

दूरभाष: २३०६/ Tele: 2306

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

CTT/300/04/04/TECH

०६ नवम्बर २३/Nov 23

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 ब्लेर ७४४ १०२/ Port Blair 744 102

TRIAL SCHEDULE FOR END OF REFIT TRIALS - INS KARMUK (NR-23)

1. Refer to following:-
 - (a) NSRY (Pbr) Fax PPC/344/KMK/NR-23(i) dated 30 Oct 23.
 - (b) INS Karmuk letter 110/1 dated 17 Oct 23.
2. Draft TSM forwarded by ship and NSRY (Pbr) has been scrutinised and feedback/recommendation for engineering and electrical equipment/systems are placed at **Enclosure I** and **Enclosure II** respectively.
3. Following issues germane:-
 - (a) Timely and duly filled in-house trial performa in all respects to be rendered incorporating following details:-
 - (i) Routine/ Repairs undertaken on equipment.
 - (ii) Major component replaced.
 - (iii) Alignment/ balancing report if undertaken.
 - (iv) Reports of mounts if replaced.
 - (v) Equipment technical specification if ABER replacement/ new fitment.
 - (b) Ships staff, OEM / NSRY Rep to be present till the completion of trials.


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

Encl: - As above

Copy to: -

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

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

Enclosure I to CTT (Pbr) letter
CTT/300/04/04 dated 06 Nov 23

END OF REFIT TRIAL SCHEDULE (ENGINEERING) - INS KARMUK (NR-23)

| Ser | Equipment | Proposed date of trial | | | Remarks |
|-----|----------------------------------|------------------------|--------------------|------------------|--|
| | | By Ship | NSRY (Pbr) | CTT(Pbr) | |
| 1. | Main Engine (Port) | 30 Nov 23 | 27 Nov – 01 Dec 23 | 01 Dec 23 | SDCs |
| 2. | Main Engine (Stbd) | | | | |
| 3. | Gear Box(P) | 10 Nov 23 | - | 13 Nov 23 | |
| 4. | Gear Box(S) | | | | |
| 5. | Steering (Harbour) | 15 Nov 23 | 20-24 Nov 23 | 20 Nov 23 | |
| 6. | CPP Pumps | | | | |
| 7. | Feathering trial | - | - | 18 Aug 23 | Completed |
| 8. | Basin trial | - | 11-15 Dec 23 | 14 Dec 23 | |
| 9. | Main Engines (Port) | | | | |
| 10. | Main Engines (Stbd) | | | | |
| 11. | Gear Box and Shafting (Stbd) | | | | |
| 12. | Gear box and Shafting (Port) | | | | |
| 13. | Stabiliser (Sea) | | | | |
| 14. | Steering gear (Sea) | | | | |
| 15. | Distilling plant (Port) | | | | |
| 16. | Distilling plant (Stbd) | | | | |
| 17. | Distilling plant s/w pump (Port) | | | 16 Nov 23 & | Harbour (Phase-I) trial on 16 Nov 23 |
| 18. | Distilling plant s/w pump (Stbd) | | 13-17 Nov 23 | 12-15 Feb 24 | Sea trial (Phase-II) during FPT on 12-15 Feb 24 |
| 19. | Distilled water pump (Port) | | | | |
| 20. | Distilled water pump (Stbd) | | | | |
| 21. | Reverse Osmosis Plant | | | | |
| 22. | Stabiliser (Harbour) | | 27 Nov – 01 Dec 23 | 29 Nov 23 | |
| 23. | Stabiliser pump (Port) | | | | |

| Ser | Equipment | Proposed date of trial | | | Remarks |
|-----|-----------------------------------|------------------------|--------------|------------------|------------------------------|
| | | By Ship | NSRY (Pbr) | CTT(Pbr) | |
| 24. | Stabiliser pump (Stbd) | | 06-10 Nov 23 | 02 Nov 23 | Completed |
| 25. | Fuel oil transfer pump | | | | |
| 26. | Fuel system | | | | |
| 27. | Fuel oil purifier (Fwd) | | | | |
| 28. | Fuel oil purifier (Aft) | | | | |
| 29. | Lub oil purifier 1 | | 06-10 Nov 23 | 12 Dec 23 | |
| 30. | Lub oil purifier 2 | | | | |
| 31. | Lub oil purifier 3 | | | | |
| 32. | Lub oil system | | | | |
| 33. | Lub oil transfer pump | | | | |
| 34. | Bilge pump 1 | 28 Oct 23 | 06-10 Nov 23 | 10 Nov 23 | |
| 35. | Bilge pump 2 | | | | |
| 36. | Bilge pumping out system | | | | |
| 37. | Oily Water Separator | 30 Oct 23 | 20-24 Nov 23 | 23 Nov 23 | |
| 38. | Standby CPP pump 1 | 28 Oct 23 | 20-24 Nov 23 | 22 Nov 23 | |
| 39. | Standby CPP pump 2 | | | | |
| 40. | CPP topping up pump 1 | | | | |
| 41. | CPP topping up pump 2 | | | | |
| 42. | GBLO pump 1 | 10 Nov 23 | - | 13 Nov 23 | |
| 43. | GBLO pump 2 | | | | |
| 44. | HP Air Compressor 1 | 25 Oct 23 | 06-10 Nov 23 | 07-08 Nov 23 | |
| 45. | HP Air Compressor 2 | | | | |
| 46. | LP Air Compressor | | | | |
| 47. | Diesel Alternator (Port) | - | 06-10 Nov 23 | 06 Nov 23 | |
| 48. | Diesel Alternator (Centre) | - | - | 18 Oct 23 | Load trials completed |
| 49. | Diesel Alternator (Aft) | - | - | 06 Oct 23 | Load trials completed |
| 50. | Diesel Alternator (Stbd) | - | 20-24 Nov 23 | 24 Nov 23 | |
| 51. | EDA | - | 06-10 Nov 23 | 14 Nov 23 | |
| 52. | Steering pump (Port) | 15 Nov 23 | 20-24 Nov 23 | 17 Nov 23 | Harbour trials |
| 53. | Steering pump (Stbd) | | | | |
| 54. | Fresh water pump 1 | - | 06-10 Nov 23 | 10 Nov 23 | |
| 55. | Fresh water pump 2 | | | | |

| Ser | Equipment | Proposed date of trial | | | Remarks |
|-----|---|------------------------|--------------|-----------|--|
| | | By Ship | NSRY (Pbr) | CTT(Pbr) | |
| 56. | Hydrophore pump (Port) | | | | |
| 57. | Hydrophore pump (Stbd) | | | | |
| 58. | Fresh water system | 15 Nov 23 | 06-10 Nov 23 | 10 Nov 23 | |
| 59. | AVCAT Transfer/Circulation pump 1 | | | | |
| 60. | AVCAT Transfer/Circulation pump 2 | 15 Nov 23 | - | 30 Nov 23 | |
| 61. | AVCAT System | | | | |
| 62. | A/C plant (Port) | | | | |
| 63. | A/C plant (Stbd) | | | 08 Nov 23 | |
| 64. | A/C plant Fwd | | | | |
| 65. | A/C SW pump (Port) | 15 Nov 23 | 06-10 Nov 23 | | |
| 66. | A/C SW pump (Stbd) | | | | |
| 67. | A/C CW pump (Port) | | | 09 Nov 23 | |
| 68. | A/C CW pump (Stbd) | | | | |
| 69. | Ref Plant 1 | | | | |
| 70. | Ref Plant 2 | - | 13-17 Nov 23 | 15 Nov 23 | |
| 71. | Chilled water system | | | | |
| 72. | HEs and ATUs (04) | 15 Nov 23 | 06-10 Nov 23 | 08 Nov 23 | |
| 73. | Machinery ventilation system | 15 Nov 23 | - | 28 Nov 23 | |
| 74. | Fire pump 1 | | | | |
| 75. | Fire pump 2 | | | | |
| 76. | Fire pump 3 | | - | 17 Oct 23 | Completed |
| 77. | Fire main system | 30 Nov 23 | - | 05 Dec 23 | |
| 78. | FITs | 30 Oct 23 | - | 03 Nov 23 | |
| 79. | Halon system | 30 Oct 23 | - | 04 Nov 23 | Completed |
| 80. | Securing of bilge plates in all machineries compartment | 31 Oct 23 | - | - | To be offered as part of respective equipment/system trials. |
| 81. | Boats/RHIBs | 15 Nov 23 | - | 21 Nov 23 | |
| 82. | Ballasting and de-ballasting system | 30 Nov 23 | 20-24 Nov 23 | 08 Dec 23 | |
| 83. | Rod gearing | 18 Oct 23 | - | 06 Dec 23 | |

| <u>Ser</u> | <u>Equipment</u> | <u>Proposed date of trial</u> | | | <u>Remarks</u> |
|------------|---------------------------------------|-------------------------------|-------------------|-----------------|--------------------------------------|
| | | <u>By Ship</u> | <u>NSRY (Pbr)</u> | <u>CTT(Pbr)</u> | |
| 84. | Gear box clutch control pump 1 & 2 | - | - | - | |
| 85. | DD compressor (01) | | | | |
| 86. | Compressed air system | | | | Equipment/system not proposed in TSM |
| 87. | Cathelco system | | | | |

Enclosure II to CTT (Pbr) letter
CTT/300/04/04 dated 06 Nov 23

POST REFIT TRIAL SCHEDULE (ELECTRICAL) - INS KARMUK NR-23

| <u>Ser</u> | <u>Equipment</u> | <u>Proposed date of trial</u> | | | <u>Remarks</u> | |
|------------|--|-------------------------------|--------------------|-----------------|---|--|
| | | <u>By Ship</u> | <u>NSRY (Pbr)</u> | <u>CTT(Pbr)</u> | | |
| 1. | Lighting in compartments / machinery spaces (including emergency lights). Luminosity checks | 30 Oct 23 | 27 Nov – 01 Dec 23 | 27 Nov 23 | | |
| 2. | <u>Trials of following motors:-</u> (i) Anchor and mooring capstan motors. (ii) Boat davit motors. (iii) Bilge and ballast pump motors (iv) CPP (P & S) | 30 Oct 23 | 27 Nov – 01 Dec 23 | 28 Nov 23 | (Rating/ Rated SC/Rated RC&DE/NDE bearing number) to be included as part of in-house report by SS. | |
| 3. | Fire Alarm System (Addressable/ Non-Addressable) | 30 Oct 23 | 06 – 10 Nov 23 | 06-08 Nov 23 | Details of sensor type, quantity, compartment name, layout diagram to be included as part of in-house report by SS. | |
| 4. | Flood Alarm System (Addressable/ Non-Addressable) | 30 Oct 23 | 06 – 10 Nov 23 | | | |
| 5. | Battery Banks & System UPS | 21 Nov 23 | 15 Nov 23 | 15 Nov 23 | List of ACOS/HCOS/Batteries/UPS (Rating and Location) and system to be included as part of in-house report by SS. | |
| 6. | Auto Changeover Switches | | 23 Nov 23 | 23 - 24 Nov 23 | | |
| 7. | Hand Changeover Switches | | | | | |
| 8. | Main/ Auxiliary switchboards and associated switchgear | 10 Nov 23 | 06 – 10 Nov 23 | 08 Nov 23 | List of features/functions in APMS to be included as part of in-house report by SS. | |
| 9. | Automatic Power Management System (APMS) | | 20-24 Nov 23 | 21 Nov 23 | | |

| Ser | Equipment | Proposed date of trial | | | Remarks |
|-----|---|------------------------|--------------------|--------------------|---|
| | | By Ship | NSRY (Pbr) | CTT(Pbr) | |
| 10. | Emergency power supply arrangement | 20 Nov 23 | 06 – 10 Nov 23 | 09 - 10 Nov 23 | Details of location and quantity of supply boxes and cables and layout diagram to be included as part of in-house report by SS. |
| 11. | Convertors and rectifiers | 10 Nov 23 | 06 – 10 Nov 23 | 11 Nov 23 | Convertors/ Rectifiers description (make, rating) and location to be included as part of in-house report by SS. |
| 12. | NLCP/ Nav lights | 30 Oct 23 | 20 - 24 Nov 23 | 22 Nov 23 | List of navigation lights to be included as part of in-house report by SS. |
| 13. | Siren | | | | - |
| 14. | Window Wipers | 10 Nov 23 | 27 Nov – 01 Dec 23 | 27 Nov – 01 Dec 23 | (Rating/ Rated SC/Rated RC&DE/NDE bearing number) to be included as part of in-house report by SS. |
| | ventilation motors starter panels. | 13 Nov 23 | 27 Nov – 01 Dec 23 | | |
| 15. | Motors and Starter panels of Steering gear/ Auto pilot, Stabilisers | 15 Nov 23 | 27 Nov – 01 Dec 23 | 05 Dec 23 | (Rating/ Rated SC/Rated RC&DE/NDE bearing number) to be included as part of in-house report by SS. |
| 16. | Motor and Starter panels of Air-conditioning equipment | 20 Nov 23 | 06 – 10 Nov 23 | 07 Nov 23 | (Rating/ Rated SC/Rated RC&DE/NDE bearing number to be included as part of in-house report by SS. |
| 17. | Domestic Machinery/ Equipment | 10 -13 Nov 23 | 13 – 17 Nov 23 | 15 Nov 23 | (Rating/ Rated SC/Rated RC&DE/NDE bearing number) to be included as part of in-house report by SS. |
| 18. | DBs, Fuse panels | | 06 – 10 Nov 23 | | |
| 19. | Engine room auxiliary motors and starter panels | | 13 – 17 Nov 23 | 16 - 17 Nov23 | |

| Ser | Equipment | Proposed date of trial | | | Remarks |
|-----|---|------------------------|--------------------|----------------|--|
| | | By Ship | NSRY (Pbr) | CTT(Pbr) | |
| 20. | <u>Trials of following motors:-</u> (i). Fireman motors. (ii). HPAC motors. (iii). Salvage pump motors | 24 Nov 23 | 20 - 24 Nov 23 | 20 - 21 Nov 23 | (Rating/ Rated SC/Rated RC&DE/NDE bearing number) to be included as part of in-house report by SS. |
| 21. | Main Broadcast/ SRE & Intercom System | | | | |
| 22. | Auto Telephone Exchange | | | | |
| 23. | Interphone | 20 Nov 23 | 20 - 24 Nov 23 | 23 - 24 Nov 23 | List of microphone station/announcement points indicating quantity, location and loop diagram to be included as part of in-house report by SS. |
| 24. | CCTV | 24 Nov 23 | 27 Nov – 01 Dec 23 | 06 - 07 Dec 23 | List of cameras indicating location and quantity to be included as part of in-house report by SS. |
| 25. | Sound Power Telephone | | | | List of SPTS and location to be included as part of in-house report by SS. |