

| 2.0              | SHIP'S CERTIFICATES, DOCUMENTS AND SURVEYS  |                                  |  |  |
|------------------|---|----------------------------------|--|--|
| 1. Ple<br>2. Ple | to Surveyors:<br>ease enter "N.A." against any Certificate<br>ease advise details of any invalid Certific<br>Recommendations as a Deficiency. |                                  |  |  |
| 2.1              | Safety Management Certificate:  | Date of issue/expiry             |  |  |
|                  | (SOLAS Chap. IX, ISM Code)  | Date of intermediate endorsement |  |  |
| Issuing          | Authority:  |                                  |  |  |
| 2.2              | Document of Compliance:<br>(SOLAS Chap. IX, ISM Code)   | Date of issue/expiry             |  |  |
|                  |   | Date of last annual endorsement  |  |  |
| Issuing          | Authority:  |                                  |  |  |
| Issued           | to: (company name & address)  |                                  |  |  |
| 2.3              | Certificate of Registry:  | Number                           |  |  |
|                  |   | Date of issue                    |  |  |
|                  |   | Date of expiry                   |  |  |
| 2.4              | Cargo Ship Safety Construction  | Date of expiry                   |  |  |
|                  | Certificate:  | Date of last survey              |  |  |
| 2.5              | Cargo Ship Safety Equipment   | Date of expiry                   |  |  |
|                  | Certificate:  | Date of last survey              |  |  |
| 2.6              | Cargo Ship Safety Radio Certificate:  | Date of expiry                   |  |  |
|                  | Certificate:  | Date of last survey              |  |  |



| 2.7  | International Load Line   | Date of expiry      |
|------|---|---------------------|
|      | Certificate:<br>(All vessels LOA > 24 m)  | Date of last survey |
| 2.8  | International Tonnage Certificate:  | Date                |
| 2.9  | IOPP (Oil) Certificate:   | Date of expiry      |
|      | (Tanker GT >150 / other ships<br>GT>400)  | Date of last survey |
| 2.10 | International Ship Security Certificate:  | Date issued         |
|      | (SOLAS Chaps XI-1 and IX-2, ISPS  | Date of expiry      |
|      | Code, vessels >500 GT engaged on international voyages)   | Issuing authority   |
| 2.11 | Minimum Safe Manning<br>Certificate:<br>(SOLAS Chap V Reg 14)   | Date issued         |
| 2.12 | Civil Liability Certificate: (CLC,<br>Tankers carrying >2,000 tons of<br>persistent oil as cargo)   | Date issued         |
| 2.13 | CLC Certificate of Financial<br>Responsibility:<br>(Tanker "Blue Card" issued by<br>P&I)  | Date issued         |
| 2.14 | Bunker Pollution Liability<br>Certificate: (Bunker Oil Pollution<br>Convention 2001, cargo vessels<br>engaged on international voyages<br>>1000 GT) | Date issued         |
| 2.15 | BPL Certificate of Financial<br>Responsibility:<br>(Cargo vessel "Blue Card" issued<br>by P&I)  | Date issued         |



| 2.16 | Document of Compliance for<br>Ships Carrying Dangerous Goods<br>(SOLAS Reg. 54 for vessels<br>constructed before 01 July 2002)                                     | Date issued    |
|------|--|----------------|
| 2.17 | International Air Pollution Prevention Certificate (MARPOL Annex VI, all vessels >400 GT engaged on international voyages)   | Date of expiry |
| 2.18 | International Anti-Fouling System<br>Certificate (AFS Convention 2001,<br>all vessels > 400 GT engaged on<br>international voyages)                                | Date of expiry |
| 2.19 | International Sewage Certificate (MARPOL Annex IV, all vessels > 400GT engaged on international voyages)   | Date of expiry |
| 2.20 | Maritime Labour Certificate (Certificate issued by the vessel's Flag state after successful approval of the DMLC. All vessel's over 500GT trading internationally. | Date of expiry |
| 2.21 | International Energy Efficiency<br>Certificate (IEEC)<br>All vessels over 400 GT   | Date of expiry |
| Comm | ents:  | ·              |



P. & I. Condition Survey Report (Part B)

#### Note to Surveyors:

The abbreviations set out below are to be used when completing this form. Reasons for the responses "NO", "NA" and "NI" must be provided in the associated Comments boxes. All responses "NO" and "NI" must also be reported in the Part A Summary of Recommendations as a deficiency.

<sup>&</sup>quot;NI" - Not inspected or assessed.

|      |  | YES/NO/NA/NI |
|------|--|--------------|
| 2.22 | Is the Stability Booklet (all ships LOA > 24 m) stamped approved by Class/ Flag State Authority and in a working language understood by the Senior Officers? (Load Line Convention '66 & Protocol '88) |              |
| 2.23 | Is the Cargo Securing Manual (all non-tankers) in a working language understood by the senior officers and approved by Class/ Flag State Authority? (SOLAS Chap VI Reg 5)                              |              |
| 2.24 | Is the SOPEP (tankers > GT 150, other ships > GT 400) in a working language understood by the senior officers and approved by Class/ Flag State Authority? (MARPOL Chap 5 Reg 37)                      |              |
| 2.25 | Is a Garbage Management Plan and Garbage Record<br>Book (all ship's > GT 400 or more or complement 15<br>persons or more) available on board and properly<br>maintained?                               |              |
| 2.26 | Is the Oil Record Book Part I – Machinery Space<br>Operation (tankers GT 150 or more, other ships GT 400<br>or more) completed and up to date? (MARPOL Chap 3<br>Reg 17)                               |              |
| 2.27 | Is the Oil Record Book Part II – Cargo and Ballast<br>Operation (tankers GT 150 or more) completed and up<br>to date? (MARPOL Chap 4 Reg 36)   |              |

<sup>&</sup>quot;YES" - In satisfactory condition and in compliance with Class/flag state regulations.

<sup>&</sup>quot;NO" - Not in satisfactory condition and not in compliance with Class/flag state regulations.

<sup>&</sup>quot;NA" - Not applicable. Does not apply to this vessel under Class/ flag state regulations.



|      |  | YES/NO/NA/NI |
|------|--|--------------|
| 2.28 | Is the most recent Class Society printout (survey status, recommendations and survey report) available on board?   |              |
| 2.29 | All Class recommendations rectified? (If "NO", provide full details in the Comments box below)   |              |
| 2.30 | Is the Class Enhanced Survey Report File up-to-date ?(All bulk carriers & crude oil tankers above 20,000 tons dwt and product tankers above 30,000 dwt, SOLAS Chap XI – 1 Reg 2, MSC/Circ 655) |              |
| 2.31 | Is the most recent ultrasonic steel thickness gauging report available on board? (Preferably prepared by an IACS Class licensed surveyor and not more than 2 years old)                        |              |
|      | If so, what is the date? How much steel renewal was accomplished at that time? (Please advise in Comments box below)   |              |
| 2.32 | Were the UTS results satisfactory i.e. within Class steel diminution parameters of between 20 to 25 % maximum?   |              |
| 2.33 | Have all Port State Control inspection deficiencies been rectified?  |              |
|      | Date and place of last Port State Control inspection?  |              |
|      | Please advise details of number of deficiencies and if vessel was detained in comments box below.  |              |
|      | ents:  |              |



# P. & I. Condition Survey Report (Part B)

| OPERATIONAL/SAFETY PROCEDURES AND RECORDS   | YES/NO/NA/NI   |
|---|--|
| Stability Calculation Records and Loading Plans maintained & up to date?  |  |
| Are you satisfied that the Master and C/O are capable of calculating the vessel's stability and loading the vessel safely?      |  |
| Medical stores and controlled drugs kept in a secure locker and inventory maintained and up to date?                            |  |
| Hot Work Permit System implemented and documented?  |  |
| Entry Permit/Permit to Work System for Confined Spaces implemented and documented? (IACS Rec 072, Confined Space Safe Practice) |  |
| Oxygen analyser/multi-meter available on board and in working order? (SOLAS Chap VI Reg 3)                                      |  |
| Full set of ship's drawing available on board with a spare set kept at the manager's office ashore?                             |  |
| Are all derricks, cranes and other lifting appliances properly marked and records being maintained?                             |  |
| Date of last quadrennial inspection and inspecting authority?  Date of last annual inspection and inspecting authority?         |  |
|   | Stability Calculation Records and Loading Plans maintained & up to date?  Are you satisfied that the Master and C/O are capable of calculating the vessel's stability and loading the vessel safely?  Medical stores and controlled drugs kept in a secure locker and inventory maintained and up to date?  Hot Work Permit System implemented and documented?  Entry Permit/Permit to Work System for Confined Spaces implemented and documented? (IACS Rec 072, Confined Space Safe Practice)  Oxygen analyser/multi-meter available on board and in working order? (SOLAS Chap VI Reg 3)  Full set of ship's drawing available on board with a spare set kept at the manager's office ashore?  Are all derricks, cranes and other lifting appliances properly marked and records being maintained?  Date of last quadrennial inspection and inspecting authority? |

# Comments:



| 4.0  | OPERATIONAL PUBLICATIONS AND MANUALS  | YES/NO/NA/NI |
|------|---|--------------|
| 4.1  | SOLAS consolidated edition (2014)   |              |
| 4.2  | MARPOL 73/78 consolidated edition (2011)  |              |
| 4.3  | ISM Code & Guidelines on Implementation (2014 Edition)                                |              |
| 4.4  | ISPS Code (2012 Edition)  |              |
| 4.5  | ILO/IMO/WHO International Medical Guide for Ships (2008 Edition) of recent equivalent |              |
| 4.6  | IMDG Code (2014 Edition)  |              |
| 4.7  | IMO Code Solid Bulk Cargoes (IMSBC Code 2012 Edition)                                 |              |
| 4.8  | IMO Code for Safe Loading & Discharge of Bulk Carriers (BLU Code 2011 Edition)        |              |
| 4.9  | IMO Guidelines on Enhanced Inspection of Tankers and Bulk Carriers (2001 Edition)     |              |
| 4.10 | IMO Code for Safe Carriage of Grain in Bulk (1991 Edition)                            |              |
| 4.11 | IMO Code of Safe Practice for Ships Carrying Timber Deck Cargoes (2011 Edition)       |              |
| 4.12 | IMO Code of Safe Practice for Cargo Stowage and Securing (2011 Edition)               |              |
| 4.13 | Ship to Ship Transfer Guide – Petroleum (For Tankers)                                 |              |
| 4.14 | Code of Safe Working Practices for Merchant Seafarers (2015 Edition)                  |              |
| 4.15 | Index of Dangerous Chemicals permitted for Carriage in Bulk on board                  |              |
| 4.16 | STCW 78/ 95 Including 2010 Manila Amendments (2011 Edition)                           |              |



P. & I. Condition Survey Report (Part B)

|  | YES/NO/NA/NI  |
|--|---|
| ICS Tanker Safety Guide (Chemicals)  |   |
| International Gas Carrier Code   |   |
| ICS Tanker Safety Guide (Liquefied Gases)  |   |
| ISGOTT -International Safety Guide for Oil Tankers and Terminals (Tankers Only) (2006 Edition) |   |
| MFAG – Medial First Aid Guide for use in accidents involving Dangerous Goods – IMDG Code       |   |
|  | International Gas Carrier Code  ICS Tanker Safety Guide (Liquefied Gases)  ISGOTT -International Safety Guide for Oil Tankers and Terminals (Tankers Only) (2006 Edition)  MFAG – Medial First Aid Guide for use in accidents |

#### Comments:

| 5.0      | MAN | IANNING AND CREW COMPETENCY |             |                            |                              |
|----------|-----|-----------------------------|-------------|----------------------------|------------------------------|
| Rank     | (   | Name                        | Nationality | Certificate<br>Grade & No. | Total Service<br>Yrs in Rank |
| Master   |     |                             |             |                            |                              |
| 1st Mate |     |                             |             |                            |                              |
| 2nd Mate | е   |                             |             |                            |                              |
| 3rd Mate |     |                             |             |                            |                              |
| Ch Eng   |     |                             |             |                            |                              |
| 2nd Eng  |     |                             |             |                            |                              |
| 3rd Eng  |     |                             |             |                            |                              |



|      |   | YES/NO/NA/NI |
|------|---|--------------|
| 5.1  | Does the present manning comply with the Safe Manning Certificate?  |              |
| 5.2  | What is the common working language used on the vessel and can all of the crew communicate in that language?  |              |
| 5.3  | Are all of the officers and crew in possession of valid STCW certificates as issued by the ship's flag state?   |              |
| 5.4  | Are all officers' certificates STCW endorsed for service on board the particular vessel being surveyed e.g. tankers/ chemical tankers/gas carrier/fast ferry /passenger vessels, as appropriate?  |              |
| 5.5  | Are all officers and crew on board holding valid certificates of medical fitness (vaccination & pre-joining medical examination)?   |              |
| 5.6  | Is there evidence that all officers and crew are provided with STCW mandated Familiarisation Training immediately on joining the ship?  |              |
| 5.7  | Is an STCW mandated record of hours of work and rest hours maintained on board & are SCTW regulations being complied with?  |              |
| 5.8  | Have the Master & deck officers received formal/STCW endorsed Bridge Resource Management training?  |              |
| 5,9  | Are the English language skills of the Master and deck officers in compliance with SOLAS and SCTW minimum standards i.e. sufficient to communicate clearly with other vessels & shore stations in both operational and emergency situations using IMO Standard Marine Vocabulary? |              |
| 5.10 | Are you satisfied that the Master, deck & engine officers and crew are properly qualified, hold valid COC's and are sufficiently experienced to safely operate the vessel in her current trade?   |              |



| Comments: |  |  |
|-----------|--|--|
|           |  |  |
|           |  |  |
|           |  |  |

| 6.0     | SAFETY OF NAVIGATION  | YES/NO/NA/NI |  |  |  |
|---------|---|--------------|--|--|--|
| Navigat | Navigation & Radio Equipment:   |              |  |  |  |
| 6.1     | Gyro compass and heading repeater at steering station in good working order? (SOLAS Chap 5 Reg 19, ships of 500 GRT & above)                  |              |  |  |  |
| 6.2     | Gyro compass bearing repeaters in good working order? (SOLAS Chap V, Reg 19 Para 2.5.3, ships of 1600 GRT & above)                            |              |  |  |  |
| 6.3     | Is a compass pelorus available for taking bearings? (SOLAS Chap 5 Reg 19 Para 2.1.2, all ships)   |              |  |  |  |
| 6.4     | Standard magnetic compass in good working order? (SOLAS Chap 5,Reg 19 Para 2.2.1, all ships)  |              |  |  |  |
| 6.5     | Are compass errors verified regularly at sea & at anchorage and recorded in a compass error book?   |              |  |  |  |
| 6.6     | Is the standard magnetic compass Deviation Card valid (Max 2 years since last adjustment) and posted on bridge?                               |              |  |  |  |
| 6.7     | Is there a spare magnetic compass, interchangeable with the standard compass, on board? (SOLAS Chap 5 Reg 19 Para 2.1.1, all vessels >150 GT) |              |  |  |  |
| 6.8     | Radar #1, 9 GHz, with electronic plotting aid, in good working order? (SOLAS Chap 5 Reg 19 Para 2.3.2, all ships > 300 GT)                    |              |  |  |  |



|      | dition Survey Report (Part B)  | YES/NO/NA/NI |
|------|--|--------------|
| 6.9  | Radar #2, 3 GHZ, with 2nd electronic plotting aid, in good working order? (SOLAS Chap V Reg 19 Para 2.7, all ships > 3,000 GT)   |              |
| 6.10 | ARPA plotting unit fitted to either Radar #1 or #2, complete with interface to a speed log and in good working order? (SOLAS Chap V Reg 19 Para 2.8, all ships > 10,000 GT)  |              |
| 6.11 | Echo sounder in good working order? (SOLAS Chap 5<br>Reg 19 Para 2.3.1, all ships > 300 GT)  |              |
| 6.12 | GPS in good working order? (SOLAS Chap V Reg 19 Para 2.1.6, all ships )  |              |
| 6.13 | AIS in good working order [and mounted on the bridge in location where the AIS display can be clearly seen from the radar observation position]? (SOLAS Chap V Reg 19, Para 2.4, all ships > 300 GT)   |              |
| 6.14 | LRIT installed or existing GMDSS Inmarsat system modified to facilitate LRIT transmission/reception & in good working order? (SOLAS Chap V Reg 19-1 and MSC .1/Circ.1296, all ships certified to operate in areas A1, A2 and A3 must undergo Conformance Testing by an approved ASP no later than first Radio Survey after 31 Dec 2008)  |              |
| 6.15 | S-VDR (Simplified Voyage Data Recorder) in good working order and annual performance approved test valid? (SOLAS Chap V, Reg 20, as amended by MSC 79thSession Dec 2004: Now mandatory for all cargo ships of 20,000 GT and above constructed before 1 July 2002 and being phased in for all cargo ships 3,000 to 20,000 GT at first scheduled drydock after 1July 2007 and no later than 1 July 2010) |              |
| 6.16 | Rate of turn indicator and forward and athwartships berthing speed indicator in good working order? (SOLAS Chap V Reg 19 Para 2.9, all ships >50,000 GT)   |              |



|      |  | YES/NO/NA/NI |
|------|--|--------------|
| 6.17 | Bridge main engine direction and RPM indicator satisfactory? (SOLAS Chap V Reg 19 Para 2.5.4)  |              |
| 6.18 | Bridge rudder angle indicator(s) satisfactory and pre-<br>departure testing in conformance with SOLAS? (SOLAS<br>Chap V Reg 19 Para 2.5.4 and SOLAS Chap V Reg 26)                             |              |
| 6.19 | Navigation lights and failure alarm panel in good working order?   |              |
| 6.20 | Sound signalling equipment/ship's whistle in good working order?   |              |
| 6.21 | Complete set of signalling flags available?  |              |
| 6.22 | Aldis lamp in good working order with spare bulb and battery pack? (SOLAS Chap 5 Reg 19 Para 2.2.2)  |              |
| 6.23 | GMDSS Inmarsat system fitted in accordance with vessel's trading area (normally, Sea Areas A1, A2 and A3) with GPS positioning input and in good working order? (SOLAS Chap IV Regs 8, 9 & 10) |              |
| 6.24 | Navtex unit in good working order?<br>(SOLAS Chap IV Reg 7 Para 1.4, all ships)  |              |
| 6.25 | Main VHF installation in good working order & fitted with DSC? (SOLAS Chap IV Reg 7 Para 1.1)  |              |
| 6.26 | Portable VHF radios X 3 required in good working order? (SOLAS Chapter III Reg.2.1.1, all vessels > 500 GT)  |              |
| 6.27 | SART Radar transponders X 2 required (one fitted on each side of the ship) & in good order? (SOLAS Chap III Reg 6 Para 2.2, all ships > 500 GT)  |              |
| 6,28 | EPIRB programmed with correct MMSI number, properly secured to float free & hydrostatic release within expiry/maintenance date? (SOLAS Chap IV Reg 7 Para 1.6)                                 |              |



| 1 . & 1. 001 | ndition Survey Report (Part B)   | YES/NO/NA/NI |
|--------------|--|--------------|
| 6.29         | Emergency batteries for main radio equipment regularly charged, battery locker properly vented and "No Smoking" signs posted on door? (SOLAS Chap IV Reg 13)   |              |
| Bridge       | Records & Procedures:  |              |
| 6.30         | Manoeuvring characteristics displayed on bridge?   |              |
| 6.31         | Block diagram instructions for change over procedures from auto to manual steering and change of steering gear power units displayed on bridge in working language used on board? (SOLAS Chap V Reg 26 Para 3.1) |              |
| 6.32         | Evidence of proper passage planning from berth to berth in accordance with IMO Guidelines? (SOLAS Chap V Reg 34 and IMO Res A.893(21)  |              |
| 6.33         | Procedures in place/checklist for pre-departure testing of all bridge equipment and steering gear? (SOLAS Chap 5 Reg 26)   |              |
| 6.34         | Procedures in place/pilot information checklist for transfer of the conduct of the vessel to a Pilot?  |              |
| 6.35         | Deck log and Bridge Bell Book maintained?  |              |
| 6.36         | Ballast tank and hold bilges daily sounding record book maintained?  |              |
| 6.37         | Master's Standing Orders posted and Master's Night Order Book maintained?  |              |
| 6,38         | Compass error record book maintained showing daily azimuths while at sea?  |              |
| 6.39         | GMDSS radio log record book maintained?  |              |
| Charts a     | and Navigational Publications: (SOLAS Chap V Reg 27)   |              |
| 6.40         | Latest edition of Notices to Mariners on board and system in place for regular reception either by e-mail or hard copy?  |              |



P. & I. Condition Survey Report (Part B)

|      |   | YES/NO/NA/NI |
|------|---|--------------|
| 6.41 | Lists of Lights and Radio Signals on board and corrected up to date?  |              |
| 6.42 | Charts for vessel's usual trading area on board and corrected up to date with correction records maintained?  |              |
| 6.43 | Current Nautical Almanac, Tide Tables and navigational tables on board?   |              |
| 6.44 | Admiralty Sailing Directions for usual trading area on board together with current supplements?   |              |
| 6.45 | Collision Regulations 2003 Edition available?   |              |
| 6.46 | International Code of Signals 2005 Edition available?   |              |
| 6.47 | ICS/IMO Bridge Procedures Guide available?  |              |
| 6.48 | SOLAS 1 poster and IAMSAR search & rescue manual,<br>Vol III, available? (SOLAS Chap V Reg 21)  |              |
| 6.49 | Manufacturer's manuals for operation and maintenance of all navigation` and radio equipment on board in both English and the ship's working language? |              |
| 6,50 | Symbols and Abbreviations Used on Admiralty Charts,<br>Chart 5011 (INT 1) - Edition 5 available?  |              |
| 6.51 | The Mariners Handbook (NP100) 10th Edition (2015) available?  |              |

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| 7.0      | LSA AND FFA EQUIPMENT, MAINTENANCE & TRAINING  | YES/NO/NA/NI |  |  |  |
|----------|--|--------------|--|--|--|
| Lifesavi | Lifesaving Appliances:   |              |  |  |  |
| 7.1      | Are Emergency Stations Muster Lists posted on the bridge, in ER and Messrooms are they up to date? (SOLAS Chap III Reg 37)   |              |  |  |  |
| 7.2      | Is the emergency/general alarm working and tested at least weekly or daily when at sea? (SOLAS Chap III Reg 20 Para 6.1.3)   |              |  |  |  |
| 7.3      | Are ship specific lifesaving appliances training manuals available to the crew in messrooms and cabins? (SOLAS Chap III Reg 35)  |              |  |  |  |
| 7.4      | Are lifesaving appliances inspection checklists/<br>maintenance records maintained and up to date & do<br>they show LSA inspection on a weekly, monthly basis<br>and annual? (SOLAS Chap III Reg 20 Para 7 & Reg 36)   |              |  |  |  |
| 7.5      | Are the lifeboat davits, releasing gear winch brakes and hoisting motors in apparent satisfactory condition? Have they been thoroughly examined by a qualified technician on an annual basis, inclusive of a dynamic test of the winch brake, within the past 5 years? (SOLAS Chap III Reg 11.1 and IMO Res MSC.81(70), MSC.1/Circ.1206/Rev.1 & MSC.1/Circ.1277) |              |  |  |  |
| 7.6      | If lifeboats/davits are fitted with on-load release gear, has this equipment been subjected to an annual examination by a qualified technician and an inspection certificate issued? (SOLAS Chap III Reg 20 Para 11.2 & MSC.1/Circ.1206/Rev.1 & MSC.1/Circ.1277)   |              |  |  |  |
| 7.7      | Are davit wire rope falls marked as having been end for ended at intervals of not more than 30 months & renewed at intervals of not more than 5 years? (SOLAS Chap III Reg 20 Para 4)  |              |  |  |  |
| 7.8      | Are the lifeboats in apparent satisfactory condition including all equipment, stores and pyrotechnics?   |              |  |  |  |



|      |  | YES/NO/NA/NI |
|------|--|--------------|
| 7.9  | Are instructions for lowering the lifeboats and launching the liferafts permanently posted on the boat deck?   |              |
|      | Are the crew aware of the serious dangers associated with lowering lifeboats? (SOLAS Chap II Reg 9 and MSC.1/Circ.1206/Rev.1)  |              |
| 7.10 | Are boat drills conducted and logged at least once each month with boats lowered to the embarkation deck? (SOLAS Chap III Reg 19 Para 3.3)   |              |
| 7.11 | Have the boats been lowered and manoeuvred in the water by their assigned crews at least once during the past 3 months? (SOLAS Chap III Reg 19 Para 3.3.3)   |              |
| 7.12 | Are all liferaft & hydrostatic release annual maintenance certificates in date? (SOLAS Chap III Reg 20 Para 8 and 9)   |              |
| 7.13 | Liferaft stowage/securing satisfactory and weak link/<br>hydrostatic releases properly secured to manufacturer's<br>instructions?<br>(SOLAS Chap III Reg 13)   |              |
| 7.14 | Lifeboats, davits & liferafts inspected weekly to ensure readiness for immediate use and engine(s) run (min 3 minutes running) & gearboxes tested and emergency generator run/tested on load weekly and logged? (SOLAS Chap III Reg 20 Para 6) |              |
| 7.15 | Bridge pyrotechnics/rockets satisfactory and within expiry date?   |              |
| 7.16 | Line throwing appliances satisfactory and within the expiry date? (SOLAS Chap III Reg 18 and LSA Code S. 7.1)  |              |
| 7.17 | Lifejackets satisfactory in number, condition and equipment?   |              |
| 7.18 | Lifebuoys satisfactory in number, condition positioning and equipment?   |              |



| 1 . & 1. COH | dition Survey Report (Part B)  | YES/NO/NA/NI |
|--------------|--|--------------|
| 7.19         | Sufficient number of immersion suits available (one per crew member plus at least 2 extra on bridge and 2 extra in ER control room)? ( All vessels unless exempted as warm waters trading only ( e.g. 30 \( \text{N}\) N. to 30 \( \text{S}\) S) by flag state, SOLAS Chap III Reg 32 Para 3 as amended by IMO Res MSC.152(78)                 | 123/10/14/   |
| 7.20         | In addition to SOLAS monthly inspection by ship's crew, have immersion suits been subjected to air pressure/ seam & closure testing by qualified technicians at intervals of not more than 3 years? (IMO Res MSC/ Circ.114)  |              |
| Fire Figh    | nting Appliances & Records:  |              |
| 7.21         | Is the vessel's approved Fire Control Plan permanently displayed in the accommodation area? (SOLAS Ch. II-2 Reg. 15 Para 2.4.1)  |              |
| 7.22         | Is a duplicate Fire Control Plan permanently stored in a prominently marked weathertight enclosure outside the accommodation entrance area? (SOLAS Chap II-2 Reg 15 Para 2.4.2)  |              |
| 7.23         | Is a SOLAS Fire Fighting Appliances' Maintenance Plan<br>maintained and up to date & does it show weekly FFA<br>inspection (to confirm operational readiness) plus<br>monthly and annual inspection (SOLAS Chap II-2 Reg 14<br>Para 2.1)   |              |
| 7.24         | Is a SOLAS Fire Fighting Appliances Training Manual and Fire Safety Operational Booklet (must both be ship specific, in ship's working language and may be combined into one document) available on board with copies available in the mess and recreation rooms or crew cabins? (SOLAS Ch. 11-2 Reg. 15 Para 2.3 and IMO Guidelines MSC/.850) |              |



|      | •  | YES/NO/NA/NI |
|------|--|--------------|
| 7.25 | Are Emergency Drills, inclusive of both Fire and Abandon Ship drills, conducted and logged not less than once every month? (SOLAS Chap III Reg 19 Para 3)  |              |
| 7.26 | Is on-board training in the use of all of the ship's fire fighting and lifesaving appliances given to all new crewmembers within 2 - 8 weeks of their joining the vessel? (SOLAS Chap III Reg 19 Para 4)   |              |
| 7.27 | Fixed fire detection & fire alarm system for accommodation, services & control spaces and machinery spaces tested regularly and in satisfactory condition? (SOLAS Chap II-2 Reg 7 Para 4 and 5.5)  |              |
| 7.28 | Fire main and hydrants in good condition with adequate water pressure available? (SOLAS Chap II-2 Reg 2.2)   |              |
| 7.29 | Fire hoses & nozzles in satisfactory condition and properly stowed? (SOLAS Chap II-2 Reg 10 Para 2.3)  |              |
| 7.30 | Emergency fire pump, capable of delivering 25 tonnes of water to 2 nozzles & operable in any vessel/ballast condition, tested & satisfactory at the time of the survey? (SOLAS Chap II-2 Para 2.2.3.1.2 and FSS Code Chap 12)                        |              |
| 7.31 | Portable extinguishers and spare charges in satisfactory condition and regularly inspected/serviced? (SOLAS Chap II-2 Reg 3)   |              |
| 7.32 | Fixed CO2 fire extinguishing system or approved alternative (foam/water spray) for engine room in satisfactory condition and serviced/tested in accordance with IMO Guidelines MSC/Circ.850? (SOLAS Chap II-2 Reg 10 Para 4 & 5 and Reg 14 Para 2.2) |              |



|      | dition 3divey Report (Fait B)   | YES/NO/NA/NI |
|------|---|--------------|
| 7.33 | Fixed CO2 fire extinguishing system or approved alternative (foam/inert gas) for cargo holds in satisfactory condition and serviced/tested in accordance with IMO Guidelines MSC/Circ.850?  |              |
|      | If not fitted, does vessel have Flag State Exemption<br>Certificate inclusive of attached list of permitted / low<br>fire risk cargoes?<br>(All vessels 2000 GT and above, SOLAS Chapter II-2.<br>Reg10 Para 4, Para7.1.3 & Para & 7.1.4)   |              |
| 7.34 | Are instructions for the use of fixed CO2/ inert gas extinguishing systems posted in both the crew's working language and in English?   |              |
| 7.35 | Is the paint locker protected by a fixed fire fighting system (CO2 / water sprinkler/dry powder) operable from outside the locker and is it in satisfactory working order? (SOLAS Chap II-2 Reg 10 Para 6.3.1)  |              |
| 7.36 | Two Fireman's Outfits available including Self Contained Breathing Apparatus and 2 spare air bottles for each Outfit fully charged and in good order? (SOLAS Chap II-2 Reg 10 Para 10 and FSS Code)   |              |
| 7.37 | Emergency Escape Breathing Devices (EEBD) available in<br>the accommodation (minimum 2) and in the machinery<br>spaces (number and location in the ER subject to IMO<br>Guidelines MSC/Circ.849 and flag state approval)?<br>(SOLAS Ch. II-2 Reg. 13 Para 3.4 & 4.3 and FSS Code) |              |
| 7.38 | International shore connection located in close proximity to the access to the accommodation and clearly marked? (all vessels > 500 GT, SOLAS Chap II-2 Reg 10 Para 2.1.7)  |              |
| 7.39 | Ventilation fire flaps to cargo holds, engine room and accommodation spaces all operating satisfactorily and permanently marked as to open/closed position and space serviced?  |              |



| Comments: |  |  |  |
|-----------|--|--|--|
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|           |  |  |  |
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| 8.0  | HULL, MAINDECK AND SUPERSTRUCTURE (ALL VESSELS)  | YES/NO/NA/NI |
|------|--|--------------|
| 8.1  | External hull, to extent visible, without significant corrosion or plate indentation exceeding 25 mm?  |              |
| 8.2  | External hull markings including IMO Number, draft marks etc all well painted and legible?   |              |
| 8.3  | Gangway access and safety net properly rigged and gangway davit hoist & lighting in satisfactory condition?                                  |              |
| 8.4  | Pilot ladders, hoists, railing gate accesses etc all in satisfactory condition?  |              |
| 8.5  | Watertight door sealing rubbers and securing dog operation all in satisfactory condition?  |              |
| 8.6  | Rope locker, cofferdam and cargo hold steel access hatch sealing rubbers, locking pins and securing dog operation in satisfactory condition? |              |
| 8.7  | Sounding pipes in satisfactory condition, permanently marked and with threaded screw caps in place?  |              |
| 8.8  | DB Tank maindeck air pipes permanently marked and internal floats and screens in satisfactory condition?                                     |              |
| 8.9  | Guard rails and bulwarks intact and in satisfactory condition?   |              |
| 8.10 | Steel ladders in satisfactory condition with no corroded steps   |              |



|      |   | YES/NO/NA/NI |
|------|---|--------------|
| 8.11 | Anchor windlasses and mooring winches, mountings and brake linings in satisfactory condition with evidence of regular greasing & maintenance?   |              |
| 8.12 | Anchor chains, first joining shackles, cable markings, cable locks/securing and spurling pipe covers all in satisfactory condition?   |              |
| 8.13 | Mooring lines all in satisfactory condition and without excessive abrasion, multiple splice repairs or ultraviolet deterioration?   |              |
|      | Number of new spare lines on board:   |              |
| 8.14 | Bollards, bitts and roller fairleads (must rotate freely) in a satisfactory condition?  |              |
| 8.15 | Emergency towing arrangements fitted at both ends of the vessel and a ship specific emergency towing procedures manual provided?  |              |
| 8.16 | Cargo cranes/derrick booms, drive units, access ladders & platforms, wires, blocks and sheaves, hooks, controls, safety devices (including limit switches) in satisfactory condition with SWL clearly marked? |              |
| 8.17 | Deck machinery hydraulic systems and piping in satisfactory condition and without evidence of any leaking on to the deck?   |              |
| 8.18 | Forecastle, Maindeck (including cross hatch areas), Poop deck & Superstructure deck plating without fractures or significant corrosion, well painted and in overall satisfactory condition?                   |              |
| 8.19 | Chain lockers in apparent satisfactory condition with warning as to closed space entry procedures marked on the access covers and bilge pump in satisfactory working order?                                   |              |
| 8.20 | Cofferdams and void spaces in satisfactory condition?   |              |



P. & I. Condition Survey Report (Part B)

|      |  | YES/NO/NA/NI |
|------|--|--------------|
| 8.21 | Electrical conduits and securing in satisfactory condition?  |              |
| 8.22 | Superstructure external fabric/plating, fire door accesses, lighting etc in satisfactory condition?                                      |              |
| 8.23 | Are deck lighting and floodlight fittings adequate for safe working? Any breakage or malfunction?  |              |
| 8.24 | Are the forecastle and deck stores and workshops clean & tidy with all heavy stores and spares well secured with chain or wire lashings? |              |
| 8.25 | Are spare oxy-acetylene gas cylinders properly secured in a designated storage racks or locker marked with "No Smoking" signs?           |              |

| Comments: |  |  |  |
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9.0 BALLAST TANK INTERNALS INCLUDING FORE PEAK AND AFT PEAK (ALL VESSELS)

#### Note to Surveyors:

- 1. Please refer to IACS Recommendation 087 (Published by Witherbys) "Guidelines for Coatings Maintenance & Repairs" which provides definitions as to the terms "Good", "Fair" and "Poor" (IMO Res A.744(18)) and photo examples and diagrams to assist accurate coating breakdown and corrosion estimation.
- 2. Your ballast tank internals survey should include the Fore Peak (essential) plus a representative sample consisting of 25 30% of the other ballast spaces.
- 3. Please ensure that your entry into the ballast tanks is in full accordance with IACS Confined Space Safe Practice (Recommendation 072 available at www.iacs.org.uk/publications).



|      | idition Survey Report (Fait B)  | YES/NO/NA/NI |
|------|---|--------------|
| 9.1  | Ref preparation for your designated tank internals inspection, do the crew appear to be knowledgeable in regard to established confined space entry procedures?   |              |
| 9.2  | Are the internal coatings of the FP and the other tanks inspected in a "Good" or Fair" condition? (If "NO", please estimate the amount of breakdown as a percentage)                                      |              |
| 9.3  | Are the tank sacrificial anodes (if fitted) in a satisfactory condition?  |              |
| 9.4  | Are the tank internal structures and plating in a satisfactory condition? (If "NO" please estimate the amount of steel diminution and whether within IACS guidelines of about 20-25 %.)                   |              |
| 9.5  | Is there any evidence of any leakage/ingress of fuel oil or other contaminants from adjacent bunker tanks or external sources?  |              |
| 9.6  | Were a representative number of double bottom ballast tanks, wing tanks and top side tanks pressure tested and results found satisfactory? Please note the details of tanks tested in comments box below. |              |
| 9.7  | Are the ballast filling and discharge lines & valves (including valve remote operation & indicators) in apparent working order and without leaks?   |              |
| 9.8  | Ballast tank plating and structures free of plate doublers or temporary repairs/cement boxes  |              |
| 9.9  | Are protective doubler plates fitted underneath ballast tank sounding pipes (to protect against tank penetration by sounding rods) free of excessive wear/corrosion?                                      |              |
| 9.10 | Are the ballast tank access manhole covers, gaskets and securing studs and nuts in satisfactory condition?  |              |



| Comments: |  |  |  |
|-----------|--|--|--|
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|           |  |  |  |
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| 10.0    | CARGO/SEAWORTHINESS – DRY CARGO SHIPS, BULKERS, REEFERS & CONTAINER VESSELS)  | YES/NO/NA/NI |
|---------|---|--------------|
| Cargo H | lolds & Fittings:   |              |
| 10.1    | Hold ventilation system and associated fire flaps permanently marked and in satisfactory working condition?                         |              |
| 10.2    | Hold access hatches, rubber seals, securing dogs and safety latches in satisfactory condition?                                      |              |
| 10.3    | Hold platforms / access ladders / guard rails in satisfactory condition?  |              |
| 10.4    | Hold internal lighting or adjacent plugs for rigging portable cargo lights in satisfactory condition?                               |              |
| 10.5    | Tank tops in cargo holds free of plate doublers and in satisfactory condition?  |              |
| 10.6    | DB manhole covers and associated securing on tank tops in satisfactory condition?   |              |
| 10.7    | Hold bilge wells clean and suctions tested (subject to local port regulations) as being satisfactory?                               |              |
| 10.8    | DB air and sounding pipes in holds satisfactory condition & fitted with adequate protection/steel guards against mechanical damage? |              |
| 10.9    | Hold transverse/division bulkheads, stools & associated framing free of doublers, substantial corrosion) and/or mechanical damage?  |              |



|         | allion salvey Report (Part B)  | YES/NO/NA/NI |
|---------|--|--------------|
| 10.10   | Internal side shell plating & associated side framing and heel brackets free of substantial corrosion and/or mechanical damage?  |              |
| 10.11   | Double bottom, hopper and top-side ballast tanks in way of cargo holds all pressed up/hydrostatically tested (subject to port regulations) with satisfactory results?                            |              |
| Cargo H | lolds & Fittings:  |              |
| 10.12   | Hatch cover hose test (conducted in accordance with IACS Rec 14, Para 6., available at <a href="www.iacs.org">www.iacs.org</a> ) or ultrasonic leak test conducted with satisfactory results?    |              |
| 10.13   | Adequate hatch cover spares/sealing rubber on board and manufacturer's hatch cover maintenance plan implemented?   |              |
| 10.14   | Hatch coaming external structure and maindeck bracketing satisfactory?   |              |
| 10.15   | Hatch cover pontoons/ panel alignment & structure satisfactory?  |              |
| 10.16   | Hatch cover cross joint and perimeter rubber seals satisfactory (permanent impression must be less than 25% of original material thickness depth) and securely attached into retaining channels? |              |
| 10.17   | Hatch cover gasket/seal retaining channel structure satisfactory?  |              |
| 10.18   | Hatch coaming drain channels free of corrosion, drain holes clear and non-return valves satisfactory?  |              |
| 10.19   | Coaming compression bars free of mechanical damage or corrosion so as to ensure good seal?   |              |
| 10.20   | Hatch cover wheels and tracks aligned and well maintained?   |              |
| 10.21   | Side locking cleats and rubber compression rings well maintained?  |              |



P. & I. Condition Survey Report (Part B)

|       | altion salvey Report ( art B)  | YES/NO/NA/NI |
|-------|--|--------------|
| 10.22 | Steel landing pads on coamings and hatch panel side plates free of corrosion and at correct height to facilitate proper/design gasket compression?   |              |
| 10.23 | Cross joint wedges on top on the hatch well maintained?  |              |
| 10.24 | Hatch hydraulic jacking and securing systems without oil leaks and in satisfactory working order?  |              |
| 10.25 | Hatch cover panel open position securing locks and automatic cut outs engage satisfactorily?   |              |
| 10.26 | Hatch covers tested operationally to full open and closed positions and found operating smoothly & open/close cycle within a reasonable time period? |              |

#### Note to Surveyors:

The use of tarpaulins and/or tape and foam on ships fitted with side rolling or Macgregor type hatches is not permissible for making hatches weather tight within the terms of the Load Line Convention 1966. Please detail the use of any such materials in the Comments box below.

| Lifting P | ontoon Hatches:  |  |
|-----------|--|--|
| 10.27     | Adequate tarpaulins (at least 3 per hatch) and in satisfactory order?                      |  |
| 10.28     | Adequate rope netting and securing available for tarpaulins?                               |  |
| 10.29     | Adequate steel side battens and wooden wedges available?                                   |  |
| 10.30     | Adequate pontoon hatches cross steel locking bars available to LL Convention requirements? |  |

**N.B.** CO2 system, if fitted, is also a cargoworthiness issue. System integrity must be confirmed & reported at 7.33.



| Commer  | nts:  |  |
|---|---|--|
| 10A.0   | BULK CARRIERS – SOLAS CHAP XII ADDITIONAL SAFETY MEASURES   | YES/NO/NA/NI                                   |
| 1. SOL<br>with<br>carry<br>2. SOL<br>3. Surv<br>IMO | Surveyors:  AS Chap XII applies to all bulk carriers ("a ship which is contained as a single deck, top-side tanks and hopper side tanks and is into a single deck, top-side tanks and hopper side tanks and is into a single deck, top-side tanks and into a single deck, top-side tanks and into a single deck, top-side tanks and is into a single deck, top-side tanks and hopper side tanks and is into a single deck, top-side tanks and is into a single deck, top-side tanks and hopper side tanks and is into a single deck, top-side tanks and hopper side tanks and is into a single deck, top-side tanks and hopper side tanks and is into a single deck, top-side tanks and hopper side tanks and is into a single deck, top-side tanks and hopper side tanks and is into a single deck, top-side tanks and hopper side tanks and is into a single deck, top-side tanks and hopper side tanks and is into a single deck, top-side tanks and hopper side tanks and hopper side tanks and is into a single deck, top-side tanks and hopper side tanks | oLAS Chap XII and the<br>SC/Circ.117 available |
| 10A.1   | Is the vessel provided with a Class/flag state endorsed Damage Stability Booklet (DSB) which certifies that SOLAS Regs 4, 5, 6 and 7 as appropriate have been complied with (including any retro-fit of bulkhead strengthening) such that the vessel is capable of withstanding flooding of any one cargo hold SOLAS Chap XII Reg 8 (Bulk carriers exceeding 150 m in length of single skin construction)   |  |
| 10A.2   | Is the DSB provided in the working language of the crew as well as in English?  |  |
| 10A.3   | Is an Enhanced Programme of Inspection file maintained on board showing that the vessel has been subjected to periodical enhanced surveys? (Bulk carriers built before 1 July 1999 and more than 10 yrs old carrying cargoes of more than 1,780 kg/M3, SOLAS Chap XI Reg 2 and Chap XII Reg 7 and IMO Res A.744(18) Guidelines on Enhanced Programme of Inspections)  |  |



| P. & I. Cond | dition Survey Report (Part B)  |              |
|--------------|--|--------------|
|              |  | YES/NO/NA/NI |
| 10A.4        | Is the vessel fitted with a Class approved loadicator instrument capable of providing hull girder shear forces and bending moments? (Bulk carriers of > 150 m. LOA, SOLAS Reg 11)  |              |
| 10A.5        | Has the loadicator been subjected to annual "in-service testing" by Class and is this unit provided with an operating manual in the crew's working language and in English? (IACS Rec 21 <a href="www.iacs.org">www.iacs.org</a> )   |              |
| 10A.6        | Has the vessel been retro-fitted with water level detectors in all cargo holds, the Fore Peak and in any ballast tank and dry/void space forward of No 1 hold other than the chain lockers & is this system in working order? (All bulk carriers SOLAS Chap XII Reg 12 Para 1)   |              |
| 10A.7        | Are the audio and visual alarms for the water level indicators on the bridge working? (All bulk carriers SOLAS Chap XII Reg 12 Para 2)   |              |
| 10A.8        | Has the vessel been retro-fitted with a remote controlled system (with controls located on/near to bridge or in ER) for draining/pumping the FP and all ballast tanks and dry/void spaces (excluding the chain lockers) forward of No 1 hold? (All bulk carriers SOLAS Chap XII Reg 13)  |              |
| 10A.9        | Are plans and operating instructions for the remote pumping system permanently posted and are the discharge and suction valves set and locked in open/closed position in accordance with the plan?   |              |
| 10A.10       | Does the Master have a copy of the IMO Guidelines on Early Assessment of Hull Damage and Possible Need for Abandonment of Bulk Carriers (MSC/Circ.1143 available from <a href="https://www.imo.org">www.imo.org</a> ) and is this Guideline incorporated as a ship specific instruction into the ship's ISM Code Emergency Plan? |              |



| Does the Master have a copy of the IMO Guidelines for Bulk Carrier Hatch Cover Surveys and Owner's   |  |
|--|--|
| Inspections and Maintenance (MSC/Circ.1071 available from <a href="https://www.imo.org">www.imo.org</a> ) and is the Guideline incorporated into the ship's ISM Code Hatch Maintenance Plan  |  |
| Does the Master have a copy of the IMO Guidance for Checking the Structure of Bulk Carriers (MSC/Circ.1117 available from <a href="www.imo.org">www.imo.org</a> ) and is this Guidance incorporated into the ship's ISM Code Maintenance Plan? |  |
| Does the Master have a copy of Guidance & Information on Bulk Cargo Loading & Discharging to Reduce Overstressing the Hull Structure (IACS Rec No 046 available from <a href="https://www.iacs.org">www.iacs.org</a> )?                        |  |

| 11.0  | CARGO WORTHINESS – REFRIGERATED CARGO<br>VESSELS (ADDITIONAL ITEMS) | YES/NO/NA/NI |
|-------|---|--------------|
| 11.1  | Refrigeration machinery satisfactory?                               |              |
| 11.2  | Remote thermometers satisfactory?                                   |              |
| 11.3  | Ventilation system satisfactory?                                    |              |
| 11.4  | Insulation of holds satisfactory?                                   |              |
| Comme | nts'  |              |



| 12.0  | CARGO WORTHINESS – CONTAINER VESSELS (ADDITIONAL ITEMS)  | YES/NO/NA/NI |
|-------|--|--------------|
| 12.1  | Cell guides in good order and pads / sockets satisfactory?   |              |
| 12.2  | Adequate provision of lashing equipment as per Cargo Securing Manual?                                |              |
| 12.3  | Adequate maintenance of lashing equipment as per Cargo Securing Manual?                              |              |
| 12.4  | Adequate spares as per Cargo Securing Manual?  |              |
| 12.5  | Compliance with maximum stack height as per Cargo Securing Manual?                                   |              |
| 12.6  | Compliance with permissible vertical sequence of masses in stacks as per Cargo Securing Manual?      |              |
| 12.7  | Compliance with maximum stack masses as per Cargo Securing Manual?                                   |              |
| 12.8  | Compliance with stowage pattern for containers of different dimensions as per Cargo Securing Manual? |              |
| 12.9  | Utilisation of securing devices as per Cargo Securing Manual?  |              |
| 12.10 | Procedures implemented to ensure non-conforming twistlocks not used?                                 |              |
| 12.11 | Procedures implemented to ensure proper stowage/ segregation of hazardous cargo?                     |              |
| 12.12 | Procedures implemented to ensure proper stowage/ segregation of temperature controlled cargo?        |              |
| 12.13 | Reefer electrical connections satisfactory?  |              |
| 12.14 | Bilge high level alarms and system fitted and tested satisfactorily?                                 |              |



| Comments: |  |  |  |
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| 13.0  | CARGO WORTHINESS – TANKERS AND GAS CARRIERS                                   | YES/NO/NA/NI |
|-------|---|--------------|
| 13.1  | Tank tops satisfactory?   |              |
| 13.2  | Pipelines and bell mouths in tanks satisfactory?                              |              |
| 13.3  | Heating coils (if fitted) satisfactory?                                       |              |
|       | Last date of pressure test of heating coils                                   |              |
| 13.4  | Platforms and guard rails in tanks satisfactory?                              |              |
| 13.5  | Ladders in tanks satisfactory?  |              |
| 13.6  | Cargo tank coatings satisfactory?   |              |
| 13.7  | Double bottom tanks & wing tanks satisfactory (double hull vessels)?          |              |
| 13.8  | Tank valves & spindles satisfactory:?   |              |
| 13.9  | Fixed ullaging equipment inside the tanks satisfactory?                       |              |
| 13.10 | Is the portable ullaging equipment satisfactory?                              |              |
| 13.11 | Tank insulation satisfactory (Gas carriers)?                                  |              |
| 13.12 | Cargo pumps satisfactory including their shafts, bearings, gauges/indicators? |              |
| 13.13 | Pump room bilges satisfactory?  |              |
| 13.14 | Pump room piping satisfactory?  |              |



|       | allion Survey Report (Part B)  | YES/NO/NA/NI |
|-------|--|--------------|
| 13.15 | Pump room valves satisfactory?   |              |
| 13.16 | Pump room ventilation & lighting satisfactory?   |              |
| 13.17 | Pump room ladders & guard rails satisfactory?  |              |
| 13.18 | Pump room floor plating satisfactory?  |              |
| 13.19 | Cargo manifolds satisfactory?  |              |
| 13.20 | Are cargo manifold pressure gauges fitted & in working order?  |              |
| 13.21 | Deck piping and valves satisfactory?   |              |
| 13.22 | Are cargo lines pressure tested yearly & dates marked on the pipeline?                                 |              |
| 13.23 | Gas lines and P/V valves satisfactory?   |              |
| 13.24 | Cargo tank gauges satisfactory?  |              |
| 13.25 | Cargo tank high level alarm (95% & 98%) working satisfactorily?  |              |
| 13.26 | Is ship-shore fire connection readily available?   |              |
| 13.27 | Inert gas system satisfactory? (deadweight 20000 GT & above)   |              |
| 13.28 | Tank lids, seals and opening and securing devices satisfactory?  |              |
| 13.29 | Ullage ports satisfactory including seals and securing arrangements?                                   |              |
| 13.30 | Crude oil washing equipment and piping satisfactory?   |              |
| 13.31 | Portable tank washing equipment including Butterworth machines & hoses adequate & properly maintained? |              |
| 13.32 | The cargo and pump monitoring & control equipment in cargo control room satisfactory?                  |              |



|       |  | YES/NO/NA/N |
|-------|--|-------------|
| 13.33 | No smoking signs posted?   |             |
| 13.34 | Tank cleaning & pre-load testing/procedures implemented on board?  |             |
| 13.35 | If special measures are required by the vessel's hydrostatic data to maintain adequate stability (e.g. maintaining ballast in D.B. tanks while loaded) are the Master and C/O fully aware of this?                             |             |
| 13.36 | Is the vessel properly fitted with double valve isolation and are procedures in place to prevent cross tank contamination?   |             |
| 13.37 | Do the owners/managers have prompt access (usually through Class) to a computerised shore based damage stability band residual structural strength calculation programme which is ship specific? (MARPOL Chap V Reg 37 Para 4) |             |

| 14.0                      | ENGINE ROOM AND MACHINERY   | YES/NO/NA/NI |
|---------------------------|---|--------------|
| Equipment and Maintenance |   |              |
| 14.1                      | Are operation & maintenance manuals for the M/E, A/E & all other equipment in the engine room available in the crew's working language as well as in English? |              |
| 14.2                      | Engine room log book properly maintained?   |              |
| 14.3                      | Main engine(s) in satisfactory condition & free of oil leaks?   |              |



|       | allion Survey Report (Part B)  | YES/NO/NA/NI |
|-------|--|--------------|
| 14.4  | Auxiliary engines/ generators in satisfactory condition & free of oil leaks?   |              |
| 14.5  | Boilers in satisfactory working condition?   |              |
| 14.6  | Steering gear in satisfactory working condition?   |              |
| 14.7  | Emergency steering tested regularly and logged as satisfactory?  |              |
| 14.8  | Communication system between steering flat and bridge tested with satisfactory result?   |              |
| 14.9  | Emergency steering engagement instructions posted in the steering flat in crew's working language and in English?  |              |
| 14.10 | Main switchboard earth fault monitoring satisfactory?  |              |
| 14.11 | Is there an insulating rubber mat at switchboard front?  |              |
| 14,12 | ER workshops in clean/tidy condition with safety signs posted, machinery safety guards fitted & safety goggles available for grinding & welding work?  |              |
| 14.13 | Are there sufficient spares and tools on board for both ME and Aux E as per Class requirements/ equipment manufacturers' recommendation? (Lists available at <a href="https://www.iacs.org">www.iacs.org</a> IACS Rec No's 26, 27 &30) |              |
| 14.14 | Are all spares (including liners, oil drums etc) securely stowed and secured with chain or wire rope lashings?   |              |
| 14.15 | Control room alarms and instrumentation in satisfactory condition?   |              |
| 14.16 | Ventilation flaps and remote ventilation stops in satisfactory condition?  |              |
| 14.17 | Oil fuel quick closing sight glasses and sounding pipes tested with satisfactory result?   |              |
| 14.18 | Oil fuel pump remote stops tested with satisfactory result?  |              |



|       | altion Survey Report (Part B)   | YES/NO/NA/NI |
|-------|---|--------------|
| 14.19 | Is fuel oil pressure line sheathing fitted to all machinery?  |              |
| 14.20 | Sea valves satisfactory as to operation and condition?  |              |
| 14.21 | Bilge high level alarms operational?  |              |
| 14.22 | Bilges clean and reasonably dry?  |              |
| 14.23 | Shaft seal satisfactory and no significant leakage?   |              |
| 14.24 | Piping colour code system implemented and all valves clearly marked including location of emergency bilge suction?                    |              |
| 14.25 | Emergency generator tested and/or emergency lighting batteries satisfactory?  |              |
| 14.26 | Emergency exits and escapes clearly marked and unobstructed?  |              |
| 14.27 | Floor plating and gratings safely secured and in a clean/non-slip condition?  |              |
| 14.28 | Sufficient lighting throughout engine room & all in safe condition (no breakage and all gas tight covers in place)?                   |              |
| 14.29 | Lubricating oil regular analysis system for main engine & auxiliaries implemented with results available to crew?                     |              |
| 14.30 | Bunker fuel analysis accomplished prior to utilisation in main engine & auxiliaries with results available to crew on priority basis? |              |
| 14.31 | Engine crew familiar with starting procedure from blackout?   |              |
| 14.32 | Engine crew capable of resetting of ME over speed trip?   |              |
| 14.33 | Main engine crankshaft deflections satisfactory?  |              |
| 14.34 | Are the running hours for the ME within manufacturer's recommendation since last overhaul?  |              |



| Breathing Devices provided in permanent stowage for engine room crew?  14.37 General cleanliness of engine room and bilges satisfactory?  R Fire Safety  14.38 Are the remote emergency fuel shut off valves clearly marked, recently tested/logged and in operating order?  14.39 Are the remote emergency fuel shut off valves clearly marked, recently tested/logged and in operating order?  14.40 ME and auxiliaries engine fuel leak alarm tested and in working order?  14.41 Is the ER ventilation system emergency shut down system clearly marked, recently tested/logged and in operating order?  14.42 Is the ER fixed fire fighting system clearly marked with operating instructions posted in the crews working language and does the Co2 release warning alarm function? |           |  |  |
|--|-----------|--|--|
| Breathing Devices provided in permanent stowage for engine room crew?  14.37 General cleanliness of engine room and bilges satisfactory?  14.38 Are the remote emergency fuel shut off valves clearly marked, recently tested/logged and in operating order?  14.39 Are the remote emergency fuel shut off valves clearly marked, recently tested/logged and in operating order?  14.40 ME and auxiliaries engine fuel leak alarm tested and in working order?  14.41 Is the ER ventilation system emergency shut down system clearly marked, recently tested/logged and in operating order?  14.42 Is the ER fixed fire fighting system clearly marked with operating instructions posted in the crews working language and does the Co2 release warning alarm function?                | 14.36     |  |  |
| satisfactory?  14.38 Are the remote emergency fuel shut off valves clearly marked, recently tested/logged and in operating order?  14.39 Are the remote emergency fuel shut off valves clearly marked, recently tested/logged and in operating order?  14.40 ME and auxiliaries engine fuel leak alarm tested and in working order?  14.41 Is the ER ventilation system emergency shut down system clearly marked, recently tested/logged and in operating order?  14.42 Is the ER fixed fire fighting system clearly marked with operating instructions posted in the crews working language and does the Co2 release warning alarm function?   |           | Breathing Devices provided in permanent stowage for  |  |
| marked, recently tested/logged and in operating order?  14.39 Are the remote emergency fuel shut off valves clearly marked, recently tested/logged and in operating order?  14.40 ME and auxiliaries engine fuel leak alarm tested and in working order?  14.41 Is the ER ventilation system emergency shut down system clearly marked, recently tested/logged and in operating order?  14.42 Is the ER fixed fire fighting system clearly marked with operating instructions posted in the crews working language and does the Co2 release warning alarm function?  | 14.37     |  |  |
| marked, recently tested/logged and in operating order?  14.39 Are the remote emergency fuel shut off valves clearly marked, recently tested/logged and in operating order?  14.40 ME and auxiliaries engine fuel leak alarm tested and in working order?  14.41 Is the ER ventilation system emergency shut down system clearly marked, recently tested/logged and in operating order?  14.42 Is the ER fixed fire fighting system clearly marked with operating instructions posted in the crews working language and does the Co2 release warning alarm function?  | ER Fire S | afety  |  |
| marked, recently tested/logged and in operating order?  14.40 ME and auxiliaries engine fuel leak alarm tested and in working order?  14.41 Is the ER ventilation system emergency shut down system clearly marked, recently tested/logged and in operating order?  14.42 Is the ER fixed fire fighting system clearly marked with operating instructions posted in the crews working language and does the Co2 release warning alarm function?  | 14.38     |  |  |
| working order?  14.41 Is the ER ventilation system emergency shut down system clearly marked, recently tested/logged and in operating order?  14.42 Is the ER fixed fire fighting system clearly marked with operating instructions posted in the crews working language and does the Co2 release warning alarm function?  | 14.39     |  |  |
| system clearly marked, recently tested/logged and in operating order?  14.42 Is the ER fixed fire fighting system clearly marked with operating instructions posted in the crews working language and does the Co2 release warning alarm function?   | 14.40     | <u> </u>   |  |
| operating instructions posted in the crews working language and does the Co2 release warning alarm function?   | 14.41     | system clearly marked, recently tested/logged and in   |  |
|  | 14.42     | operating instructions posted in the crews working language and does the Co2 release warning alarm |  |
| Comments:  | Commer    | nts:   |  |



| 15.0     | MARPOL POLLUTION PREVENTION - DECK AND ENGINE DEPTS   | YES/NO/NA/NI |  |  |  |
|----------|---|--------------|--|--|--|
| Engine I | Engine Dept:  |              |  |  |  |
| 15.1     | Is the oily water separator (OWS) and 15 PPM oil discharge monitoring equipment recently calibrated (provide date & authorised party), in good working order & routinely used?                  |              |  |  |  |
| 15.2     | Are operating instructions posted for the OWS in the crew's working language and in English? Is the overboard discharge for the OWS fitted with a chain and padlock for securing while in port? |              |  |  |  |
| 15.3     | Are suitable anti-pollution warning notices posted?   |              |  |  |  |
| 15.4     | Is the communication system for bunkering and internal fuel transfer operations adequate?   |              |  |  |  |
| 15.5     | Are written procedures & a checklist for bunkering and fuel transfers posted / available in the crew's working language and in English?   |              |  |  |  |
| 15.6     | Is the ship's sewage and/or retention system in satisfactory order and approved by Class/flag state in accordance with MARPOL Annex IV? Date of last inspection?                                |              |  |  |  |
| 15.7     | Is the ship's air pollution prevention system being operated in accordance with MARPOL Annex VI?  |              |  |  |  |
| 15.8     | Does the vessel have Ship Energy Efficiency<br>Management Plan on board? (Applicable for vessels over<br>400GT)   |              |  |  |  |
| 15.9     | Has the SEEMP been approved by the vessel's Class?  |              |  |  |  |
| 15.10    | Is the garbage incinerator in working condition?  |              |  |  |  |



| реск ре | Deck Dept:   |  |
|---------|--|--|
| 15.11   | Are adequate scupper plugs available & are they in position and ready for immediate use while the vessel is alongside and/or engaged in bunkering, oil transfer and/or oil cargo operations?                 |  |
| 15.12   | Are Deck and Engine Dept oil pollution control drills conducted in accordance with the vessel's SOPEP/ SMPEP plan? Date of last drill logged?  |  |
| 15.13   | Is there an adequate quantity of oil absorbents, clean up equipment & chemicals on board for controlling a small ship source oil spill? Are these materials stored in a clearly marked and dedicated locker? |  |
| 15.14   | Are oil spill steel save-alls fitted on deck around bunker manifolds, fuel tank air pipes & sounding pipes and are metal threaded drain plugs fitted and secured?  |  |
| 15.15   | Is the maindeck free of oil/oily material, including leaks from hydraulic systems?   |  |
| 15.16   | Is there an approved ballast management plan which accords with MARPOL Guidelines and do the ship's records show that is being adhered to?   |  |
| 15.17   | Is there an approved Garbage Management Plan and Garbage Record Book available in accordance with MARPOL Annex V?  |  |
| 15.18   | Are garbage disposal warnings posted in the galley and messrooms and is all garbage being stored, processed and disposed of in accordance with Annex V?  |  |
| _       | nts:   |  |



| 16.0  | ACCOMMODATION AND GALLEY AREA  | YES/NO/NA/NI |
|-------|--|--------------|
| 16.1  | Is the accommodation in a clean and well maintained condition?   |              |
| 16.2  | Is the electrical safety within the accommodation/crew cabins, galley and mess rooms satisfactory?               |              |
| 16.3  | Is the cleanliness of the galley satisfactory and are galley range hood grease filters clean?                    |              |
| 16.4  | Is all equipment in the galley safe, in working order and properly secured?                                      |              |
| 16.5  | Is there a CO2 / DP fire extinguisher and/or fire blanket in the galley?   |              |
| 16.6  | Galley access doors & serving hatches fire retardant?  |              |
| 16.7  | Are the food and other dry stores in a clean and orderly condition and without evidence of bugs or other vermin? |              |
| 16.8  | Are crew toilets and showers all working and clean?  |              |
| 16.9  | Refrigerated store room door internal opening device and /or alarms tested and satisfactory?                     |              |
| 16.10 | Do the crew appear to be satisfied with the quality and quantity of food and water available on board?           |              |
| Comme | nts:   |              |
|       |  |              |
|       |  |              |
|       |  |              |



| 17.0 | SHIP MANAGEMENT SYSTEM (INCLUDING ISM CODE IMPLEMENTATION)*   | YES/NO/NA/NI |
|------|---|--------------|
|      | o Surveyors: see Guidance for Auditors to the ISM Code ec No 041 available at <a href="https://www.iacs.org">www.iacs.org</a>   |              |
| 17.1 | Are ISM Code Manuals and Procedures on board, updated and in use in the operation of the vessel?  |              |
| 17.2 | Does the Master's and crew's understanding and on board implementation of the ISM Code Safety Management System appear to be satisfactory?  |              |
| 17.3 | Are ISM audits carried out regularly? Date last external and authority? Date last internal and name of party?   |              |
| 17.4 | Are ISM records of non-conformance maintained showing corrective action taken and non-conformities closed out?  If there are any non-conformities which have not been actioned/closed out, please detail in the Comments box below. |              |
| 17.5 | ISM records of accidents and hazards/near misses maintained and acted upon through Ship's Safety Meetings?  |              |
| 17.6 | Does a Superintendent attend the vessel on a regular basis? Date of last visit on board?  |              |
| 17.7 | Is there an owners/managers circular file kept on board?  |              |
| 17.8 | Do the Master, Chief Officer and Chief Engineer provide regular condition and maintenance reports to the owners/managers as part of the ISM system?   |              |
| 17.9 | Are shipboard management meetings held on a regular basis and are minutes of the meeting sent to owners/ managers?  |              |



| 17.11 D ve 17.12 Is or 17.13 Ar tc pr 17.14 Is ar | an ISM Planned Maintenance System implemented on oard which includes all parts of the vessel?  oes the general appearance and operation of the essel reflect this?  there a drug and alcohol policy and is it implemented in board, inclusive of random testing by a 3rd party?  re there contingency plans available to the Master of deal with major incidents such as collision, salvage, collution, fatalities, serious cargo damage? |  |
|---|---|--|
| 17.12 Is on 17.13 An to po 17.14 Is ar            | there a drug and alcohol policy and is it implemented n board, inclusive of random testing by a 3rd party? re there contingency plans available to the Master o deal with major incidents such as collision, salvage, ollution, fatalities, serious cargo damage?   |  |
| 17.13 Ai to po 17.14 Is ar                        | n board, inclusive of random testing by a 3rd party? re there contingency plans available to the Master o deal with major incidents such as collision, salvage, ollution, fatalities, serious cargo damage?   |  |
| 17.14 Is ar                                       | deal with major incidents such as collision, salvage, ollution, fatalities, serious cargo damage?   |  |
| ar  | there a designated Cafety Officer on board and is   |  |
| رد ا  | there a designated Safety Officer on board and is n ISM accident reporting system and safety meeting ystem in place?  |  |
| in  | re safety posters, training posters, tags, tallies,<br>struction books and technical manuals available on<br>oard in the crew's working language?   |  |
| рі  | re the crew provided with adequate personal rotective equipment (PPE) for work and can it be seen eing used in a proper manner?   |  |
| m   | an emergency contact list (including owners, ship<br>nanagers, charterers, agents, P&I Club, port safety &<br>ecurity) available and accessible to all senior officers?   |  |
| Sobo  | re the crew aware that asbestos is now banned by OLAS on all ships and has all residual asbestos on oard in the engine room or any other parts of the essel been removed or planned for removal?  |  |
| Comments  |   |  |



| 18.0  | ISPS: SHIP SECURITY  | YES/NO/NA/NI |
|-------|--|--------------|
| 18.1  | Is an approved ship security plan available and implemented onboard, inclusive of requirements for a comprehensive stowaway search prior to departure? (ISPS Part A:9.2) |              |
| 18.2  | Are the Master and crew familiar with the plan's use, including the strict control of access to the vessel?  |              |
| 18.3  | Are the keys to spaces which have been locked for ISPS control Purposes (e.g. CO2 room etc) readily available from the duty crew member in charge of gangway access?     |              |
| 18.4  | Is the CSR (Continuous Synopsis Record) in order?<br>(SOLAS 74 Chap XI-1 reg 5.3)  |              |
| 18.5  | Is the ship's Identification/IMO number permanently marked on the hull? (SOLAS 74 Chap XI-1 reg 3)   |              |
| 18.6  | Is an SSAS (Ship Security Alert System) installed onboard and in working order? (SOLAS 74 Chap XI-2 reg 6)   |              |
| 18.7  | Does the Ship Security Officer (SSO) hold a valid ISPS certificate?  |              |
| 18.8  | Are ship security drills carried out at intervals of at least once every three months and logged? (ISPS Part B: 13.6)  |              |
| Comme | ents:  |              |