

दूरभाष: २३०६/ Tele: 2306

सम्मिश्र जांच दल/ Composite Trial Team
द्वारा नौसेना कार्यालय/ c/o Navy Office
मुख्यालय/ Headquarter
अन्डमान एवं निकोबार कमान/
Andaman & Nicobar Command
पोर्ट ब्लेयर ७४४१०२/ Port Blair 744 102

CTT/300/04/05/TECH

21 नवम्बर २३/ Nov 23

प्रधान सेनापति/ The Commander-in-Chief
{कृते कमान तकनीकी अधिकारी (समुद्री/ समुद्री विद्युत)/ for CTO (M/ 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

STAFF SEA CHECKS STAGE IV – INS KULISH (NR-22)

1. Refer to the following: -

(a) HQANC Fax ANC/42444/DR/5 dated 08 Nov 23.

(b) INS Kulish Fax 344/3/5 dated 07 Nov 23.

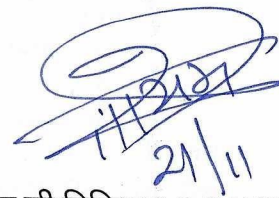
2. **Background.** Trials of pending observations of SSC IV - INS Kulish (NR-22) were undertaken on 16 Nov 23. The trials included Performance, Vibration, Attenuation, SPM and Capacity trials of HPAC 1 & 2 along with liquidation checks of various equipment and systems. Status of observations is tabulated below: -

Ser	Eqpt	Action Point/ Pending Observation	SS Remarks	CTT Remarks
(a)	Main Propulsion	(i) L/O leakage from A3 & A9 rocker arm head covers of SME and A3 and B1 rocker arm head covers of PME.	Completed	Sat
(b)		(ii) Fuel leakage from return line.	Liquidated	Sat
(c)		(iii) Exhaust temp failure continuously activated in SCC panel of SME.	Sensor renewed	Sat
(d)		(iv) Port Gear Box Bearing No.3 temp gauge not working.	Gauge renewed	Sat
(e)		(v) Crankcase pressure gauge not working on BMEs.	Gauge renewed	Sat
(f)	HPAC No.1	Capacity achieved 21.6 m ³ /h against 25 m ³ /h post ABER replacement. SS to identify all system	System pressurized and multiple leakages observed have been	(i) Sub-optimal performance (Capacity achieved 21.16 m ³ /hr against designed

		leakages and re-offer trials to CTT (Pbr)	addressed. Trials by CTT (Pbr) being progressed.	capacity of 25 m ³ /hr). (Detailed report at Enclosure). (ii) Discharge valve wheel not availbe. (iii) Sea water gauge malfunctioning
(g)	HPAC No.2	Capacity achieved 18.5 m ³ /h against 25 m ³ /h post 2400 hrly routines. SS to identify all system leakages and re-offer trials to CTT (Pbr)		(i) Sub-optimal performance (Capacity achieved 21.15 m ³ /hr against designed capacity of 25 m ³ /hr). (Detailed report at Enclosure). (ii) Drain pipe line not secured. (iii) Overboard valve wheel and sea chest wheel not available.

3. **Recommendations.**

- Liquidation of observations / CTT Remarks at para 2 above.
- Capacity trials of both compressors to be re-offered post liquidation of defects.
- Liquidation status of Domestic Machinery Cathelco to be forwarded post replacement.
- Auto Pilot-2 be offered for trials post liquidation of defect.


21/11

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

Encl:- As above

Copy to:-

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 744 002

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

PERFORMANCE TRIALS OF HPAC NO. 1 AND 2 - INS KULISH

1. Trial Inspectors : (a) Sarv Jeet Singh, ERA III
(c) Sanjay Yadav, LME
2. Date and Time : 16 Nov 23 (1400 -1800Hrs)
3. Equipment used for Trials : (a) SPM T-30
(b) Temperature Gun
(c) Camera

4. **Safety device checks.**

Ser	Description	Unit	Design Value	HPAC No.1	HPAC No.2
(a)	1 st Stage Relief valve	Bar	10	10	10
(b)	2 nd Stage Relief valve	Bar	55	55	55
(c)	3 rd Stage Relief valve	Bar	245	245	244
(d)	Cooling water outlet temp.	°C	40	41	40
(e)	Auto Drain Mechanism	-	Ops/ Non Ops	Ops	Ops

5. **Performance trials.**

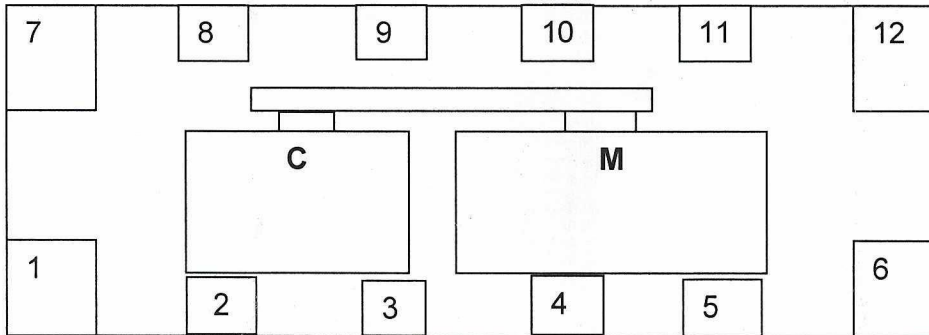
Ser	Description	Unit	HPAC No.1	HPAC No.2
(a)	Compressor starting time	hrs	1511	1524
(b)	Compressor stopping time	hrs	1611	1754
(c)	Time taken	Min	60	150
(d)	Bottle capacity	ltrs	108	258
(e)	Bottle air pressure	Bar	196	205
(f)	Compressor capacity achieved	m ³ /hr	21.16	21.15

6. **Vibration trials.**

Ser	Description	HPAC No.1			Remarks (Limit 15 mm/sec)
		V	A	H	
(a)	MFE	6.5	1.7	5.3	SAT
(b)	MDE	5.2	3.6	2.4	
(c)	CDE	2.6	1.6	1.6	
(d)	CFE	2.6	1.8	2.2	

Ser	Description	HPAC No.2			Remarks (Limit 15 mm/sec)
		V	A	H	
(a)	MFE	7.2	3.5	3.7	SAT
(b)	MDE	6.7	2.7	3.0	
(c)	CDE	5.6	1.5	1.6	
(d)	CFE	2.8	1.7	1.8	

7. Attenuation checks.



Ser	Position	HPAC No.1											
		1	2	3	4	5	6	7	8	9	10	11	12
(a)	Top	3.1	2.4	1.9	2.8	3.2	2.3	3.0	2.9	3.1	2.2	2.4	3.1
(b)	Bottom	0.7	0.5	0.2	0.6	0.4	0.5	0.6	0.5	0.7	0.3	0.4	0.6
(c)	Attenuation % (Limit above 70%)	77	79	89	78	87	78	80	82	77	86	83	81
(d)	Remarks	SAT											

Ser	Position	HPAC No.2											
		1	2	3	4	5	6	7	8	9	10	11	12
(a)	Top	3.4	2.9	3.2	2.8	2.5	3.0	3.2	2.7	2.6	1.9	2.4	3.0
(b)	Bottom	0.8	0.6	0.7	0.3	0.4	0.6	0.5	0.6	0.5	0.2	0.4	0.7
(c)	Attenuation % (Limit above 70%)	77	79	78	89	84	80	84	77	80	89	83	76
(d)	Remarks	SAT											

8. SPM Levels.

Description	HPAC No.1 Dbm/Dbc	HPAC No.2 Dbm/Dbc
Motor FE 6309	10/-3	7/-6
Motor DE 6309	9/-3	11/-2