

HMCC..... Basin Trials Report: Dated:

Contract reference

SECTION M **BASIN TRIALS**

TRIALS PARTICULARS

Generator Trials

- 1.1 Witness Port Generator started, run on 75% load for 1 hour, then at 100% for 0.5hrs (to set AVR), record all temperatures and pressures and check Emergency Stop system and reset.

Remarks:

- 1.2 Witness operation of all alarm switches as follows: -

- 1.2.1 Over speed
- 1.2.2 Jacket fresh water temperature alarm
- 1.2.3 Low Lub. Oil pressure
- 1.2.4 Differential jacket pump low
- 1.2.5 High Lub. oil temperature
- 1.2.6 Lub. Oil low pressure stop
- 1.2.7 Jacket fresh water stop
- 1.2.8 All trips reset.

Remarks

- 1.3 Witness Starboard Generator started, run on 75% load for 1 hour, then at 100% for 0.5hrs (to set AVR), record all temperatures and pressures and check Emergency Stop system and reset.

Remarks:

- 1.4 Witness operation of all alarm switches as follows: -

- 1.4.1 Over speed
- 1.4.2 Jacket fresh water temperature alarm
- 1.4.3 Low Lub. Oil pressure
- 1.4.4 Differential jacket pump low
- 1.4.5 High Lub. oil temperature
- 1.4.6 Lub. Oil low pressure stop
- 1.4.7 Jacket fresh water stop
- 1.4.8 All trips reset.

Remarks

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1.5 Generators to be run in parallel for 15 minutes

Main Engine Trial

2.1 Witness both Main Engines started, run for 30 minutes, check temperatures and pressures (Caterpillar Service Engineer to be in attendance) and finally stopped. Check Emergency Stop system and reset.

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| Remarks: |
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2.2 Witness operation of all alarm switches as follows: -

| | Remarks |
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| 2.2.1 Over speed | |
| 2.2.2 Jacket fresh water temperature alarm | |
| 2.2.3 Low Lub. Oil pressure | |
| 2.2.4 Sea water differential pressure | |
| 2.2.5 High Lub. oil temperature | |
| 2.2.6 Lub. Oil low pressure stop | |
| 2.2.7 Jacket fresh water stop | |
| 2.2.8 All trips reset. | |

Praxis monitoring system (ISIS for Sentinel)

3.1 Witness Praxis Monitoring (ISIS For Sentinel) system working

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| Remarks: |
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Fresh & Grey Water system

4.1 Witness freshwater pressure system working: observe all sink taps and shower heads working correctly and verify automatic / manual pump out function of the grey water holding tank(s).

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| Remarks: |
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Black Water system

5.1 Witness that all toilets flush without apparent leakage and that vacuum system recovers quickly. Provided that no use has been made of the system observe pump out function.

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| Remarks: |
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Fire Detection System

6.1 Witness / test operation of the fire detection panel

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| Remarks: |
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Fire and Bilge System (modify form as necessary to suit Sentinel F&B system)

7.1 Witness operation of the Fire and Bilge system as follows: -

No 1 Pump

7.1.1 Fire hydrant system to be operated, branches to be connected and functionally tested.

7.1.2 Bilge suction function to be verified by filling at least one non-machinery space bilge with 200-500 litres of FW and pumping directly overboard.
Ensure bilge pumped dry on completion

7.1.3 Bilge suction function from the forepeak to be verified.

| Remarks |
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No 2 Pump

7.1.4 Fire hydrant system to be operated, branches to be connected and functionally tested.

7.1.5 Bilge suction function to be verified by filling at least one non-machinery space bilge with 200-500 litres of FW and pumping directly overboard.
Ensure bilge pumped dry on completion

7.1.6 Bilge suction function from the forepeak to be verified.

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7.2 Witness operation of the Emergency Fire Pump

Stabilisers

8.1 Witness stabilisers run up and operated through out their range

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| Remarks: |
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CPP System

- 9.1 Witness the CCP propeller system run up and operated through out the full pitch range.

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| Remarks: |
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- 9.2 CPP lubrication header tanks are to be checked and re-filled as appropriate after trial.

Steering System *(modify form as necessary to suit Sentinel hydraulic steering system)*

- 10.1 Witness the Steering system run up and operated by each pump through the full lock to lock range: -.

- 10.1.1 Port No 1 pump
- 10.1.2 Port No 2 pump
- 10.1.3 Stbd No 1 pump
- 10.1.4 Stbd No 2 pump

| Remarks |
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- 10.2 Witness manual hydraulic and emergency steering systems operated through out lock to lock ranges.

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| Remarks: |
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Anchor windlass and after rope warping drums

- 11.1 Witness operation of the anchor windlass, veering, hoisting, declutching and functioning of the rope warping drum.

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| Remarks: |
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- 11.1 Witness operation of the after deck rope warping drums.

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| Remarks: |
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Fire Monitor

- 12.1 Witness functional operation of the fire monitor, running up the pump and demonstrating local manual controls.

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| Remarks: |
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Boarding Boat

- 13.1 The Delta RIB boarding boat is to be launched and recovered with its engine test run as possible and the function of its steering and manoeuvring controls verified

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| Remarks: |
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MoB Boat

- 14.1 The MoB boat is to be launched and recovered with its engine test run as possible and the function of its steering and manoeuvring controls verified. On completion, the outboard engine is to be flushed with fresh water

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| Remarks: |
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Contractors Certificate of Seaworthiness

- 15.1 After the satisfactory completion of these basin trials the contractor must submit a Contractors Certificate of Seaworthiness (MSP-12 Annex C) on each occasion that the cutter undertakes any passage or Sea Trial.

NB Witnessed tests are to be carried out jointly by the HMRC Overseeing Officer and the Damen Project Manager, who are to sign the form. Where an aspect of the trial is witnessed by the Cutter Chief Engineer they are to initial and date the section concerned

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| <u>Form Completed by:-</u> | <u>Form Witnessed by:-</u> |
| Signed: | Signed: |
| | |
| Name: | Name: |
| Position: | Position: HMRC Overseeing Officer |

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Form Witnessed by:-

Signed:

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Name:

Position:

Form Witnessed by:-

Signed:

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Name:

Position: **Cutter Chief Engineer**