



Alfons Håkans
Suomenlinna Shipyard
Suomenlinna B10
00190 Helsinki

DOCKING REPORT



SUMMARY

VESSEL NAME	M/S FRAM
OWNER	Alfons Hakans AS Finnish Branch
PLACE OF SURVEY	Suomenlinna shipyard
DATE COMPLETED	10.6.2016
INSPECTION TYPE	5 years, renewal inspection
DOCKING DURATION	6.5.2016 – 10.6.2016
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1 VESSEL OVERVIEW

1.1 GENERAL

NAME	FRAM
CALL SIGN	OITV
IMO NRO	5031925
FLAG	FINNISH
CLASS	DNV-GL
BUILD YEAR	1958
OWNER	ALFONS HÅKANS

1.2 DIMENSIONS

LOA	33,00 m
LPP	30,09 m
BREADTH mld	8,82 m
DRAFT MAX	4,5 m
GRT	270

2 MACHINERY OVERVIEW

2.1 MAIN PROPULSION

MAIN ENGINE(S)	CAT 3606 MCR
TOTAL POWER	2250 bhp

2.2 AUXIALIRIES

DIESEL GENSET	Caterpillar 3304B 91 kW
DIESEL GENSET	Volvo TMD 120AK 191 kW



2.3 STEERING GEAR AND RUDDER

RUDDER	Balanced rudder with one pintle
STEERING GEAR	Hydraulic type

2.4 THRUSTERS

BOW THRUSTER	Ulstein 45 TV 350 bhp
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2.5 HEATING SYSTEMS

HEATING TYPE	Hot water boiler + burner. MGO fuel
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3 INSPECTIONS

3.1 INSPECTED ITEMS

3.1.1 HULL

ITEM	CURRENT STATUS	NOTES	DATE	AUTH
ZINC ANODES CONDITION	good	200 kg zincs added	29.5.2016	TH
SHELL PLATING	good	Visual inspection. Few minor indents at keel strike. No actions needed	10.5.2016	TH
UTM-Inspection	good	See attached UTM-report	9.6.2016	TH
COATING	good	1-2% spot blasted & recoated. UHP-blasting	9.6.2016	TH
TANK VENT AIR PIPES	good	Some repairs done	9.6.2016	TH
DECK	good	No actions needed	9.6.2016	TH

REMARKS

- The hull was washed before inspections. 500 bar.

- The hull had been coated with 2-comp epoxy (Jotamastic) during previous docking 2011. Coating condition was good, only few minor damages.

Attachments

- UTM-report



3.1.2 TANKS

ITEM	CURRENT STATUS	REMARKS	DATE	AUTH
FRESH WATER TANK	good	Tank washed. Steel structures in good condition.	9.6.2016	TH
BLACK WATER TANK	good	Tank washed, good condition	9.6.2016	TH
BUNKER 3 SB	good	Tank washed, good condition	9.6.2016	TH
BUNKER 3 BB	good	Tank washed, good condition	9.6.2016	TH
COOLING TANK OF GEN 1	good	Tank washed, good condition	9.6.2016	TH
SLUDGE TANK	good	Tank washed and inspected. Minor deformation of longitudinal bracket at #16. No actions needed.	9.6.2016	TH
AFT PEAK TANK	good	Tank washed and inspected. some repairs done.	9.6.2016	TH

3.1.3 SEA WATER VALVES

ITEM	CURRENT STATUS	REMARKS	DATE	AUTH
SEACHEST VALVES	good	Overhaul inspection	9.6.2016	TH
OVERBOARD VALVES	good	Overhaul inspection	9.6.2016	TH

REMARKS

- All sea chest and overboard valves disassembled, inspected and overhauled



3.1.4 MAIN PROPULSION GEAR

ITEM	CURRENT STATUS	REMARKS	DATE	AUTH
TAILSHAFT	good	Clearance 0,7 mm. See attachment for details	9.6.2016	TH
TAILSHAFT SEALS	good	Renewed aft and fwd seals	9.6.2016	TH
TAILSHAFT OIL	good	New oil changed	9.6.2016	TH
PROPELLER	good	Visual check. Good cond.	9.6.2016	TH

REMARKS

- Tailshaft clearances measured with hydraulic jack and dial gauge
- Tailshaft aft and forward shaft seals changed (Split type cedervall)

Attachments

- Tailshaft measurement record

3.1.5 RUDDER ASSEMBLY

ITEM	CURRENT STATUS	REMARKS	DATE	AUTH
RUDDER BEARINGS	good	Max clearance 0,75 mm. See attachment for details	9.6.2016	TH
RUDDER	good	Rudder pressure tested. See attachment for details	9.6.2016	TH

REMARKS

- Rudder bearing clearances measured with hydraulic jack and dial gauge

Attachments

- Rudder inspection record



3.1.6 THRUSTERS

ITEM	CURRENT STATUS	REMARKS	DATE	AUTH
BOW THRUSTER	good	Visual inspection, no leaks.	9.6.2016	TH

3.1.7 ANCHOR CHAIN

ITEM	CURRENT STATUS	REMARKS	DATE	AUTH
ANCHOR CHAIN	good	Laid down on the dock bottom and inspected	9.6.2016	TH

3.1.1 ELECTRIC SYSTEMS

ITEM	CURRENT STATUS	REMARKS	DATE	AUTH
INSULATION TESTS	good	See attached report	9.6.2016	TH

3.1.1 STARTING AIR SYSTEM

ITEM	CURRENT STATUS	REMARKS	DATE	AUTH
STARTING AIR RECEIVERS	good	Opened and inspected	9.6.2016	TH

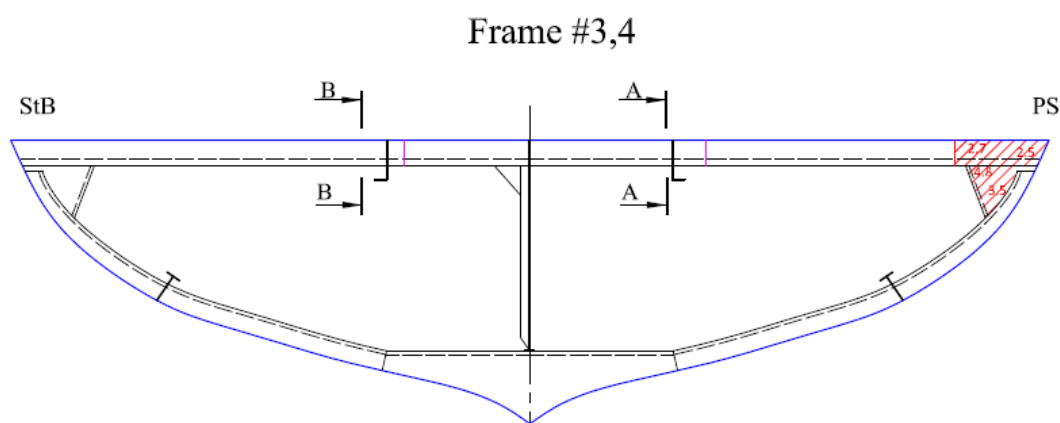


4 REPAIRS

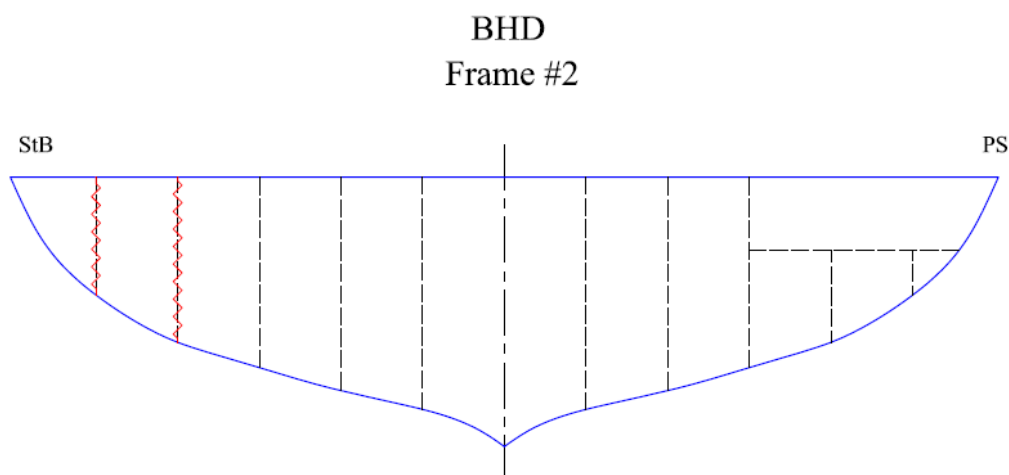
4.1 REPAIRS COMPLETED

4.1.1 HULL REPAIR

Aft peak tank were repaired at frames #2,#3 and #4. See Drawing 1 and 2.



Drawing 1: *Frames 3 and 4 new brackets*



Drawing 2: *Bulkhead at Frame 2 new stiffeners at BB-side*



4.1.2 RAILING REPAIR

The railing had some damages at SB-side, midships. About 7 meters of railing was replaced.

4.1.3 HULL COATING REPAIR

The hull was spot blasted with UHP water (max 3000 bar). Underwater and topside part of the hull were **touch up** painted with 2 x (300 my) Jotamastic 87/90 GF black. The topside was additionally painted with 1 x (150 my) Jotamastic 87 **full coat**.

4.1.4 FRESH WATER TANK'S SUCTION PIPE REPAIR

The fresh water tanks suction pipe was replaced inside the fresh water tank

4.1.5 TOWING WINCH REPAIR

Towing winch break was repaired. New friction liner was installed. The winch housing was UHP blasted and painted. Servo oil changed.

5 CONCLUSION

The tug Fram is in nice condition. The ship has been in good hands keeping it clean and organized. The maintenances are up to date. A very nice tugboat.

Helsinki 10.6.2016



Tero Hänninen

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Suomenlinna repair yard