (e.g. ISM SMS instruction).

03. **Charts** ❐ ☑ ❐ ☒

All charts for the last & intended voyage available & updated (either physically or electronically as per SSEC).

04. **Nautical Publication** ❐ ☑ ❐ ☒

All publications for the last & intended voyage available & updated (either physically or electronically as per SSEC).

05. **T&P Notices to Mariners** ❐ ☑ ❐ ☒

Temporary & Preliminary Notices: appropriately dealt with, records available. Access to cumulative and annual summary list of NtM notice to mariners available.

06. **Master´s Standing Order** ❐ ☑ ❐ ☒

Available, updated and signed by Master & OOW. Contains particular general requirements to the Bridge Team.

07. **Master´s Watch Order Book** ❐ ☑ ❐ ☒

Available, frequent entries made, signed by Master & OOW. Contains Master´s expectations, conditions or periods.

08. **Watch Schedule** ❐ ☑ ❐ ☒

Up-to date, posted at bridge & public area, identical figures schedule/records (lookout) considering required rest hours.

09. **Deck Log Book** ❐ ☑ ❐ ☒

Entries completed, daily signed by Master. Lookout and fire & safety rounds recorded (lookout may not leave the bridge).

10. **Table of Life Saving Signals** ❐ ☑ ❐ ☒

Posted on the bridge. OOW are familiar with it.

11. **Wheelhouse Poster** ❐ ☑ ❐ ☒

Available & OOWs familiar. Manoeuvring characteristics displayed and known. (*Manoeuvring information mandatory L>100m, gas and chemical tankers – recommended for all).*

12. **Pre-Arrival / Pre-Departure Checklist** ❐ ☑ ❐ ☒

Done for each port of call, records available and complete.

13. **Pilot Card & Exchange Records** ❐ ☑ ❐ ☒

Updated and maintained considering potential defects, records of Pilot / Master information exchange produced.

14. **Position fixing** ❐ ☑ ❐ ☒
There are specifications for the method and the frequency by either SMS procedures, standing orders or equivalent.

15. **GYRO COMPASS** ❐ ☑ ❐ ☒
All gyros operational. Course indications between Bridge Mother (Main) and repeaters Center, Wings, S/G room and further indicators (auto-pilot, radar, VDR) are synchronized.

16. **MAGNETIC COMPASS** ❐ ☑ ❐ ☒
Compass readable. Mirror in place, standard & emergency illumination operational, adjusted & maintained (records), updated deviation table posted. Spare compass available / maintained (not required if fitted with alternative means).

17. **COMPASS DEVIATION / Error** ❐ ☑ ❐ ☒
Deviation/Error and figures of gyro & magnetic compass are recorded at the log book and at the compass deviation/error book, daily records available, standard failure is addressed.

18. **RADAR** ❐ ☑ ❐ ☒
Radars & their alarms operational without failure indication. Records of performance test & maintenance (e.g. cleaning filter) available. Blind sectors identified/recognizable. Speed input as per instruction (e.g. speed through the water).

19. **ECDIS** ❐ ☑ ❐ ☒
Operational, no failure indication, alarms functional. Voyage integrated berth-to-berth as per voyage plan. ENC up to date, cell licenses not expired / active for the whole voyage. Team familiar & able to demonstrate various options & depth contour. Type specific familiarization complete/documented.

20. **ECDIS back-up** ❐ ☑ ❐ ☒
Back-up may be of electronic type (ECDIS), paper charts or a combination of both. As-is condition is equal to the CSSE Certificate. In case of paper charts: all back-up charts for the latest and intended voyage are up to date (incl. T&P NMs).

21. **Echo Sounder** ❐ ☑ ❐ ☒
Operational, no failure indication. Manual means available.

22. **AIS** ❐ ☑ ❐ ☒
Operational, no failure indication. 12M shore based test done (certificate available), proper ID and figures displayed.

23. **VDR / S-VDR** ❐ ☑ ❐ ☒
Operational, no failure indication. 12M shore based test done (certificate available). OOWs able to demonstrate operation / triggering. Emergency battery: not expired.

24. **ALDIS Lamp** ❐ ☑ ❐ ☒
Operational with both power sources main and battery, spare parts available, battery regularly charged.

25. **BNWAS** ❐ ☑ ❐ ☒
Operational and protected against misuse. Bridge team familiar with operation. Appropriate certification available.

26. **LRIT** ❐ ☑ ❐ ☒
Operational, certification / conformance test report available.

27. **Speed log / distance.** ❐ ☑ ❐ ☒
Operational, no failure indication, showing speed & distance through the water. Second means operational measuring speed over ground for certain type of ships >50.000gt.

28. **Navigational Lights** ❐ ☑ ❐ ☒
Main & spare lights operational (e.g. position, anchor, NUC, DG). Sectors not obstructed, free of damages / residues, e.g. water, carbon, salt. Side nav. lights: screen is of black colour.

29. **Shapes & Sound Signal** ❐ ☑ ❐ ☒
Available / operational as per COLREG incl. anchor bell, gong.

30. **Steering Gear** ❐ ☑ ❐ ☒
Procedure for change over main & emergency steering available, OOW familiar & able to establish communication between Bridge-S/G (by both means main & emergency).

31. **Rudder angle indicator** ❐ ☑ ❐ ☒
Operational. Bridge & steering gear room: synchronized.

32. **Search lights bridge wings** ❐ ☑ ❐ ☒
If available: operational and of good condition.

33. **Bridge Window** ❐ ☑ ❐ ☒
Appropriate safe condition with operational cleaning, wiping & heating system to prevent limitations (rain, icing, fogging).

34. **Blind Sector bridge view** ❐ ☑ ❐ ☒
SOLAS compliant with calculation evidence as necessary.

35. **GMDSS (fixed)** ❐ ☑ ❐ ☒
Equipment as per Ship Safety Radio Certificate available & operational. OOW can demonstrate test calls (both DSC VHF, DSC MF/HF radio, VHF & MF/HF). Battery charger and batteries in order & maintained, records available.

36. **GMDSS (portable)** ❐ ☑ ❐ ☒
Available & in good working condition (e.g. VHF, EPIRB, SART). Batteries including spare batteries not expired.

37. **GMDSS (records)** ❐ ☑ ❐ ☒
Appropriate radio and GMDSS records available (including daily / weekly checks and DSC test calls).

38. **Familiarization w. bridge equipment** ❐ ☑ ❐ ☒
OOW familiar with bridge control & navigational equipment, steering gear, manoeuvring characteristics, alarm system, safety equipment, procedures, nautical publications, bridge procedures checklists, instructions, manuals & maintenance.

39. **Proper look-out** ❐ ☑ ❐ ☒
Effective look-out maintained during night & day time and recorded. Records and rest hours identical.

40. **Alarm syst. (general, abandon ship)** ❐ ☑ ❐ ☒
Fully operational and in good working condition.

Information to prepare for inspections

BRIDGE TEAM

Navigational Bridge

Bridge Team Management

Objectives

Generally, the inspection pursues two main objectives:

1) The ship was safely navigated into the port(s).
2) The ship can be safely navigated to the next port(s).

The inspection thus aims at both the past and the future.

Therefore, inspectors examine existing records such as charts, publications, logbooks, checklists and passage plans. Together with the general impression and results of direct interviews, which is giving also an indication on the familiarization and understanding of the company procedures of the responsible bridge team members, a picture emerges. Beside this, all navigation devices, whether required or not, must be in an operational condition. Since the bridge is the central command station, other vital safety and control systems that come together here must be functional and the bridge team must be familiar with.

Technical failure and reporting

It is normal for technical systems to fail from time to time.

For these cases, the reporting and documentation as per SOLAS and companies ISM / SMS system is a routine and essential standard. A bridge team should not try to hide or disregard a defect. Instead, the team should discuss deficiencies / deviations and should deal with in accordance with ISM instruments.

Use the available ISM tools of the company.

These tools may include, for example: issuing a non-conformity note, appropriate documentation demonstrating corrective and preventive actions to the extent possible, reporting to flag State and/or port State administration. Seek for a flag State confirmation or dispensation as possible.

Keep an appropriate documentation on hand to demonstrate the measures taken if asked for.

Need advice?

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Check on board: Notes on selected references

01.	Passage plan	SOLAS V/34, STCW A-VIII/2-2, Res.A.893, BPG 3, 4.15, C2.9, C2.10, C2.11
02.	Navtex/EGC	SOLAS IV/7, BPG 3.4.11
03.	Charts	SOLAS V/34, IMO Res.A.893, BPG 5.12
04.	Publications	SOLAS V/34, IMO Res.A.893, BPG 5.12
05.	T&P NMs	BPG 3.3
06.	Standing Order	STCW A-VIII/2, BPG 2.3, C2.17, COLREG
07.	Watch Order B.	BPG 2.3
08.	Watch Schedule	STCW A-VIII/1, See-ArbZNV, IMO MSC.1/Circ.1598
09.	Log book	SOLAS V/28
10.	Table of signals	SOLAS V/29
11.	Wheelhouse P.	BPG 4.14, C1.3, SOLAS II-1/28
12.	Pre-Checklist	BPG 4.22, C2.6, C2.7
13.	Pilot Card	BPG 6, C1
14.	Position fixing:	SOLAS V/34, IMO Res. A.893
15.	Gyro Comp.	BPG 5.3
16.	Magnetic Comp.	BPG 5.3
17.	Comp. error	BPG 5.3
18.	Radar	BPG 5.11, IMO SN.1/Circ.271
19.	ECDIS	IMO Res A.817 (19), IMO MSC.1/ Circ. 1503, BPG 3.4.4, 5.13, C2.4
20.	ECDIS backup	IMO Res A.817 (19), IMO MSC.1/ Circ. 1496, BPG B, C2.5
21.	Echo sounder	BPG 5.5, SOLAS V/19.2
22.	AIS	V/19.2, BPG 5.10
23.	VDR / S-VDR	SOLAS V/18, V/20, BPG 5.8
24.	ALDIS	SOLAS V/19.2, IMO MSC.95(72)
25.	BNWAS	SOLAS V/19.2, IMO MSC.128 (75), BPG 4.5, 5.6
26.	LRIT	SOLAS V/19-1 BPG 4.20
27.	Speed log	SOLAS V/19.2, BPG 5.4
28.	Nav. Lights	COLREG, BPG 4.16, 5.7
29.	Shapes & sound	COLREG, BPG 4.16, 5.7
30.	Steering Gear	SOLAS V/26, II-1/29, BPG 5.2, C2.1
31.	Rudder angle	SOLAS II-1/29
32.	Search lights	Panama Canal, Polar Code, Class, Ice requirements
33.	Window	SOLAS V/22
34.	Blind sector	SOLAS V/22
35.	GMDSS fixed	SOLAS IV, BPG 4.19, 5.15
36.	GMDSS porta.	SOLAS IV, BPG 4.19, 5.15
37.	GMDSS records	SOLAS IV/17, BPG 4.19, 5.15,
38.	Familiarization	BPG 2.3,4, 4.7, 4.23, 5, C2.3, C2.4
39.	Look-out	COLREG, STCW A-VIII/2, BPG 2.2.2, 4.3, 4.4, 4.8
40.	Alarm system	SOLAS II-2/12, III/6, LSA 7.2

Common deficiencies noted

Passage Plan (Voyage Planning)

- Incomplete, not updated, not signed
- No berth-to-berth planning

Nautical publications (lights, tides, sailing directions)

- Not available on board, not updated (outdated)
- Electronic means without backup

Navigational charts

- Missing / not available for present or intended voyage
- Not updated / Notice to Mariners missing

Magnetic compass

- Illumination not available (main & emergency)
- Mirror out of position
- Unreadable (unclear view, dusty, dirty)
- Excessive deviation / not corrected
- Spare magnetic compass not available (if required)

Gyro Compass

- Not synchronized (main, center, wing, S/G room)

Lights & shapes

- Not all nav. Lights operational (nav lights)
- Damage stations for nav lights
- Shapes not (completely) available
- ALDIS lamp: lack of alternative power, broken bulb

ECDIS

- Inconsistency of Certificate (CSSEC), demonstrating different backup system
- Bridge Team not familiar (e.g. safety / depth contour, update procedure)
- Wrong safety settings

Various nautical systems

- AIS displaying incorrect figures / not updated
- VDR / S-VDR showing long term errors / battery expired
- Radar inoperative / blind sector not known / unclear picture (i.e. magnetron related) / defect of screen
- Echo sounder inoperative / fault messages
- Speed log inoperative / fault messages
- Alarm displays & indicators defect
- Other displays defect or worn out (e.g. GPS)
- Switches (e.g. push button) missing or broken

GMDSS

- Battery error. Portable VHF: batteries inoperative or expired, SART / EPIRB expired
- Type of SART (AIS) not as per certificate

Team familiarity

- Members not familiar with operations including equipment and procedures to the extend required (e.g. crew not familiar with emergency communication to engine or S/G room)

Common grounds for PSC detention

- Charts: incomplete, outdated or missing
- Naut. publications: incomplete, outdated or missing
- Navigational equipment not operational
- GMDSS equipment not operational
- Passage plan not available / done
- Bridge team not familiar with equipment or procedures

Further information that may be of interest

Procedures for Port State Control, 2021

Extracts of IMO Res. A. 1155(32)

Bridge operation

The PSCO may determine if officers in charge of a navigational watch are familiar with bridge control and navigational equipment, changing the steering mode from automatic to manual and vice versa, and the ship's manoeuvring characteristics.

All officers in charge of a navigational watch should have knowledge of the location and operation of all safety and navigational equipment. Moreover, this officer(s) should be familiar with procedures which apply to the navigation of the ship in all circumstances and should be aware of all information available.

The PSCO may also verify the familiarity of the officers with all the information available to them such as manoeuvring characteristics of the ship, life-saving signals, up-to-date nautical publications, checklists concerning bridge procedures, instructions and manuals.

The PSCO may verify the familiarity of the officers with procedures such as periodic tests and checks of equipment, preparations for arrival and departure, changeover of steering modes, signalling, communications, alarm system, manoeuvring, emergencies and logbook entries.

Communication

The PSCO(s) may determine if the key crew members are able to communicate with each other, and with passengers, as appropriate, in such a way that the safe operation of the ship is not impaired, especially in emergency situations. For drills, key crew members could be but are not limited to: .1 bridge team including GMDSS operators who must also be able to communicate with the shore and other vessels.