



Border Force

**AUTHORITY: The Secretary of State for the
Home Department
acting through Border Force**

STATEMENT OF REQUIREMENTS

**PLANNED MAINTENANCE AND SAFETY
EQUIPMENT RECERTIFICATION FOR
HMC SEARCHER**

NOVEMBER 2019

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DEFINITIONS:

Acceptance	The issuing of an acceptance document, signed by the Authority following the completion of an Annual Maintenance & Repair Period to the satisfaction of the Authority.
Additional Work	Unprogrammed work outside of the scope of planned or scheduled work.
Agreed Facility	A single phone number for the Supplier giving access to a point of contact able to give user friendly assistance to persons experiencing technical problems with any part or operation of the Cutters
Alongside Berth	A suitable quay/berth with at least 1m depth below LWS at all times Complete with access by gangway/brow
Cardinal Date Plan (CDP)	A plan provided by the Supplier mapping out the significant dates for a project
Cutter	The Vessel as detailed in Annexes C & D
Defect Rectification	Work undertaken to resolve any kind of defect identified and listed in the work package.
Emergent work	Any work that emerges from the Planned Maintenance, which is notified to the Supplier in this Statement of Requirements. Any repairs which are required as a direct result of defects found with during this package of works.
Highlight Reports	A report highlighting the details, cause and effect, of a deviation from the agreed Cardinal Date Plan.
Lloyd Register	Lloyd's Register's Rules and Regulations set standards for the design, construction and lifetime maintenance of ships, offshore units and land-based installations.
Major Defect	Any defect or fault which reduces the performance of the Cutter, so it is unable to perform its duties.
Milestone Payment Plan	A plan setting out the significant milestone payments process for each Maintenance and Repair period
Minor defect	Any defect or fault which reduces the performance of the Cutter while allowing it to be safely operated for its duties.
Original Equipment Manufacturer (OEM)	The original manufacturer of a piece of equipment.
Planned Maintenance	The package of works as detailed at Annex A
Project Manager	A member of the Suppliers personnel who is responsible for the overall planning and execution of a project.

Progress Report	A report giving details of progress against the agreed CDP
Rectification Plan	A plan to rectify a specified defect, giving dates and reasons for relevant actions to effect full rectification of the defect.
Safe Working Load (SWL)	The maximum load a piece of equipment can safely operate under.
Slipway/Dry Dock	A Slipway or Dry Dock of suitable size, complete with dock blocks in accordance with the supplied docking plan and to the satisfaction of the Border Forcer Overseeing Officer Complete with safe permanent means of access to the Cutter
Warranty	A guarantee, issued to the Authority by the Supplier, promising to repair or replace something if necessary, within a specified period.
Working Location	The area in which the Cutter is operational

Part 1: GENERAL

1. Background

- 1.1 The Authority currently operates a fleet of eleven sea going patrol craft operating in both UK National and International waters. This consists of five Cutters and six Coastal Patrol Vessels (CPV).
- 1.2 The four Damen 4207 patrol vessels of which HMC Searcher is one, are built in accordance with Lloyds 100A+ and hold valid MCA International Load line certification.
- 1.3 The primary roles of the Cutters are: -
 - 1.3.1 To provide a mobile, flexible seaborne force capable of maintaining an effective deterrent against illegal immigration, smuggling and other breaches of the law administered by Border Force both within and outside the territorial waters of the UK.
 - 1.3.2 To increase maritime intelligence, undertake surveillance and improve international liaison in combating illegal immigration, the smuggling of drugs and movement of instruments of terrorism by sea;
 - 1.3.3 To intercept suspect vessels in territorial and international waters; and
 - 1.3.4 To provide mutual assistance to other EC countries, the Channel Isles, the Isle of Man and other partners on the UK border.

- 1.4 In addition to these primary responsibilities, Border Force also undertake tasks on behalf of the Ministry of Defence, Maritime and Coastguard Authority, National Crime Authority, Police and UK Fisheries Agencies.

Part 2: REQUIREMENTS AND CONSTRAINTS

2. Requirements

- 2.1 The objective of this specification is to provide requirements for;

- The annual Maintenance of equipment and machinery,
- The annual recertification of all safety equipment,
- The modification and Defect Rectifications

3. Location and Dates

- 3.1 The requirements, as detailed in 2.1, will be undertaken within the geographic parameters set out in 3.2 and 3.3 and between the dates set out in 3.4.

3.2 UK – between Portland and Sunderland

3.3 Europe – between Cherbourg, France and Rotterdam, The Netherlands

- 3.4 Delivery of HMC Searcher to the successful bidder will be sometime during, week commencing, the 18th November 2019 with a *likely delivery date* being 20th November 2019.

4.0 Constraints

- 4.1 All specified work must be completed.
- 4.2 All work carried out must be compliant to all applicable standards or regulations and in accordance with best industry standards.
- 4.3 All new parts and equipment fitted should be supportable for a period of five years following installation
- 4.4 All new equipment shall be provided with relevant operator & maintenance documentation, and any applicable certification.
- 4.5 All work must be completed as follows:

Between w/b 18th November 2019 and the 9th of December 2019.

3: PROVISION OF SERVICES

5.0 General Requirements

- 5.1 The Supplier will appoint and name a dedicated Project Manager, as a single point of contact, for the duration of the Project.
- 5.2 The Authority will delegate a Border Force Overseeing Officer (BFOO) for the duration of this contract, who shall be entitled to inspect any work or to have it inspected by their duly authorised representative.
- 5.3 On arrival at the supplier's premises the respective Cutter will be formally handed over in the case of a docking to the Supplier using the formal handover document at Annex E. Thereafter, the Supplier will be formally approached for consent in respect of any Authority activity or the activity of any Authority designated / arranged Supplier onboard.
- 5.4 The Supplier shall submit a draft CDP covering the completion of all planned work with the formal quotation for this work package, in an accessible Microsoft Office document format (word or excel), for approval by the Authority, once agreed by the Authority this will form the final CDP to be followed.
- 5.5 The Supplier is to provide Highlight Reports within twenty-four hours of all identified deviations from the CDP.
- 5.6 During the contract period the BFOO and BF appointed contractors (e.g. MCA surveyors shall during normal working hours, Access to all premises of the yard or its suppliers where any parts are being manufactured, repaired or serviced.
- 5.7 During the contract period the Supplier shall provide reasonable office accommodation for use by the Authority, to include printing facilities.
- 5.8 All tasks shall be completed by appropriately qualified and experienced personnel in relation to the equipment being worked upon.
- 5.9 The Supplier will be expected to clean the working area removing and disposing of those component parts that are replaced and all waste created during this project, in addition to returning the vessel to its original state of cleanliness on handover.
- 5.10 All minor consumable fixings, sealants, anti-corrosive paste/ insulation washers on fittings liable to salt water spray etc required to gain access to maintenance of equipment or rectify defects to be provided by the Supplier.
- 5.11 The supplier is required to provide secure storage for the vessel's equipment stored in the mission and bunk space.

- 5.12 All bunk space soft furnishings, including mattresses are to be removed to a secure clean environment for the duration of the work, or covered to adequately protect them from dirt. If soiled, they are to be returned to a clean and usable state.
- 5.13. On completion of all work and prior to hand back, the vessel shall be cleaned to the same standard it was presented to the supplier in in order to allow for a swift return to operational use once accepted by the Authority
- 5.14 A secure alongside berth is to be provided for the duration of the LSA period and following docking to enable the Basin trial programme to be completed
- 5.15 Provision of 415volt 3 pH electrical supply for the duration of the LSA/Docking period, payment of electrical supply to be via the Emergent Work process with meter readings before and after to support costs
- 5.16 The Authority will be engaging with OEM manufactures, under a separate contract, to undertake specific maintenance tasks on the installed Main and Auxiliary machinery. The Supplier is to afford access as required and assist with various tasks as instructed by the Border Force Overseeing Officer to complete this specific work. Payment for these tasks will be covered under Emergent Work process

Part 4: WARRANTY

6.0 Warranty Requirements

- 6.1 The Supplier shall provide an Agreed Facility for reporting faults and obtaining technical advice, covering the hours between 08:00 and 16:30, Monday to Friday, for the logging of faults or data. Response times for such service shall allow for all faults to be logged, given a reference number and Rectification plan agreed between all parties within a maximum of forty-eight hours of the fault being logged.
- 6.2 The Supplier shall provide warranty repairs in the event that any of the supplied or repaired parts develops a fault during the parts warranty period.
- 6.3 All Work carried out by the Supplier during the period of this contract shall be covered by a one-year Warranty, commencing from the date of acceptance back in to the custody of the Authority.
- 6.4 All new parts supplied or fitted during the period of this contract shall be covered by a one-year warranty or such other provided warranty if it is longer than the minimum one year.
- 6.5 In the event that a Warranty Major Defect is notified to the Supplier that will render a Cutter non-operational. The Supplier shall provide services to ensure the Cutter is restored to full working condition within forty-eight hours,

calculated from the date and time on which the Authority agrees the Supplier personnel can gain access to the Cutter. In the event a Major Defect cannot be rectified within the assigned period, a Rectification Plan must be agreed with the Authority within forty-eight hours of identification of the fault.

- 6.6 In the event that a Warranty Minor Defect is notified to the Supplier, other than those that will render the Cutter non-operational, the Supplier shall provide services to ensure the Cutter is restored to full working condition, as quickly as possible, and in any event, within ten working days, calculated from the date and time on which the Authority agrees the Supplier personnel can gain access to the Cutter. In the event a Minor Defect cannot be rectified within the assigned period, a Rectification Plan must be agreed with the Authority within forty-eight hours of identification of the fault.

Part 5: TRIALS, DOCUMENTATION, ACCEPTANCE AND PAYMENT

7.0 Basin Trials

- 7.1 On completion of all work and once the Supplier has satisfied themselves that the Cutter is seaworthy this will be demonstrated to the Authority who will provide an Acceptance Certificate and confirm the hand back of the Cutter into the Authority's custody and responsibility. Where propulsion work has been undertaken, this shall include propulsion and manoeuvring trials measured against original trials data for comparison and include OEM service engineer alongside the supplier's own mechanical and electrical service engineers
- 7.2 Any trials required shall be to prove that the executed work has been carried out satisfactorily and that the various systems can be checked and confirmed as fully and effectively re-commissioned. Other than fuel, all costs related to the operations of test and trials will be the responsibility of the Supplier.
- 7.3 Because of the specialist nature of the vessel, the Authority will provide a crew member(s) familiar with the navigational controls and engineering systems of the Cutter.

8.0 Documentation

- 8.1 All certification required for regulatory compliance or requested by the Authority shall be supplied enclosed in clear envelopes within four-ring ring binders complete with an index. An electronic copy shall be forwarded by e-mail to the Authority in .pdf and .docx format.
- 8.2 All certificates and reports specified as required are to be provided before acceptance.

8.3 All certificates and reports specified as required are to be provided in a hard copy folder to the vessel before departure and electronically emailed to the Authority.

8.4 Certifications are required in the following format:

A. Two sets of hard copies

B. One set of electronic copy with index and emailed to the BFOO

NB: Although these sets of certifications are to be presented at the Acceptance Meeting, to minimize time spent in checking these during the acceptance meeting prior opportunity shall have been given to the Border Force Overseeing Officer to check the contents and the index.

9.0 Acceptance

9.1 Final acceptance will be the issuing of a Final Acceptance document as at Annex F, signed by the Authority.

9.2 The Acceptance document will be issued after:

9.2.1 Successful completion of basin trials required for the work undertaken.

9.2.2 Delivery of Certificates of Conformity for all new equipment fitted.

9.2.3 Delivery of all documentation and certificates as specified in part 8 of this Statement of Requirements.

9.2.4 Outstanding actions listed at wash-up meeting

10.0 Charges and Payment

10.1 On completion the Supplier shall provide the Authority with a completed schedule showing the individual cost breakdown for each item of Planned Work and Emerging Work for approval. Following approval of this schedule the Supplier will invoice the Authority for 90% of the total amount.

10.2 The remaining 10% shall be invoiced for following a one calendar month, snag free, period in relation to the work completed.

10.3 All travel and subsistence costs related to defect repairs shall be paid, having been recharged for, at the Home Office reimbursable T&S rates as stipulated in Annex G.

Annex A: Annual Maintenance & LSA

NB: Where it is stipulated in this SoR that approved engineers/agents are to be used, the Supplier shall submit details, to include business address and contact details, to the Authority of these engineers/agents who will carry out the work with the formal quotation.

1.0 SHORE POWER

- 1.1 The Supplier is to provide 400-volt 50 Hz 50amp, three phase shore power, for the duration of the maintenance/LSA period.
- 1.2 Payment for Electricity consumed will be covered under the Emergent Work process

2.0 BERTHING

- 2.1. Provide secure alongside berthing as required during LSA / Maintenance period with a minimum depth of 1m below HWS
- 2.2. Provide means of safe access

3.0 DECK

- 3.1 Overhaul Raised Coaming water tight hatches
 - Weather deck Fwd./Lower Deck Fwd. Accommodation;
 - Weather deck / Waist Main Engine Room Access;
 - Weather deck / Port Aft Peak Steering Compartment Access; and
 - Weather deck / Stbd Aft Steering Compartment Access.
- 3.2 On completion of all work, function test the hatches to prove security and water tight integrity to the satisfaction of the Border Force Overseeing Officer.

4.0 Main Engine: Caterpillar 3516B

NB: Main Engine lubrication oil capacity is 405 litres Castrol Vectron 15/40), Oil and Filters Border Force supply

- 4.1 Change oil and filters on both Port and Stbd Caterpillar 3516B main engines:
 - Existing main engine lubrication oil charge is to be pumped out and disposed of in accordance with extant regulations.
 - Renew the lubrication oil filters.
 - Replenish the lubrication oil charge.
 - Change the main engine fuel filters (only change the 5 off main filters).

5.0 Main Engine Gearboxes: Reintjes WLS930

NB: Main Gearbox lubrication oil capacity is 90 litres, Castrol MHP 153),
Oil Border Force supply

- 5.1 Check the alignment of both main gearboxes to Engine and service the engine mounts, adjust accordingly
- 5.2 The 4 off Main Engine Resilient Mounts (Rubber Design Type 214) are to be: -
- Visually inspected for failure of the rubber insert;
 - Dimensional check of all four engine mounts are to be made to ensure the requisite loaded heights are in accordance with the manufacturer's recommendations;
 - The main holding down bolts are checked to ensure they remain torqued to 1,000 Nm;
 - The engine mount fixing bolts are checked to ensure they remain torqued to 400 ken;
 - The buffer screw mounting height is verified as correct in accordance with the manufacturer's recommendations.
- 5.3 Provide a written report on the engine mount heights and condition

NB: This **Work is to be carried out by Messrs EMHA (Engine Mount Rubber Design Manufacturer) approved agent** main engine to gearbox alignment is to be laser checked and adjusted by: -

Messrs EMHA
Ringdijk 520A
Postbus 54
2980 AB Ridderkerk
The Netherlands
Tel: +31 (0) 180-48 43 43
Fax: +31 (0) 180-41 85 81
e-mail: info.emha@ham-groep.nl
Website: www.emhabv.nl

- 5.4 Main engine Port and Stbd Reintjes WLS930 Reduction Gearboxes:

This service is to be completed by an approved Reintjes service agent and is to carry out the following:

- Annual external inspection; and

- Open the Inspection plates and carryout an internal inspection of the pinions and gearwheels in accordance with Reintjes WLS & WVS maintenance service routines.
- Test all temperature and pressure shut down devices.
- Change P&S Gearbox Oil & Filters (Border Force Supply)
- Existing gearbox lubricating oil change is to be pumped out and disposed of in accordance with extant regulations.
- Renew the in-use lubricating oil filters (only change the in-use oil filter).
- Change the sinter filter.
- Replenish the lubricating oil charge.

NB: Gearbox lubricating oil capacity is 90 litres

On completion, a Reintjes Service Report is to be provided to the Border Force Overseeing Officer.

6.0 Steering Gear Installation

NB: there are two electronically linked Steering Gear installations each installation has two hydraulic pumps and consequently two starters

- 6.1 Carry out visual and physical inspection of the Port & Starboard steering gear installations checking for
- Hydraulic leaks;
 - Wear on Hydraulic Hoses;
 - Cylinders and rams for leakage;
 - Tightness / security of linkages & connection; and
 - Inspect tank anti-vibration mounts.

7.0 Bow thruster

- 7.1 Bow thruster Flexible Coupling:
- Check the condition of the flexible coupling element and the mounting bolts.

Report findings to the Border Force Overseeing Officer.

- 7.2 The following Bow Thruster hydraulic power pack hydraulic oil filters are to be changed: -
- Filter Element No E26N - Off Line Filter
 - Tank Top Return Filter H33O R20N
 - Tank Top Return Filter H160 R20
- NB Filters Border Force supplied

8.0 Emergency Fire Pump

- 8.1 50hr service on Lombardini Diesel Firefighting Pump Engine as per manufacturer's instructions for 250 hours.

9.0 Portable Salvage Pump

- 9.1 Carry out 50 Hour service on the Yanmar L48 4.8HP diesel engine as per manufacturer's instructions for 250 hours.

10.0 Separ Fuel Filters Fuel Oil System - Three (3) engine SEPAR coalescer fuel filters are to be:

- Removed, stripped, cleaned and inspected.
- Renew filter elements as necessary.
- Refill with FO when finished.

Note: two (2) are in use and one (1) is on standby.

NB Filters are Border Force supplied

11.0 Domestic Water System

11.1 Hydrophore (BT) Fresh Water Hydrophore Unit - Hydrophore Tank Maintenance

- Disconnect and drain the hydrophore.
- Inspect the hydrophore cylinder and rubber bladder.
- Remove the bladder, clean it with freshwater and sterilize it.
- Inspect the cylinder for excess corrosion, leaks or damage.
- Inspect the bladder for damage, leaks or signs of perishing: renew the bladder if necessary.

NB: The cost of any replacement Bladder would be managed under Border Force Emergent Work procedure.

- 11.2 Re-pressurise the air space between the hydrophore cylinder and bladder to 0.2 bar.

On completion of re-commissioning function test to the satisfaction of the Border Force Overseeing Officer and report details.

11.3 Domestic Hot FW System:

2 of Daalder domestic fresh water calorifier Heaters (No.1 and No.2)

- Inspect & Pressure Test Calorifiers (carry out pressure test to 6 bar for 15 minutes).
- Inspect for leaks and damage.
- Check pressure setting of PRV
- Supply test tallies.

Supply local tallies to record the pressure and test date and issue certificate of test.

Carry out and record insulation test on the 6 kW Heating elements in both calorifiers.

12.0. Air Conditioning System:

- Replace the AC Compressor drier filling.
- Inspect the condition of the V- belts driving the ventilation fan.
- Measure the deflection/tension of the v-belts and adjust as required.
- Inspect refrigeration system pipework and system.

Report Details to the Border Force Overseeing Officer

13.0 Electrical Distribution

13.1 Check insulation readings on listed circuits

13.2 Check and record insulation readings on all circuits from the following locations: -

- Main switchboard (Engine Room) 415/240V 50Hz.
- P1 power/lighting distribution board (Engine Room) 415/240V 50Hz
- P2 power/lighting distribution board (Forward Machinery Space) 415/240V 50Hz
- L3 lighting distribution board (Main Deck Technical Room) 415/240V 50 Hz.
- L4 lighting distribution board (Wheelhouse) 415/240V 50 Hz.
- Central distribution board (Wheelhouse) 415/240V 50Hz.
- AC plant distribution board (Forward Machinery Space) 415/240V 50 Hz.

13.3 Submit formal tabulation of readings taken.14.4

13.4 Shore Power Supply:

- Inspect & Test Shore Power Connection Box & Cable01.

Submit formal tabulation of readings taken.

13.5 Earth Bonding:

- Check Earth Bonding of Shafts, Rudders & Stabilizers.

Submit formal tabulation of readings taken.

13.6 Clean, Inspect & Test Starters & Motors for the following:

- Anchor Windlass
- Port and starboard capstans (2 in total)
- Mob Boat Davit

- Steering gear system pumps (4 in total)
- Bilge/general service pumps (2 in total)
- FW hydrophore pumps (2 in total)
- AC pump
- AC compressor

Tasks to include:

- Insulation testing
- Continuity testing of earth bonding
- Function test of current overload devices
- Function test of anti-condensation heaters
- Motor bearing condition checks

On completion of all work, restore power supply and function test to the satisfaction of the Border Force Overseeing Officer.

Submit formal tabulation of readings taken.

14.0 240v Portable Appliances

14.1 Carryout & Document PAT on Listed 240v Appliances:

- A Portable Appliance Test (PAT) is to be carried out on up to 180 portable appliances (including privately owned appliances used onboard).

On completion of satisfactory test, label each appliance with a suitable identification label indicating:

- Pass.
- Date of Test and Initials of tester.

Submit formal tabulation of appliances tested.

15.0 Fixed Fire Detection and Fire Fighting Equipment/Systems:

15.1 Fire Detection System, Inspect & Test Fire Detection system

Inspect and clean the following Fire Detection System Detector Heads: -

- 14 x Heat Detectors (both fixed and rate of rise type); and
- One (1) Smoke (Light scatter) Detector
- Function Test the following: -
 - 1) 12 x Call Points
 - 2) 8 x Audible Alarm Units
 - 3) 2 x Alarm Indicator beacons.
- Inspect the Power Supply Unit (PSU) Batteries and connection: noting expiry date.
- Function test the system including secondary power mode.

Update test tally.

Submit formal tabulation of readings taken and report details to the Border Force Overseeing Officer.

15.2 CO2 Extinguishing System Ajax- Service, Survey & Certify CO2 System:

NB: These tasks are to be carried out by an approved Marine Fire & Safety Contractor.

Service, Survey and Certify the Engine Room Fixed CO2 Extinguishing System as follows: -

- Disconnect the Main CO2 cylinders from the system and insert blanks;
- Visually inspect the whole CO2 system;
- Blow through discharge pipe work system with clean air at a minimum pressure of at least 20 bar.
- Check the contents and levels of the 3 main 45kg CO2 cylinders and the operating cylinders;
- Check all flexible hoses for ageing;
- Check pilot bottle pressures are greater than 120 Bar and within 10% of one another;
- Function check of the pull handle to activate the cylinder valves, close valves and check for leakage;
- Fill CO2 manifold with (+/- 25 bar) from a CO2 test cylinder (Main valves closed, or sections sealed).
- Close and disconnect the CO2 test cylinder, check thread connections for leakage;
- Check operation of pressure gauge and blow through the CO2 pipe work with the CO2 gas in the manifold or clean air with a pressure of a minimum 20 bar.

Report all defects found with work recommendations to the Border Force Overseeing Officer.

On completion, re-connect / re-commission the system.

Present the re-commissioned system to the Border Force Overseeing Officer.

On completion of successful survey, update test tally, issue certificate and pass one photocopy and one original copy of each to the Border Force Overseeing Officer.

Complete Task-sheet Notes & Completion Record.

15.3 Portable Firefighting Equipment - Service Portable Extinguishers:

Note: These tasks are to be carried out by an approved service agent.
The following portable hand-held fire extinguishers are to be serviced and certified in accordance with extant regulations: -

- 8 x 5Kg CO₂;
- 4 x 9 litre AFFF;
- 6 x 6Kg Dry Powder;
- 1 x 9 litre water (training)
- 1 x 9 litre AFFF (training).
- 1 x Fire blanket (Galley).

Report all defects found, with work recommendations, to the Border Force Overseeing Officer.

Issue survey & certification.

15.4 Portable Firefighting Equipment - Examine, Test & Certify Hoses, Nozzles.

The following fire hoses are to be examined tested and certified:

- 2 x 10 metre 1 ½ diam. fire hoses (Forward Machinery Space);
- 2 x 10 metre 1 ½ diam. fire hoses (Engine Room)
- 1 x 10 metre 1 ½ diam. fire hoses (external port side Wheelhouse)
- 2 x 10 metre 1 ½ diam. fire hoses (external foredeck)
- 1 x 10 metre 1 ½ diam. fire hoses (external aft deck)
- 1 x 10 metre 1 ½ diam. fire hoses (aft bridge deck)
- 6x 1 ½ diam. Fire hose nozzles and their associated instantaneous couplings.

On completion of survey, pressure test the hoses to 5.25 bar.

Report all defects found, to the Border Force Overseeing Officer and issue survey & certification documentation.

15.5 Compressed Air BA Equipment

- 3 sets Draeger PA 90+ BA Equip:
 - Carryout annual maintenance and survey.
- 12 in number 9 litre carbon fibre BA air cylinders:
 - Carry out annual maintenance and survey.
- 2 sets Draeger CF10 EEED and their respective air cylinders:
 - Carryout annual maintenance and survey.

NB: These tasks are to be carried out by an approved Draeger service agent.

Issue certification and report all defects found, to the Border Force Overseeing Officer.

16.0 Safety Equipment

16.1 Inflatable Lifejackets:

10 x Survitec Twin Elite SOLAS approved inflatable lifejackets are to be:

- Inspected, serviced and tested.

NB: These tasks are to be carried out by an MCA approved Survitec service agent.

Issue individual certificates of inspection and test. Report all defects found, with work recommendations, to the Border Force Overseeing Office.

16.2 Scrambling Net:

- Thoroughly examine and certify the Scrambling net (including the securing arrangement).

On completion of satisfactory survey, update the attached test tally, issue certificate of inspection and survey and pass one photocopy and one original copy to the Border Force Overseeing Officer.

16.3 Rescue Slings:

- Survey & Certify the 'Helicopter Strop' in use as a rescue sling.

NB: These tasks are to be carried out by an approved examination test house.

17.0 Fall Arrest and Safety at Height Equipment

17.1 GlideLoc Mast Installation:

Survey and Certify the fixed components of the GlideLoc Mast Installation:

- GlideLoc Fall Arrest Traveller
- Soll Fall Arrest Block
- Work Positioning Strap

NB: These tasks are to be carried out by an approved GlideLoc / SALA Service Agent.

17.2 GlideLoc/SALA Mast Access Equipment:

Survey and Certify the following personal safety equipment:

- 2x SALA Full Body Harness to EN361 with back strap
- 2x Climbers Helmet
- 2x AG 10 rescue Kit
- 2x Inertia Lanyard

NB: These tasks are to be carried out by an approved GlideLoc / SALA Service Agent.

Report all defects found. On completion, issue certificates of survey and pass one photocopy and one original copy of each to the Border Force Overseeing Officer.

17.3 Safety Harnesses:

Survey and Certify the following personal safety equipment:

- 2x Lalizas deck safety body harnesses
- 2x Seago safety lines.
- 2 x Waist Harnesses
- 2 x 1.5m restraint lanyards

NB: These tasks are to be carried out by an approved examination test house.

Report all defects found. On completion, issue certificates of survey and pass one photocopy and one original copy of each to the Border Force Overseeing Officer.

18.0 Lifting Equipment

NB: All equipment to be tested under Lifting Operations and Lifting Equipment (LOLER) regulations.

18.1 Anchor Windlass:

- Carry out a Dynamic Load Test of the anchor windlass using a horizontal load of 1.6 tonnes.

NB: The following service is to be carried out by an approved test house.

On completion of successful test, update test tally and issue certificate.

18.2 Capstan for RHIB Handling:

- Carry out a Dynamic Load Test of the RHIB Recovery Capstan to 1.6 tonnes.

NB: The following service is to be carried out by an approved test house.

On completion of successful test, update test tally and issue certificate.

Report all defects found, with work recommendations, to the Border Force Overseeing Officer.

18.3 Port and Starboard Capstans:

- Carry out a Dynamic Load Test of the Port After Mooring Capstans to 1.15 tonnes.

NB: The following service is to be carried out by an approved test house.

On completion of successful test, update test tally and issue certificate.

Report all defects found, with work recommendations, to the Border Force Overseeing Officer.

18.4 RIB Recovery equipment:

- Survey and certify the 12mm stainless steel rope, safety hook and swivel to a SWL of 1.6 tonnes.

NB: The following service is to be carried out by an approved test house.

On completion of successful test, update test tally and issue certificate.

Report all defects found, with work recommendations, to the Border Force Overseeing Officer.

18.5 Emergency Towing Equipment:

- Remove the 32mm x 200 metre 8 strand Multi-plait Towing Line and associated Towing Shackles from vessel.
- Undertake visual inspection of Towing Line and load test of shackles.
- Report all Defects and findings to Border Force Overseeing Officer.
- Return and re-store Towing Line and Towing Shackles onboard Cutter.

NB: The following service is to be carried out by an approved test house whose details will be notified to the Authority with the submission of the formal quotation.

On completion of successful test, update test tally and issue certificate.

Report all defects found, with work recommendations, to the Border Force Overseeing Officer.

18.6 Emergency Anchor Recovery Equipment:

The following anchor recovery is to be examined, certified and where appropriate tested:

- 1x Tractel Turffer tackle block and wire 3200kgs SWL
- 1x GS Double fall manual chain block x 6metres HOL 3000 SWL
- 1x Duplex polyester web belt sling terminating in a captive eyed latch hook one end only EWL 840 mm 3000 kgs SWL

- 1x Ace grade 8 alloy steel single leg chain complete with 16/8 Bergok one end and 16/8 shortening clutches the other, EWL 400mm 3,500kgs SWL @ 90 degree
- 1x 16 mm diam. single leg wire rope sling terminating in soft eyes EWL 850mm 3000 kgs SWL
- 1x 1" Bow shackle 3750 kgs SWL
- 8 x Screw pin bow shackles

NB: The service is to be carried out by an approved test house whose details will be notified to the Authority with the submission of the formal quotation.

On completion of successful test, update test tally and issue certificate.

19.0 Galley Equipment

19.1 Vessel's 2x microwave ovens located in galley and mess deck:

- Inspect & Radiation Test Microwave

20.0 Man Overboard Boat (MOB) System

20.1 SEC MS2-7-40 MOB Davit to have:

- Annual Inspection and Maintenance as per manufacturer's instructions.

To be completed by an approved service agent whose details will be notified to the Authority with the submission of the formal quotation.

20.2 Schat-Harding RRH15 MOB quick release hook:

- Inspect & Certify Quick Release Hook.
- Annual requirement is that the QRH will be surveyed, certified and load tested.

NB: These tasks are to be carried out by an approved Schat Harding service agent whose details will be notified to the Authority with the submission of the formal quotation.

20.3 Duarry 3.8 metre MoB Boat:

- Boat to be removed and sent for service, survey & certification.
- Survey & Certify 4 leg lifting sling and 4 lifting points.

NB: These tasks are to be carried out by an MCA approved Zodiac service agent whose details will be notified to the Authority with the submission of the formal quotation.

Issue service report and certification to the Border Force Overseeing Officer.

20.4 MoB Boat 25hp Yamaha Long Shaft Outboard Engine:

- Engine to be removed and sent for annual service as per manufacturer's instructions.

NB: These tasks are to be carried out by an approved Yamaha service agent whose details will be notified to the Authority with the submission of the formal quotation.

On return the outboard is to be re-installed on the MoB Boat.

Upon completion motor is to be tested to the satisfaction of the Border Force Overseeing Officer and a service report is to be provided.

20.5 Vessel's Magnetic Compasses:

- Inspect & carryout compass Swing on the binnacle mounted Lilley & Gillie SR-3 magnetic compasses on the wheelhouse top.
- Inspect the spare Lilley & Gillie SR-3 magnetic compass held in the messroom.

Note: It is important that the spare compass is stowed inverted so that wear on the bearing is avoided.

Note: The compass swing is to be carried as early as possible after the completion of the annual maintenance period: at the convenience of the vessels commander, when the vessel is fully operational with all equipment embarked.

On completion of the compass swing issue a deviation card for the compass to the onboard crew and pass copies to the Border Force Overseeing Officer.

20.6 Satellite EPIRB:

- Remove the EPIRB from the vessel and dispatch to approved service agent.
- Survey & Service EPIRB
- Inspect EPIRB Hydrostatic release expiry date and if less than 1 year remains and renew EPIRB hydrostatic release unit and plastic retaining bolt.
- Check EPIRB battery.

NB: This Inspection/Service to be carried out by an approved Jotron service agent whose details will be notified to the Authority with the submission of the formal quotation in accordance with the guidelines in MSC/Circ.1040, carryout annual testing of the 406Mhz satellite EPIRB as required by SOLAS regulation IV/15.9 from 01-July-2002.

Issue a report with a list of the test results and maintenance performed and pass one photocopy and one original copy to the Border Force Overseeing Officer.

21.0 MARS (Man overboard Recovery Ladder)

21.1 The MARS recovery equipment is to be dispatched to the manufacturer Messrs SWL Ropes and Rigging Southampton for annual survey

Messrs SWL
65 Bernard Street
Southampton
SO1 1BA
Tel 02380 338286

22.0 SUPER CHLORINATION OF THE DOMESTIC FRESH WATER SYSTEM

22.1 Super chlorinate the Fresh Water Holding Tank.

- Press up the holding tank with treated super chlorination mixture
- Run water through ALL taps, hoses and shower heads: ensuring the super-chlorination concentrate levels are monitored and maintained.
- De-chlorinate the freshwater tank: run through ALL taps, hoses and shower heads.
- Drain down the system & the holding tank.
- Re-fill up Fresh Water tank, take water samples of the onboard system and shoreside
- Submit samples for analysis of potability and legionary's disease
- Provide a certificate of potability and no legionary present upon completion of satisfactory tests

NOTE: Failure will require re-super-chlorination and test until acceptable test standards are achieved.

23. Oxygen Therapy Kit

23.1 The onboard Oxygen therapy kit is to have its annual service carried out by an approved service agent.

Annex B: Modifications and Defect Rectification

1. The isolating deck valve for the hawse pipe flushing from the fire main system is to be freed and brought up to full operational status.
2. A replacement intrinsically safe 240-volt AC fluorescent light unit is to be supplied and installed in the Bosun's store.
3. The Intruder alarm system is to be:
Replace all intruder alarm roller contact switches on access doors and hatches
Tested to prove operation
4. The failed threads on the port and stbd engine room air intake jalousie fittings are to be;
Removed
New Stainless steel 6mm dia Heli coil inserted
New Stainless Steel 6mm dia bolts complete with nylon isolating washers

NB: Anti corrosive paste is to be used on the threads

5. The port and stbd main engine exhaust insert plate welds are to be:
Cleaned back of all corrosion
Inspection of the welds
NDT of the welds
Upon completion of repairs, painted in accordance with the ships paint specification
6. The port main engine cluster gauges have an earth present, the earth is to be traced and rectified

NB: Messrs Finning electrical engineer may have to attend

7. The 7 fresh water windscreen washer injection nozzles are to be;
Removed
Cleaned and orifices checked for blockages
Re-installed and tested
8. The 7 Wynn windscreen wiper assemblies are to be
Opened for inspection
Survey completed on their drive assemblies
Reported to the Border Force Overseeing Officer
9. The Port and Stbd steering feedback bars to are to be removed, straightened and refitted. Then the steering feedback system correctly adjusted
10. The missing deck head lining and lining retainer in the Bosuns store is to be replaced with as like for like to the existing specification

11. A new wooden open type cross hatch grating is to be provided to cover the Forepeak 24" round flush hatch, whilst open and venting the Forepeak
12. New door retainers are to be supplied and fitted to the galley fridge and freezer access doors
13. The damaged aft deck flood light supply cable is to be removed. A new supply cable of the same specification or greater is to be installed and the aft deck light proved. See Fig 1.1 below.

Fig 1.1



Annex C: Vessel Drawings and General Arrangements

See separate documents for Vessel Drawings and General Arrangement

Annex D: Vessel Details

Length O.A: 42.80m

Breadth O.A: 6.95m

Depth mid: 3.77m

Summer Draught: 2.15m (to base)

Displacement: 251.1 tons

Deadweight: 69.3 tons

Gross Tonnage: 235 tons

Built to Lloyds: 100A1 SCC

Annex E: Handover Document

Name of vessel: HMC Searcher

This Handover to Supplier Certificate is to be duly signed by a representative of the Authority and the Supplier upon the commencement of the contract for Planned Maintenance & LSA

Immediately upon signing this Handover Certificate by the Supplier, the responsibility and safe custody of HMC Searcher is accepted by the Supplier and the responsibility and safe custody will always thereafter remain with the Supplier until completion of the contract and an Acceptance Certificate duly signed by the Authority and the Supplier representative.

Statement of Condition by the Authority

HMC Searcher is in a safe and stable condition. All systems have been shut down, (except those as listed below, commensurate with the systems as required by the Supplier).

Tank Contents			
Fuel		litres	
Fresh water		litres	
Black Water Tank		litres	
Systems Still Operational			

Signed: For and on Behalf of the Supplier	Signed: For and on Behalf of the Authority
Name:	Name:
Position / Capacity:	Position / Capacity

Annex F: Acceptance Document

PART 1: to be completed by Supplier

Vessel Name:
HMC Searcher

HMC Searcher having completed its Planned Maintenance & LSA by..... to the satisfaction of the Authority and having successfully completed all trials and provided all documentation required under the Authority's Contract No.....is this day offered for acceptance by the Border Force.

Signed: **For and on Behalf of the Supplier**

 • **Print Name**
 • **Date:**

PART 2: to be completed by The Authority

By Vessel Commander:
 I attended basin and sea trials of HMC Searcher t and have satisfied myself that all systems, machinery and equipment are working satisfactorily. I have inspected the Cutter and consider she is in a condition suitable for return to operational service. Outstanding items are noted as attached.

Signed: **Print Name / Post**

By Border Force Overseeing Officer:
 HMC Searcher having completed its Planned Maintenance & LSA to the satisfaction of the Authority and having completed all trials and documentation required under the Contract is hereby accepted at hours.

Signed: **Border Force Overseeing Officer**
Print Name:
Date:

Last Emergent Work Authorization Issued was: EM

Outstanding Items
 Any outstanding items are to be noted, appended to this form and signed by both the Supplier and the Authority. Dates when these outstanding items are to be "completed by" are to be agreed and shown.

Distribution
 Original - Retained by the Supplier
 Copies to - Border Force Overseeing Officer; and
 Cutter Chief Engineer (for Ships Book).

ANNEX G: Reimbursable Expenses

The Supplier may claim the following Reimbursable Expenses at the rates set out below:

1. Travel

Standard rate of allowance for private cars

Initial 10,000 miles	40p per mile
Additional miles over the initial 10,000	25p per mile
Public transport rate	23.8p per mile

2. Hotel rates

London	£125 per night
All other locations other than London	£90 per night

Annex H: Paint Specification

Please see attached vessel paint specification

Annex I: Lubrication Specification

Please see attached vessel lubrication specification