Ship \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date of first Revision # \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CRITICAL EQUIPMENT LIST**

(Including technical systems) (Ref. ISM Section 10.3 and [Fleet Ops](http://srv-glas301:82/Leisure/content/parent%20category%20topics/procedures%20and%20operations/fleet_ops.htm) > [5.0 Technical Procedures](http://srv-glas301:82/Leisure/content/parent%20category%20topics/procedures%20and%20operations/ship_technical_operations.htm) > 5.3 Maintenance and Operation Overview > [5.3.12 Control & Calibration of Measuring & Monitoring Devices](javascript:void(0);))

Clause 10.3 of the ISM Code requires that: “*The Company should identify equipment and technical systems the sudden operational failure of which may result in hazardous situations. The SMS should provide for specific measures aimed at promoting the reliability of such equipment or systems. These measures should include the regular testing of stand-by arrangements and equipment or technical systems that are not in continuous use*”

Critical Equipment includes machinery, equipment, technical systems and also any standby arrangements or other items not in continuous use, the sudden failure of which may result in a hazardous situation or occurrence (incident or accident as defined in the [Fleet Ops](http://srv-glas301:82/Leisure/content/parent%20category%20topics/procedures%20and%20operations/fleet_ops.htm) > [9.0 Safety Management](http://srv-glas301:82/Leisure/content/parent%20category%20topics/procedures%20and%20operations/safety_management.htm) > 9.3 Accident and Incident Management)

The list of Critical Equipment is prepared specifically for each managed ship after consultation with the Master and the Chief Engineer as per the flowchart below.

The table in this form lists the various groups of equipment that need to be reviewed and the Company identified items as critical equipment within each such group.

This list is to be reviewed and revised as necessary (ie retrofits, installation of new equipment etc).

The critical equipment so identified is to be regularly inspected to promote its reliability and this integrated into the Planned Maintenance System PMS (per [Fleet Ops](http://srv-glas301:82/Leisure/content/parent%20category%20topics/procedures%20and%20operations/fleet_ops.htm) > [5.0 Technical Procedures](http://srv-glas301:82/Leisure/content/parent%20category%20topics/procedures%20and%20operations/ship_technical_operations.htm) > 5.3 Maintenance and Operation Overview) as follows:

* The PMS is to be based on Manufacturers’ recommendations (via the equipment Manual, maintenance schedule etc)
* If these are not available then the recommendations of another manufacturer of similar equipment and specifications should be used
* If these are not available either, then best Company professional judgment may be used for establish PMS

The Critical Equipment List should further be used to assist in the identification of:

* minimum stock levels for certain items (form OP51 – Minimum Stock Level)
* equipment used to measure maintenance criteria and requiring calibration or a control check (per form OP 61 - The Master Calibration List)

It should however be recognized that not all equipment listed on OP51 and/or OP61 would be critical and that not all critical equipment should be listed on forms OP51 and/or OP61.

|  |
| --- |
| **Fig. 1** |

**Fig.2 (for IT systems)**

**Diagram

Description automatically generated**

**Fig.3 (for IT critical connected and OT systems)**

**Diagram

Description automatically generated**

***More rows may be added if necessary***

| **GROUP OF EQUIPMENT** | | Equipment Specific Component, if any | Inspection / Maintenance reference requirement by: | | | Calibration / Control Check required?  (OP61) | Minimum Stock Level identified? (OP51) | PMS reference number |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| original manufacturer | another manufacturer for similar equipment | best professional judgement |
| **DECK** | | | | | | | |  |
| 1 | Windlass |  |  |  |  |  |  |  |
| 2 | Winches |  |  |  |  |  |  |  |
| 3 | Gangway and embarkation system |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |
| **NAVIGATION & COMMUNICATION** | | | | | | | |  |
| 1 | Magnetic Compass |  |  |  |  |  |  |  |
| 2 | VDR |  |  |  |  |  |  |  |
| 3 | AIS |  |  |  |  |  |  |  |
| 4 | Communication equipment (GMDSS) |  |  |  |  |  |  |  |
| 5 | PA system |  |  |  |  |  |  |  |
| 6 | ECDIS\*  \*Required to be critical by many PSC including AMSA (despite 100% redundancy required) |  |  |  |  |  |  |  |
| 7 | Email system |  |  |  |  |  |  |  |
| **SAFETY** | | | | | | | |  |
| 1 | Emergency Fire Pump |  |  |  |  |  |  |  |
| 2 | Fixed Fire Fighting System |  |  |  |  |  |  |  |
| 3 | Fire Detection & alarm System |  |  |  |  |  |  |  |
| 4 | Life Boat |  |  |  |  |  |  |  |
| 5 | Survival Craft Launching Equipment |  |  |  |  |  |  |  |
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| **ENVIRONMENTAL** | | | | | | | |  |
| 1 | Oily Water Separator |  |  |  |  |  |  |  |
| 2 | Emergency Engine Room Bilge Suction |  |  |  |  |  |  |  |
| 3 | Ballast Water Treatment Plant |  |  |  |  |  |  |  |
| 4 | EGCS (where fitted) |  |  |  |  |  |  |  |
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| **TECHNICAL / MACHINERY** | | | | | | | |  |
| 1 | Main Steering Gear |  |  |  |  |  |  |  |
| 2 | Emergency Steering Gear |  |  |  |  |  |  |  |
| 3 | Fuel Oil System |  |  |  |  |  |  |  |
| 4 | Lubricating Oil System |  |  |  |  |  |  |  |
| 5 | Emergency Stops and Remote Closing Devices |  |  |  |  |  |  |  |
| 6 | Emergency Diesel Generator |  |  |  |  |  |  |  |
| 7 | UPS System |  |  |  |  |  |  |  |
| 8 | Batteries System |  |  |  |  |  |  |  |
| 9 | Emergency Compressor |  |  |  |  |  |  |  |
| 10 | Remote control valve system |  |  |  |  |  |  |  |
| 11 | Emergency switchboard |  |  |  |  |  |  |  |
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| **Information Technology or Operational Technology system** | | | | | | | |  |
| 1 | Internet |  |  |  |  |  |  |  |
| 2 | Firewall |  |  |  |  |  |  |  |
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| **PUBLIC HEALTH / INFECTION PREVENTION AND CONTROL** | | | | | | | | | |
| 1 | HEPA filter in HVAC |  |  |  |  |  |  |  | |
| 2 | AC Ventilation Fan for Isolation area |  |  |  |  |  |  |  | |
| 3 | Medical Ventilator for ARI/COVID |  |  |  |  |  |  |  | |
| 4 | Freezer / refrigerator equipment for covid vaccines |  |  |  |  |  |  |  | |
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| **OTHERS** | | | | | | | |  |
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**Dates of Reviews**:

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| --- | --- | --- | --- | --- | --- |
| Date: | Master | Chief Engineer | Fleet Mngr | DPA | Changes or Remarks |
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