**M.V. SILVER SHADOW**

**PLANNED MAINTENANCE INSTRUCTIONS**

**FOR**

**LIFE SAVING APPLIANCES AND SYSTEMS**

**(Solas Chapter III, Regulation 20, as amended and MSC.402(96))**

**PLANNED MAINTENANCE RECORD CHART**

**PLANNED MAINTENANCE INSTRUCTIONS**

The Planned Maintenance Instructions for Life Saving Appliances and Systems are designed to run in one year cycle.

The date on which a planned maintenance item is completed should be entered in the appropriate box.

The Planned Maintenance Record Chart duly filled in will show which maintenance schedules have been completed.

The frequency at which planned maintenance routines must be carried out is indicated on the chart by the non shaded areas.

**All weekly and monthly** maintenance will be carried by a “competent person” as defined in Fleet Ops > 9.0 Safety Management > 9.8 Lifesaving Appliances (LSA) and/or Survival Craf, Tenders and Zodiacs.

**Annual and Five-year** thorough examinations, overhauls, operational tests and repairs shall be conducted by certified personnel of either the manufacturer (OEM) or an authorized (by Flag) service provider.

The "Original" Planned Maintenance Record Chart is to be retained on board in the Ship's Safety File.

A copy of the Planned Maintenance Record Chart for the previous year is to be sent to the Safety and Quality Department on the 1st of January each year.

**Note:** Any flag specific more stringent requirements shall be consulted (via relevant LWI53x, Flag bulletins/circulars etc.) and implemented in this form accordingly as relevant to the specific vessel.

For ships operating in Polar waters inventory and readiness of additional equipment prescribed by the Polar Assessment/ Polar Water Operation Manual (PWOM), such as extra life rafts, additional TPAs/ immersion suits, personal and group survival kits, extra rations, extra tools for snow / ice, de-icing equipment/ consumables, additional inflation pumps etc., shall be maintained and verified against the PWOM

**LIFE SAVING APPLIANCE SYSTEM**

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| WEEKLY ITEMS | Year | | | | | | | | | | | | | | | | | | | | | | | | REMARKS |
|  | J | | F | | M | | A | | M | | J | | J | | A | | S | | O | | N | | D | |  |
| W 1 All survival craft, rescue boats and launching appliances shall be visually inspected to ensure that they are ready for use. The inspection shall include, but is not limited to, the condition of hooks, their attachment to the lifeboat and the on-load release gear being properly and completely reset |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| W 2 Lifeboat Engines – shall be run for a total period of not less than 3 min; it should be demonstrated that the gear box and gear box train are engaging satisfactorily |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1st. Engineer |
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| W 3 Signalling Lamp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Safety/Navigating Officer |
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| W 4 Anchor and Pin condition |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Staff Captain |
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**LIFE SAVING APPLIANCE SYSTEM**

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| MONTHLY ITEMS | Year | | | | | | | | | | | | **REMARKS** |
| J | F | M | A | M | J | J | A | S | O | N | D |
| 1 Lifeboat/Liferafts Davits |  |  |  |  |  |  |  |  |  |  |  |  | Staff Captain |
| 2 Lifeboat and liferaft Embarkation Lights |  |  |  |  |  |  |  |  |  |  |  |  | Chief Electrician |
| 3 Lifejackets – complete and in good order |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 4 Lifeboat Equipment (small gear), including pyrotechnics – complete and in good order. Inflatable lifejackets recommended checks (if no manufacturer specific): service indicator is green; signs for wear, damages, tears, holes etc.(if in doubt inflate bladder by the tube and check for loss of pressure); seams securely sewn; straps and hardware in good order; CO2 cylinders firmly secured and free of rust; all auto-inflation components armed and within expiry dates; lifejacket re-packed as per manufacturer’s instructions; pull-tab lanyard accessible |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 5 Lifeboat Rations |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 6 Lifebuoys and Lights |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 7 Emergency Steering Gear |  |  |  |  |  |  |  |  |  |  |  |  | 1st.Engineer |
| 8 All lifeboats, shall be turned out from their stowed position, without any persons on board if weather and sea conditions so allow |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 9. Immersion suits (as per MSC/Circ.1047) |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 10. Lifeboat and liferaft embarkation ladders |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 11. Liferaft lashing arrangements (slip hook, buckles, straps, pad eyes etc. incl. HRU) visually inspected for proper tension, deterioration, corrosion, wastage, free of dirt/ oil/, grease etc. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12. Lifeboat and rescue boat batteries |  |  |  |  |  |  |  |  |  |  |  |  | Chief Electrician |
| 13. Radio Equipment – EPIRBs, SARTs, GMDSS VHFs |  |  |  |  |  |  |  |  |  |  |  |  | Comms Officers |
| 14. Bridge pyrotechnics |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 15. Line throwing appliances |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 16. Gangways and accommodation ladders |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 17. Bridge Windows and their fittings |  |  |  |  |  |  |  |  |  |  |  |  | Staff Captain (inspect if glass and supporting elements (frame, fixtures, gaskets etc) are structurally strong with a sound integrity, free from compromising corrosion etc or other damage |
| 18. Spare glasses for external windows and side scuttles, and portable deadlights |  |  |  |  |  |  |  |  |  |  |  |  | As per [Operations](http://srv-glas301:82/Leisure/content/parent%20category%20topics/procedures_and_operations.htm) > [Safety Management](http://srv-glas301:82/Leisure/content/parent%20category%20topics/procedures%20and%20operations/safety_management.htm) > [Safety Equipment & Maintenance](http://srv-glas301:82/Leisure/content/parent%20category%20topics/procedures%20and%20operations/safety%20equipment%20&%20maintenance.htm) > Lifesaving Appliances (LSA), Tenders & Zodiacs and related Planned Maintenance |

**LIFE SAVING APPLIANCE SYSTEM**

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| **QUARTERLY ITEMS** | **Year** | | | | | | | | | | | | **REMARKS** |
|  | J | F | M | A | M | J | J | A | S | O | N | D |  |
| 1 Pilot Ladders |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 2 Lifeboat Water |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 3 Gyro Compass |  |  |  |  |  |  |  |  |  |  |  |  | Navigating Officer |
| 4 Lifeboats lowered to the water and operated by assigned crew |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
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**LIFE SAVING APPLIANCES SYSTEM**

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| **SIX MONTHLY ITEMS** | **Year** | | | | | | | | | | | | **REMARKS** |
| J | F | M | A | M | J | J | A | S | O | N | D |
| 1 Navigational Shapes |  |  |  |  |  |  |  |  |  |  |  |  | Navigating Officer |
| 2 Navigational Lights and Sound Signals |  |  |  |  |  |  |  |  |  |  |  |  | Navigating Officer |
| 3 Inflatable Liferafts |  |  |  |  |  |  |  |  |  |  |  |  | Safety Officer |
| 4 Lifeboat Hulls |  |  |  |  |  |  |  |  |  |  |  |  | Staff Captain |
| 5 Lifeboats Falls & Lifting Hooks |  |  |  |  |  |  |  |  |  |  |  |  | Staff Captain |
| 6 Lifeboat Rope Work, Wires & Ladders |  |  |  |  |  |  |  |  |  |  |  |  | Staff Captain |
| 7 Hand & deep sea leads |  |  |  |  |  |  |  |  |  |  |  |  | Staff Captain |
| 8 Emergency steering gear & compass |  |  |  |  |  |  |  |  |  |  |  |  | Staff Captain |
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**LIFE SAVING APPLIANCES SYSTEM**

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| **ANNUAL ITEMS** | **Year** | **REMARKS** |
| 1 Liferafts |  | Staff Captain/ Manufacturer’s representative or other competent person appropriately trained and certified |
| 2 Davit launched liferaft automatic release hooks thorough examination and operational testing |  | Certified personnel of either the manufacturer or an authorized (by Flag) service provider |
| 3 Lifeboat Winch Brakes |  | Certified personnel of either the manufacturer or an authorized (by Flag) service provider |
| 4 Pyrotechnics |  | Safety Officer |
| 5 Inflatable lifejackets |  | Safety Officer/ Manufacturer’s representative or other competent person appropriately trained and certified |
| 6 Hydrostatic release units |  | Safety Officer |
| 7 Launching appliances – thorough examination; dynamic test of the winch brake at maximum lowering speed with an empty boat |  | Certified personnel of either the manufacturer or an authorized (by Flag) service provider |
| 8 Lifeboat and (fast) rescue boat, and their release gear – thorough examination and operational test |  | Certified personnel of either the manufacturer or an authorized (by Flag) service provider Design review by Lifeboat RRS manufacturers and performance test witnessed by Flag or RO to be completed by July 1, 2013. |
| 9 Launching appliances – thorough examination of lifting wires, including wires paid out completely, de-greased, close-up examined for corrosion/ defects especially stationary areas (i.e. parts resting on sheaves/ locking devices etc.), greased and re-wound on drum |  | Certified personnel of either the manufacturer or an authorized (by Flag) service provider |
| 10 Immersion suits – air pressure test for suits over 10 years of age |  | Safety Officer |
| 11 Thorough examination of pilot ladders, gangways, accommodation ladders and any associated lifting equipment, davits, fittings and winches will be as part of the Passenger Ship’s Safety Certificate Survey |  | Manufacturer’s representative or other competent person appropriately trained and certified |
| 12 Lifejackets – check there is no compression from stowage, loss of resiliency (ie lifejacket is excessively hard, stiff or its foam brittle) or shrinkage in size (indicated by wrinkling of the coating or loose fitting shell) |  |  |
| 13. Marine Evacuation System (MES) - service at a competent service station |  | Manufacturer’s representative or other competent person appropriately trained and certified  In addition or in conjunction with servicing, each MES to be deployed from the ship on a rotational basis at intervals agreed by the Administration but at least once every 6 years |

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| **EVERY DRY DOCKING OR THREE YEARLY ITEMS** | **Year:** | **REMARKS** |
| 1. Immersion and anti-exposure suits seams and closures - air pressure test (per MSC/Circ.1114) for suits less than 10 years of age (or at more frequent intervals for suits more than 10 years old) |  | Safety Officer |
| 2. All vessel’s windows and portholes and their fittings |  | Structural inspection for sound integrity by a specialized Company (including associated shutters, deadlight covers, storm covers etc and their adequate thickness) |
| **FIVE YEARLY ITEMS** | **Year:** | **REMARKS** |
| 1. Lifeboat and rescue boat wires renewal (stainless steel falls, whose service life for marine use as per manufacturer’s statement exceeds 5 years may be retained in use for the stated periods if end-for-ending is performed as specified by manufacture) |  | Safety Officer |
| 2. Launching appliances  Thorough examination and dynamic test of the winch brake at maximum lowering speed with a proof load of 1.1 times the maximum working load of the winch  Davit winches anti-reverse bearings renewed as per manufacturer recommendations (or every 5 years if no specific recommendations from manufacturer) |  | Certified personnel of either the manufacturer or an authorized (by Flag) service provider  Should be done in the presence of a RO surveyor |
| 3. Lifeboat and (fast) rescue boat on-load release gear- thorough examination and operational test under a load of 1.1 times the total mass of the boat full (crew + equipment) |  | Certified personnel of either the manufacturer or an authorized (by Flag) service provider  Should be done in the presence of a RO surveyor |
| 4. Davit launched liferaft automatic release hooks overhauled and operationally tested under a load of 1.1 times the total mass of the liferaft when loaded with its full complement of persons and equipment |  | Certified personnel of either the manufacturer or an authorized (by Flag) service provider  Should be done in the presence of a RO surveyor |
| 5. Wires used on gangways and accommodation ladders to be renewed unless renewed earlier due to deterioration |  | Manufacturer’s representative or other competent person appropriately trained and certified |
| 6. Gangways, accommodation ladders and any winches to be operationally tested to their specified maximum design load |  | Manufacturer’s representative or other competent person appropriately trained and certified |