

दूरभाष: २३०६/ Tele: 2306

सम्मिश्र जांच दल/ Composite Trials Team
द्वारा नौसेना कार्यालय/ c/o Navy Office
मुख्यालय/ Headquarter
अन्डमान एवं निकोबार कमान/
Andaman & Nicobar Command
पोर्ट ब्लेयर ७४४ १०२/ Port Blair 744 102

CTT/300/04/04/TECH

26 अक्टूबर २३/ Oct 23

प्रधान सेनापति/ The Commander-in-Chief
{कृते कमान तकनीकी अधिकारी (समुद्री विद्युत)/ for CTO(ML)}
मुख्यालय/ Headquarters
अन्डमान एवं निकोबार कमान/ Andaman and Nicobar Command
द्वारा नौसेना कार्यालय/ c/o Navy Office
पोर्ट ब्लेयर ७४४ १०२/ Port Blair 744 102

END OF REFIT TRIAL OF FIREMAIN PUMP NO. 1, 2 AND 3 – INS KARMUK (NR-23)

1. Refer to INS Karmuk Fax 343/3/3 dated 16 Oct 23.
2. End of refit trials of fire main pump no. 1, 2 & 3 were undertaken on 17 Oct 23. The details of trials parameters are placed at **Enclosure**.
3. **Observations.** The salient observations during trials are as follows:-

(a) **Fire Pump No.1.**

- (i) Mounts not preserved.
- (ii) Sea water leakage observed through discharge valve.
- (iii) Mounts painted.
- (iv) Discharge gauge range only up to 10 bar while max system pressure is 12 bar.
- (v) Gauge marking and calibration stickers not in place.
- (vi) Attenuation of 07/08 mounts observed to be **UNSAT.**

(b) **Fire Pump No.2.**

- (i) Suction pressure gauge non ops.
- (ii) Motor earthing strip not held.
- (iii) Attenuation of 04/08 mounts observed to be **UNSAT.**
- (iv) Mounts not preserved.

- (v) Gauge marking and calibration stickers not in place.
- (vi) MDE bearing in yellow zone.

(c) **Fire Pump No.3.**

- (i) Motor junction box not secured.
- (ii) Sea water leakage observed from discharge bellow.
- (iii) Attenuation of 03/08 mounts observed to be **UNSAT.**
- (iv) Mounts not preserved.
- (v) Gauge marking and calibration stickers not in place.

4. **Recommendations.**

- (a) Liquidation of observations mentioned at Para 4 above.
- (b) Reoffer vibration / attenuation checks post torque tightening.
- (c) Trials of Fire-Main system not offered. System checks to be offered as & when ready for trial in all aspects.



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

Encl. As above

Copy to:-

कोमोडोर अधीक्षक/ The Commodore Superintendent
{कृते उप महाप्रबंधक (मरम्मत)/ for DGM (Refit)}
नौसेना पोत मरम्मत यार्ड/ Naval Ship Repair Yard
द्वारा नौसेना कार्यालय/ c/o Navy Office
पोर्ट ब्लेयर ७४४ १०२/ Port Blair 744 102

नौसेना खण्ड सेनापति/ The Naval Component Commander
{कृते वरिष्ठ कर्मचारी अधिकारी (यांत्रिकी)/ for SSO(Tech)}
मुख्यालय नौसेना खण्ड/ Headquarters Naval Component
द्वारा नौसेना कार्यालय/ c/o Navy Office
पोर्ट ब्लेयर ७४४१०२/ Port Blair 744 102

कमान अधिकारी/ The Commanding Officer
भा. नौ. पो. कार्मुक/ INS Karmuk
द्वारा नौसेना कार्यालय/ c/o Navy Office
पोर्ट ब्लेयर ७४४ १०२/ Port Blair 744 102

END OF REFIT TRIAL OF FIREMAIN PUMP NO. 1, 2 AND 3 – INS KARMUK (NR-23)

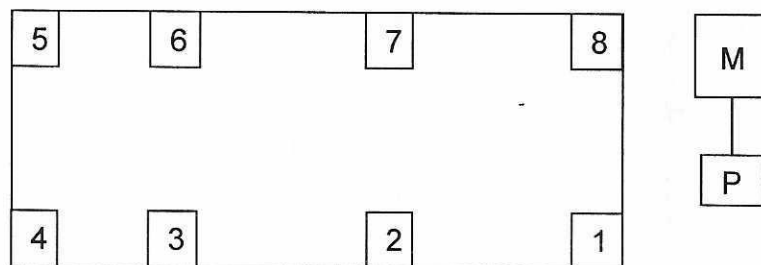
1. Performance Parameters

<u>Ser</u>	<u>Description</u>	<u>F/M Pump No 1</u>	<u>F/M Pump No 2</u>	<u>F/M Pump No 3</u>
(a)	Condition of SV mounts of pumps & motors	07/08 UNSAT	03/08 UNSAT	03/08 UNSAT
(b)	Condition of suction/discharge compensator	SAT	SAT	SAT
(c)	Securing of suction / discharge pipe	SAT	SAT	SAT
(d)	Abnormal noise	SAT	SAT	SAT
(e)	Excessive vibration	Within limit		
(f)	Gland leak (Mechanical seal)	SAT	SAT	SAT
(g)	Pressure fluctuation	NIL	NIL	NIL
(h)	Suction pressure (Kg/cm ²)	0.1	NON OPS	NON OPS
(i)	Discharge pressure (Kg/cm ²)	8.4	10	9.0
(k)	Start/stop from remote	No	No	Yes
(l)	Valve and gauges provided with tallies	No	No	No
(m)	Operating instructions displayed for pump	No	No	No
(n)	Pipe painting as per color standard	No	No	No
(p)	Starting current (Amps)	272	279	282
(q)	Running current (Amps)	62.1	44	66

2. Overall Vibration. (Limit - 10 mm/sec)

<u>Position</u>	<u>Pump No.1</u>		<u>Pump No.2</u>		<u>Pump No.3</u>		<u>Remarks</u>
	<u>A</u>	<u>R</u>	<u>A</u>	<u>R</u>	<u>A</u>	<u>R</u>	
Motor FE	3.96	2.94	4.97	2.11	2.48	8.76	SAT
Motor DE	3.08	2.20	1.81	1.35	0.95	2.68	
Pump Drive End	3.86	2.26	6.44	4.23	9.9	4.24	
Pump Free End	5.16	1.73	3.93	2.10	3.51	2.59	

3. Attenuation checks.



Attenuation Across Mounts

Pump No.1								
Mount No.	1	2	3	4	5	6	7	8
Top	3.95	3.93	2.41	5.12	4.89	3.4	1.91	1.84
Bottom	2.2	2.26	1.2	2.09	6.44	5.50	3.61	2.85
%	44	42	50	59	33	61	89	54
Remarks	UNSAT						SAT	UNSAT
Pump No.2								
Top	3.56	2.31	2.41	3.41	3.07	2.63	1.99	2.28
Bottom	1.12	0.46	0.52	0.63	1.01	0.60	0.70	0.88
%	68	80	78	81	67	77	64	61
Remarks	UNSAT	SAT			UNSAT	SAT	UNSAT	
Pump No.3								
Top	2.61	1.43	2.11	2.77	3.34	1.94	1.72	2.35
Bottom	1.21	0.63	0.40	0.22	0.90	0.26	0.55	0.53
%	53	55	81	92	71	86	62	77
Remarks	UNSAT		SAT				UNSAT	SAT

4. SPM Level.

<u>Description</u>	<u>Pump No. 1</u>	<u>Pump No. 2</u>	<u>Pump No. 3</u>
Motor FE	16/1	10/3	17/1
Motor DE	13/4	21/13	15/4
<u>Remarks</u>	SAT	UNSAT	SAT