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सम्मिश्र जांच दल/ Composite Trials Team  
द्वारा नेवी कार्यालय/ C/o Navy Office  
मुख्यालय/ Headquarter  
अन्दमान एवं निकोबार कमान/  
Andaman & Nicobar Command  
पोर्ट ब्लेयर/ Port Blair - 744 102


CTT/300/03/11/TECH

16 Mar 23

The Commander-in-Chief  
{for CTO (Marine)}  
Headquarters  
Andaman & Nicobar Command  
Port Blair – 744 102

**DEHMI OF MAIN ENGINES – IN LCU L-53**

1. Refer to HQANC fax message ANC/42002/EG/11/1 dated 02 Mar 23.
2. DEHMI (Harbour Inspection) of both main engines of IN LCU L-53 were carried out on 07 Mar 23 and a detailed report of the same is placed at **Enclosure**.
3. **Observations**. Following observed during checks: -
  - (a) Torsion meter of Stbd Main Engine non-ops.
  - (b) Shaft RPM of Port Main Engine not available in MCR.
  - (c) Gear box standby lub oil pump not operating in auto mode.
  - (d) SV Mounts not cleaned.
  - (e) Last lub oil cooler cleaning carried out in 2017.
  - (f) Pre-fuel filter of both Main engines sensor fault.
  - (g) Overspeed and lub oil pressure checks not carried out in SDC by SS.
4. **Recommendations**.
  - (a) Liquidate all observations mentioned at Para 3 above prior conducting full power trials of main engines as part of DEHMI.
  - (b) Forward details of all parameters recorded during the full power trials for analysis and recommendations thereof.

  
(एस सी विलियम/ S C William)  
कमांडर/ Commander  
प्रभारी अधिकारी/ Officer-in-Charge

**Encl:** - As above



**Copy to:-**

The Naval Component Commander  
{for SSO (Tech)}  
Headquarters Naval Component  
C/o Navy Office  
Port Blair – 744 102

The Commanding Officer  
/IN LCU L-53  
C/o Navy Office  
Port Blair – 744 102



**DIESEL ENGINE HEALTH MONITORING INSPECTION (DEHMI) – MAIN ENGINES**

**1. Status of Documents and Engine Data.**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Diesel Service Log Book	√	√	
(b)	EMAPS/ Kalamazoo	√	√	
(c)	Running Log Book	√	√	
(d)	Engine Serial No.	527110016	527110035	
(e)	Running Hours since installation	5242.10	5213.15	

**2. External State of Engine.**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Condition of durites/ compensators	Sat	Sat	
(b)	Condition of SV mounts & application of Necol Lacquer	Sat	Sat	Mounts are not cleaned
(c)	System Pipelines well supported and free of leaks	Sat	Sat	
(d)	Filter Drains clear	Sat	Sat	
(e)	Status of bilge platform in the immediate of vicinity of engine	Sat	Sat	

**3. Status of Air Intake.**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Cleanliness of air intake filter	Sat	Sat	
(b)	Perforated sheet for corrosion and intactness of securing (where applicable)	NA	NA	
(c)	Cleanliness of air intake trunking	NA	NA	
(d)	Intake drain clear	NA	NA	
(e)	Air Intake restriction measuring instrument	NA	NA	
(f)	Status of Vacuum Indicators	NA	NA	
(g)	Status of durites/ compensators	NA	NA	



4. **Status of Exhaust System.**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Securing of exhaust trunking supports and load hangers	Sat	Sat	
(b)	Intactness of hot tagging	Sat	Sat	
(c)	Status of corrosion on exhaust funnel/flap/ball valve	Sat	Sat	
(d)	Condition of Exhaust drain pipeline	Sat	Sat	
(e)	Intactness of exhaust trunking	Sat	Sat	
(f)	Exhaust back pressure measuring point accessible	NA	NA	

5. **Starting Air System.**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Condition of durites/ braided hoses	Sat	Sat	
(b)	Status of air starting valve	Sat	Sat	
(c)	Working of auto/ manual drain valve of air compressor	Sat	Sat	

6. **Fuel System.**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Condition of fuel filters	Sat	Sat	
(b)	Status of fuel centrifuge	Ops	Ops	
(c)	Fuel leakages	Sat	Sat	
(d)	Condition of wire-braided hoses	NA	NA	

7. **Lub Oil System.**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Outcome of last lub oil analysis			
	Basic	Sat	Sat	
	Advanced	-	-	Report NA
(b)	Status of lub oil Centrifuge	Ops	Ops	
(c)	Oil leakages	Sat	Sat	
(d)	Date of last cooler cleaning	-	-	Initially cleaned in 2017
(e)	Status of durites/ compensators	NA	NA	
(f)	Lub Oil Test Kit status	Sat	Sat	



8. **Coolant/ Fresh Water System.**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Outcome of last coolant analysis	Sat	Sat	
(b)	Condition of Gauge glass of expansion tank	NA	NA	
(c)	Status of Coolant system	Sat	Sat	
(d)	Date of last cooler cleaning	Sep 22	Sep 22	
(e)	Coolant Test Kit status	Sat	Sat	

9. **Sea Water System**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Status of sea water system	Sat	Sat	
(b)	Condition of durites/ compensator	Sat	Sat	
(c)	Status of suction Strainer	Sat	Sat	
(d)	Status of Zinc plugs	Sat	Sat	

10. **Tappet Clearance Check.**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Intake Valve (limit :0.2)	0.25	0.25	
(b)	Exhaust Valve (limit :0.5)	0.52	0.52	

11. **Instrumentation & Control Check**

<b><u>Ser.</u></b>	<b><u>CHECK</u></b>	<b><u>STBD</u></b>	<b><u>PORT</u></b>	<b><u>REMARKS</u></b>
(a)	Insulation of control system panels	Sat	Sat	
(b)	Status of calibration of all instrumentation	Sat	Sat	
(c)	Status of thermometer/ thermocouples/ pressure sensors	Sat	Sat	
(d)	Thermometer- Total Non-Ops	NA	NA	
(e)	Thermocouples - Total Non-ops	NA	NA	
(f)	Pressure gauge - Total Non-ops	NA	NA	
(g)	Number of faulty Alarms/ Relays	01	01	Pre fuel filter alarm
(h)	Blowby measurement tool/ provision	NA	NA	



## 12. Ventilation System

<u>Ser.</u>	<u>CHECK</u>	<u>STBD</u>	<u>PORT</u>	<u>REMARKS</u>
(a)	Status of compartment Ventilation	Sat	Sat	
(b)	Average compartment Temperature at four corners/ Ambient air temperature	34°C	35°C	
(c)	Status of compartment/ bilge coolers	NA	NA	
(d)	Date of last cooler cleaning			
	(i) Compartment cooler	NA	NA	
	(ii) Bilge cooler	NA	NA	

## 13. Fire Fighting System

<u>CHECK</u>	<u>STBD</u>	<u>PORT</u>	<u>REMARKS</u>
Status of machinery compartment firefighting system	Ops	Ops	CO2 system SAT

## 14. Performance Trials Details

<u>Ser.</u>	<u>CHECK</u>	<u>STBD</u>	<u>PORT</u>	<u>REMARKS</u>
(a)	Max ERPM achieved during CST	1796	1797	
(b)	Max ship's speed achieved during CST	11Kn	11Kn	
(c)	Max ERPM achieved during last	1790	1792	
(d)	Max ships speed achieved during last FPT	12Kn	12Kn	
(e)	Max torsion meter readings	44	44	
(f)	Present status of Torsion meter	Non-ops	Ops	
(g)	Date of last SDC	Jan 23	Jan 23	