

Service Report

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Date 27/06/2019

Service ☐ Guarantee ☐ Inspection ☒ Installation ☐ Others ☐

Visit description **HCO Inspection**

Customer	DF Barnes	Vessel name	CCGS Henry Larsen
Order No	W.O.: 10678838	IMO number	8409329
Service Engineer/ Report by	Hrvoje Latkovic	Ship representative	Chief Engineer
Supervised by	M.H.	Place of service	CCG Terminal, St. John's NL CANADA
Date of visit	start 24/06/2019		
	end 24/06/2019		

Equipment type	Serial no / drwg. no	Operating duty and climate	Tot. op. hrs / op. cycles
- HC - 2 sets, - identical - Main Deck, side-by-side - 2 panels - Flush type, W/T - wire operated	Unkown/ 21-69030	unknown	unknown

Terms and conditions

Unless the Customer and MacGregor have agreed otherwise in writing, Orgaline General Conditions for the Supply of Mechanical, Electrical and Electronic Products - M 2000 shall be applied to the services referred hereto. The services performed and this report are based on the Customer's order, the Customer's instructions and the facts that were readily available for MacGregor's engineer during the performance of the services.



Lloyd's Register Quality Assurance certifies that the Quality Management System for MacGregor is ISO 9001:2008 compliant.

Report:**Equipment:**

- a) Fwd:
 - Single HC,
 - Raised Type, W/T, 2 panels, wire operated,
 - **Not in use**
 - Not inspected
- b) Aft:
 - Two HC's
 - Identical
 - Side-by-side
 - W/T
 - Flush type
 - Double-skin, screwed
 - Wire operated
 - In use
 - Both inspected

The following applies for both aft HCO:

- 1) Operation:** Good
- 2) Structure:**
 - a) Top plates: good
 - b) Side plates: good, except bottom portion rusty, needs to be sandblasted and painted
 - c) Double-skin plates: good
 - d) Bottom structure: couldn't be inspected without removal of double-skin plates
- 3) Main hinges:**
 - Plates rusty, must be sandblasted and painted
 - Must be dismantled in order to inspect the hinge-pins condition and hinge-pin holes condition, then compare with original design dimensions and TOL. and make decision if they are reusable or to be renewed.
- 4) Intermediate panel hinges:**
 - Plates in good condition
 - Hinges greased
 - Must be dismantled in order to inspect the hinge-pins condition and hinge-pin holes condition, then compare with original design dimensions and TOL. and make decision if they are reusable or to be renewed.
- 5) Lifting Lug & pocket:**
 - Good
 - Rusty, must be sandblasted and painted
- 6) Over-compression stoppers:**
 - Upper side good, bottom side & edge rusty, must be sandblasted and painted
 - Relative Height from bottom of rubber retainer channel to stoppers bottom edge must be measured and compared with the requirement for achievement of nominal rubber compression. Any found deviation in height from originally designed, must be eliminated in order to maintain the required nominal rubber compression.
- 7) Preventer chains & attachments:** good
- 8) Flanged wheels:**
 - Wobbliness: no
 - Somewhat rusty
 - Keeper plates: good
 - Race: without detail measurements, seems slightly worn-out
 - Ship representative is requesting new wheels

9) Plain wheels:

- Same comments as for Flanged wheels
- Races concavely worn-out, even to naked eye

10) Rubber packing:

- No damages
- Must be renewed because rubber material lost its original elastic properties
- Seems lack of compression & W/T present, based on discovery of traces of neoprene glue on the entire HC parameter's exposed face of the rubber gasket, which is the result of gluing rubber shims on top of rubber gasket face, what didn't hold and rubber shims were falling-off. In any case, if rubber shims need to be used in order to compensate for lack of compression and W/T, the correct procedure is to install the rubber shims under the rubber gasket, not on its top face.

11) Rubber packing channel: couldn't be inspected without removal of rubber packing.

12) Flush Deck Cleats:

- Good
- A spring pin was found missing on PS HC – Fwrd Panel.
- All spring pins should be replaced.

13) Coaming:

- Rusty
- To be sandblasted and painted

14) Compression bar:

- Corrosion present, especially top face is critical since rough top face damages the rubber packing face and might not assure full W/T
- To be replaced with stainless steel compression bar, material: AISI 316-L. This suggestion & decision was in agreement with the Ship Representative.
- Top face of SS compression bar to be ½ round.

15) Wheel tracks:

- Rusty
- To be sandblasted and painted

16) Heating element/wire:

- Good
- To be secured to coaming with adequate clips.

17) Drains:

- Openings free of obstructions
- To be tested for correct drainage

18) W/T: was not tested at the time

Used spares: NA

Description	Part no	Qty	Comments / Measurements / Drwg no

Required repairs: N/A

Necessary spares: As per above suggestion

Description	Part no	Qty	Comments / Measurements / Drwg no
Flanged Wheel	24-69002	2	
Plain Wheel	24-69006	2	
Rubber Packing	71mm x 32mm	20 m	
Spring pin for cleats	11.50.09/08	12	

Pictures:



Figure 1: CCGS Henry Larsen



Figure 2: Bottom view of PS HC



Figure 3: Bottom view of SB HC

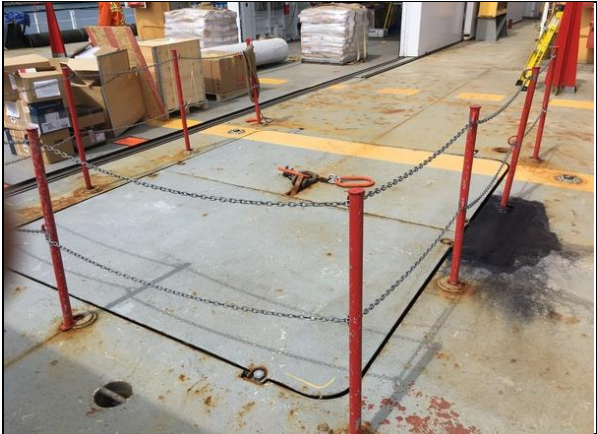


Figure 4: Top view of SB HC.

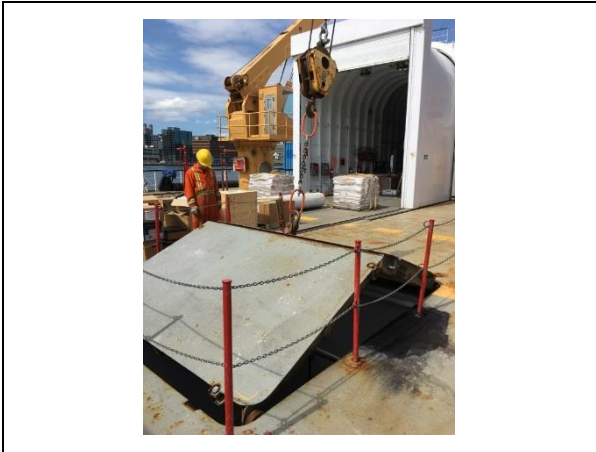


Figure 5: SB HC operation

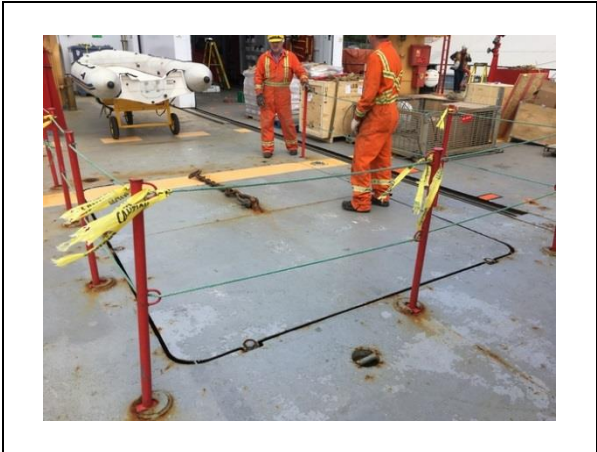


Figure 6: Top view of PS HC.

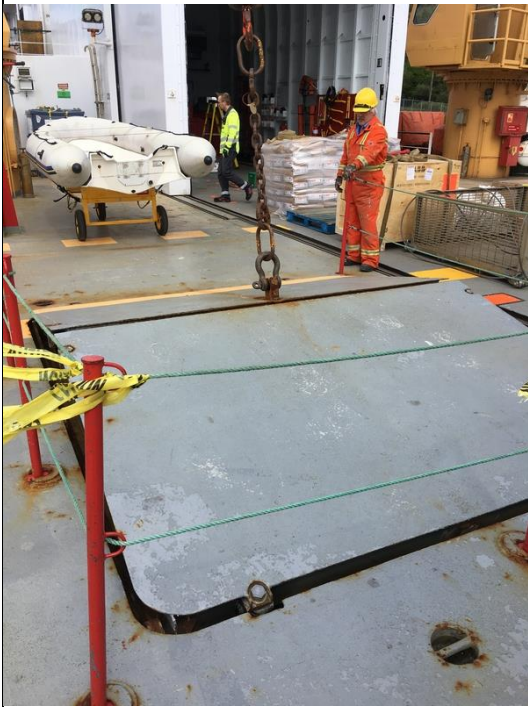


Figure 7: PS HC operation



Figure 8: SB HC fully open



Figure 9: Inspection of wheels, Typ.

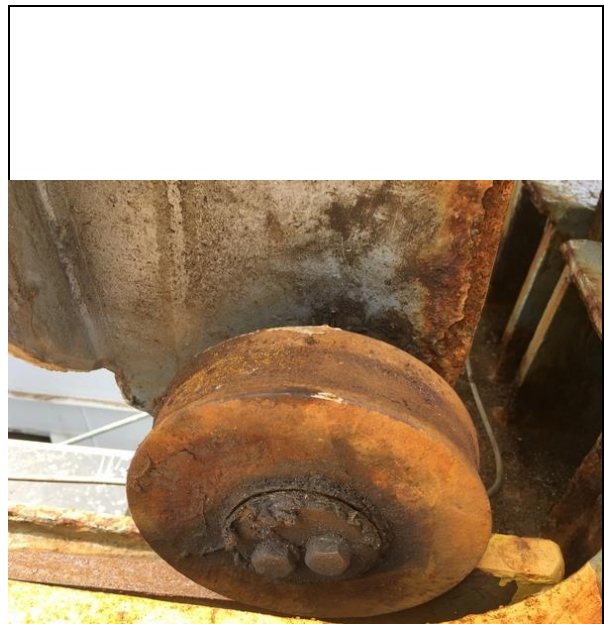


Figure 10: Condition of plain wheel on PS HC. One can see large concave crown

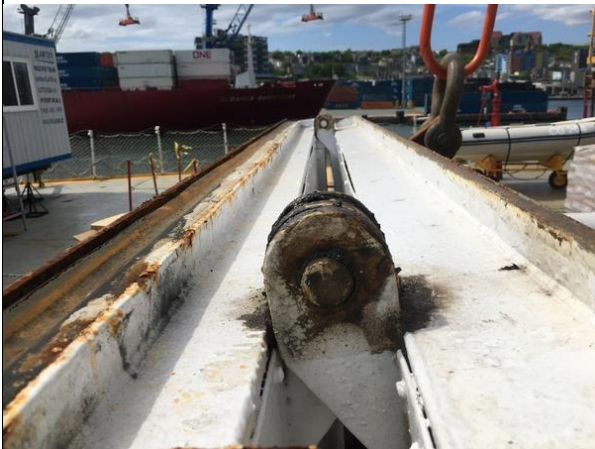


Figure 11: Intermediate Hinges on SB HC



Figure 12: Intermediate Hinges on PS HC



Figure 13: Preventer chain, typ.



Figure 14: Condition of lifting lug, typ.



Figure 15: Condition of over-compression stoppers



Figure 16: Condition of Side plates bottom edge



Figure 17: Condition of flush deck cleats.
This one has a missing Spring Pin



Figure 18: Condition of main hinges, typ.



Figure 19: Condition of coaming, compression bar & Rubber Packing. One can see remaining of neoprene glue on top of rubber packing face.