

Requirements for repair of 3 x Delta 740X RHIBs

Background.

UKBF operate a fleet of four (4) Delta 740X Rigid Hulled Inflatable Boats (RHIBs) which are deployed from DAMEN 4207 class Cutters via a stern ramp launch arrangement.

Three of these RHIBs, designated DE02, DE03, DE04, are now in need of major repairs to rectify long standing defects and ensure they meet an operational standard.

Summary of Requirements.

This invitation for quotations is based on each RHIB as an individual unit and all major repair work is itemised per vessel. Some works are common across the three in various combinations. For clarity, each RHIB, and its associated repair requirements, is listed herein by designation number.

Constraints

1. All work carried out must be compliant to any applicable standards.
2. All new parts fitted should be supportable through the life of the craft with all relevant documentation supplied to UKBF.
3. Once finished, each RHIB will undergo a final acceptance trial to ensure acceptability to UKBF satisfaction. Such trial will be conducted at a time and location specified, or agreed, by UKBF.
4. Each RHIB will undergo its repair package individually and sequentially in order to maintain maximum operational availability within the fleet. Choice of order will be at UKBF sole discretion.
5. All repair requirements need to be completed by the end of the current Financial Year (end March 17).

Transport

1. Each RHIB must be collected from, and returned to, the Portsmouth/Southampton area as specified by UKBF.
2. Quotations must include all associated collection and transport costs from, and return to, the collection point including lifting from the water and the provision of a suitable supporting cradle.

DE02.

1. Sponson

- The existing 5 compartment 550 mm diameter Hypalon/Neoprene sponson is to be totally removed and any emerging damage to the hull fabric is to be repaired as necessary.
- A new 5 compartment sponson of 550 mm diameter constructed from at least 1,500 g/m² Hypalon/Neoprene fabric is to be supplied and installed to the existing design and colour completed with:
 - a. A5 Inflation valves
 - b. Lifelines
 - c. Heavy duty Rubbing strakes
 - d. Non slip treads on embarkation points as per the existing design
 - e. Port and Stbd Border Force identification panels with flap over
 - f. covers as per the existing design
 - g. Port and Stbd line quoits
 - h. Covering strips
 - i. New hollow section rubber D section at the bow
 - j. Additional safety retaining webbing straps installed
- One strap is to be fitted at the front of the bow, running from the hull flange, over the bow through the hollow rubber D section and secured inboard.
- Two webbing retaining straps will also be fitted both on the port and starboard bow sections to offer greater protection.
- Two layers of the attachment 1670dtex Hypalon fabric is to be applied to the attachment areas for the first one metre back from the bow.

2. Keel Band

- The existing stainless steel keel band is to be removed in its entirety
- A new Kevlar/Stainless keel band is to be installed in accordance with the drawing at Appendix A.

3. Steering and control levers

- The helm wheel control unit is to be stripped down, all seals renewed, fitted and re-installed;
- The steering actuator is to be removed, stripped down, new shaft seals fitted and re-installed

- The system is then to be bleed through with a new charge of hydraulic oil.
- All three, console mounted control levers, for clutch, engine and bucket controls are to be stripped down, overhauled and reassembled. Any new parts are to be fitted as required.
- Following all re-installation, all steering and control systems are to be checked to ensure correct operation

4. Electrical System.

- All battery electrical terminals are to be replaced along with associated wiring to main battery breakers, on completion they are to be coated in silicone gel;
- All non-electronic circuits where possible are to be have an insulation check completed, any failed cables are to be replaced.

5. Engine bay combing and canopy.

- Engine bay canopy and combing is to be removed.
- Damage to the fwd port and stbd corners of the canopy is to be repaired to match the original colour.
- Combing is to be cleaned, repaired as necessary and resealed to the deck and transom to ensure a watertight seal.
- Canopy is to be resealed and reinstalled to the combing.
- Watertight test is to be conducted following re-installation.

DE03.

1. Sponson

- The existing 5 compartment 550 mm diameter Hypalon/Neoprene sponson is to be totally removed and any emerging damage to the hull fabric is to be repaired as necessary.
- A new 5 compartment sponson of 550 mm diameter constructed from at least 1,500 g/m² Hypalon/Neoprene fabric is to be supplied and installed to the existing design and colour completed with:
 - k. A5 Inflation valves
 - l. Lifelines
 - m. Heavy duty Rubbing strakes
 - n. Non slip treads on embarkation points as per the existing design
 - o. Port and Stbd Border Force identification panels with flap over
 - p. covers as per the existing design
 - q. Port and Stbd line quoits
 - r. Covering strips
 - s. New hollow section rubber D section at the bow
 - t. Additional safety retaining webbing straps installed
- One strap is to be fitted at the front of the bow, running from the hull flange, over the bow through the hollow rubber D section and secured inboard.
- Two webbing retaining straps will also be fitted both on the port and starboard bow sections to offer greater protection.
- Two layers of the attachment 1670dtex Hypalon fabric is to be applied to the attachment areas for the first one metre back from the bow.

2. Keel Band

- The existing stainless steel keel band is to be removed in its entirety
- A new Kevlar/Stainless keel band is to be installed in accordance with the drawing at Appendix A.

3. Electrical system

- All battery electrical terminals are to be replaced along with associated wiring to main battery breakers, on completion they are to be coated in silicone gel;
- All non-electronic circuits where possible are to be have an insulation check completed, any failed cables are to be replaced.

- All under console wiring and connections are to be checked for corrosion and replaced as necessary.
- Any corroded or suspect fuse connections are to be replaced by suitable re-settable breakers.

4. Chart plotter

- Existing chart plotter is to be removed.
- Replacement chart plotter, Raymarine eS97 MFD, is to be fitted, including new replacement wiring and connectors as necessary.
- Replacement chart plotter may need modifications to the existing console.

5. Painter release cable

- Remove existing release cable and replace with new cable.
- Remove existing release lever unit and replace with new unit.

6. Seating

- Replace jockey seats with UKBF supply seats

DE04.

1. Chart plotter

- Existing chart plotter is to be removed.
- Replacement chart plotter, Raymarine eS97 MFD, is to be fitted, including new replacement wiring and connectors as necessary.
- Replacement chart plotter may need modifications to the existing console

2. Steering and control levers

- The helm wheel control unit is to be stripped down, all seals renewed, fitted and re-installed;
- The steering actuator is to be removed, stripped down, new shaft seals fitted and re-installed
- The system is then to be bleed through with a new charge of hydraulic oil.
- All three, console mounted control levers, for clutch, engine and bucket control are to be stripped down, overhauled and reassembled. Any new parts are to be fitted as required.
- Following all re-installation, all steering and control systems are to be checked to ensure correct operation.

3 Hamilton Jet

- Remove the waterjet tail pipe housing
- Clean and inspect rotor and stator for damage/corrosion
- Inspect the shaft bearing for damage
- Take wear down readings for the shaft bearing
- Inspect the aluminium housing for damage/corrosion
- Inspect all linkages for damage/corrosion
- Re-install tail pipe housing
- Paint housing with two coats of International black antifouling paint suitable for aluminium alloy
- Inspect gear tooth drive belts
- Inspect transom housing, flanges and seal.
- Rectify any defects found.

4 Painter release cable

- Remove existing release cable and replace with new cable.
- Remove existing release lever unit and replace with new unit.

5 Electrical system

- All battery electrical terminals are to be replaced along with associated wiring to main battery breakers, on completion they are to be coated in silicone gel;
- All non-electronic circuits where possible are to have an insulation check completed, any failed cables are to be replaced.
- All under console wiring and connections are to be checked for corrosion and replaced as necessary.
- Any corroded or suspect fuse connections are to be replaced by suitable re-settable breakers.

7. Seating

- Replace seat and backrest foam in all 4 x jockey seats
- Recover seats and backrests in similar material to that originally fitted.

8. Echo sounder

- Replace echo sounder with suitable unit.
- Replace cables and connections as necessary.

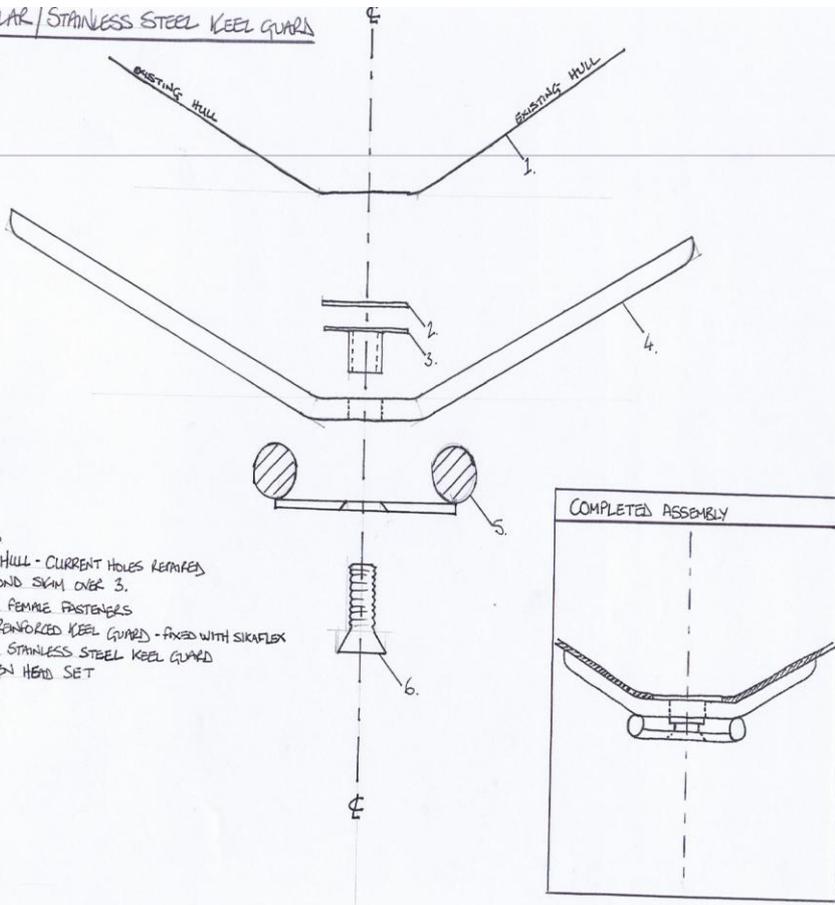
9. Speed log

- Replace existing speed log
- Renew cables and connections as necessary.

Appendix A.

UNDA KEVLAR / STAINLESS STEEL KEEL GUARDS

PROPOSAL:
13/09/2012



BILL OF ITEMS

1. EXISTING HULL - CURRENT HOLES REMOVED
2. CRESTOBOND SKIM OVER 3.
3. BIG HEAD FEMALE FASTENERS
4. KEVLAR REINFORCED KEEL GUARDS - FIXED WITH SIKAFLEX
5. EXISTING STAINLESS STEEL KEEL GUARD
6. CSK ALLEN HEAD SET