

1 Introduction

1.1 General

This is the specification for the 2022 Refit of TV Tristram.

TV Tristram, formerly RFA Sir Tristram, is a static training vessel and former Landing Ship Logistics (LSL) of the Round Table Class. RFA Sir Tristram ceased service in 2005 and was converted to TV Tristram (TVT), arriving at Portland Harbour in 2007.

1.2 Vessel Details

The following vessel details are provided for information (when in service as Sir Tristram).

1.2.1 Ship : SIR TRISTRAM

- Official No. : 334639
- Lloyds No. : 6704373 (Class Suspended)
- Port of Registry : LONDON
- Ship type : RORO (SPECIAL SERVICE)

1.2.2 Tonnage

- Gross : 6824T
- Net : 2047T
- Dead-weight : 2443T

1.2.3 Classification

- Chain cable grade : U2
- Chain cable diameter : 50mm diameter
- Chain cable length : 495 metres

1.2.4 Hull

- Date of build : 1967
- Main builder : HAWTHORN LESLIE. HEBBURN
- Yard No. : 761
- Length overall : 134.85 (158m BOW AND STERN RAMPS OPEN)
- Breadth extreme : 17.94
- Draught maximum : 3.979
- Length BP : 120.48
- Depth moulded : 7.93

1.2.5 Machinery

Note: All machinery is now redundant on board.

- Engine type : 2 X Mirrlees National ALSSDM10 Oil Engines (direct drive)
- Boilers : 2 X Clayton Coiled Vapour Model E100 W working pressure & function 8 bar domestic
- Diesel generators : 4 X Allen (NEI APE) BCS 121 X Allen BCS 12 DX (400kw each)
- NIL
- Thrusters : 1 X Voith Schneider Thrust Unit Model 16E (SER 2-41-0125)

1.2.6 Rudder & Steering gear

- Rudder : 2 X Suspended Spade Rudders
- Steering gear : Hasties 2 X Model 4.5 Steering Units on 4 ram system

1.2.7 Propeller and shafting

- Propeller : 2 X 4 Blade 2.54m dia X 2.2m pitch
- Shafting : 2 X Face Coupled 7.0m length X 0.33m dia each fitted with 2 in no bronze liners
- Tailshaft Bearings: 1 X Tufnol Sterntube Bearing and 1 x Tufnol A Frame Bearing (each shaft)
- Stern gland : 2 X Soft Packed Glands

1.2.8 SHIP'S DRAWINGS 2015

- ANNEX A - Quest Marine Drawings - Ship's Layout 2015

2 Keywords and Definitions

2.1 Definitions

2.1.1 The following list is not exhaustive and should not detract from any of the definitions contained within the Contract Terms and Conditions covering this refit. Wherever these words and phrases are used throughout this specification, the following definition, including technical details and procedures are to be inferred and acted upon without direct instruction unless the individual specification directs differently.

ADDITIONAL WORK That further work of a type that can normally be expected to be sought during an upkeep period, which is not definable when the original work specification is derived and is not EXTRA or EMERGENT work. ADDITIONAL WORK should only be considered if, not undertaken, it would result in an OPDEF or affect personnel or equipment safety. ADDITIONAL WORK may be included in the Upkeep Period Specification at the discretion of the Authority's Authorised Representative but no ADDITIONAL work is to be carried out without their authorisation.

ALLOW FOR Describes work that may be encountered by the Contractor, which is to be assumed for costing purposes. The work will normally be drawn upon after a test, inspection or survey. The Contractor is to include the cost of ALLOW FOR's in the tender. The Authority's Authorised Representative's approval is required to take up any ALLOW FOR.
e.g. ALLOW FOR the renewal of four in number pistons.

ALLOW TO Describes work that is to be done. ALLOW TO's are discrete procedures or stages of work which form an integral part of specified work. The Contractor is to include and carry out without further reference, the work and is to fully include the price of ALLOW TO's in the tender.
e.g. ALLOW TO remove/replace ten in number bulkhead panels.

ADJUST Compare operating parameters, performance or characteristics of an equipment or system with specified standards and make changes to variable features or controls so that the parameters, performance or characteristics are within the specified range of values. This will include multiple measurements and re-measurements and will include opening and closing cabinets and enclosures for access. These costs are to be fully incorporated.

AS REQUIRED Specify risk allowances, the cost of which will be required as extra.

ASSEMBLY Build an equipment or system from components or sub-assemblies into fully functional equipment in accordance with instructions and best practice. Include costs of calibration, adjusting, lining up, etc, where appropriate to ensure functionality.

CALIBRATION The process of adjustment, comparison with one accepted standard or known value, and re-adjustment until acceptable and agreed performance standards are achieved. Costs are to include removal/replacement, system isolation, transport, opening/closing enclosures and disassembly/assembly as appropriate to the instrument or system concerned. Also, to be included is the cost of labels showing the calibration date and calibration period.

CLEAN With reference to and in context with the individual specification as appropriate, remove all foreign matter and arisings to an appropriate standard for the process, equipment under consideration, and without damage to surrounding areas, equipment or surfaces. Costs are to include collection,

storage and disposal of all fluids and arisings.

- CONSUMABLE PARTS** e.g., seals, joints, bushes, bearings, brushes, springs, contacts, fasteners, nuts and bolts, etc, which, supplied singly or in kits, it is necessary or normal practice to replace on each occasion an overhaul or service procedure of the type specified is carried out.
- DISMANTLE** Break an equipment or assembly down to component parts commensurate with completing an overhaul, service procedure, adjustment, calibration or repair as specified.
- EMERGENT WORK** Work arising during the project as a direct consequence of survey, inspection, maintenance and other tasks in the Upkeep Period Specification, including any anticipated or ALLOW FOR work in the Specification. EMERGENT WORK may be included in the Upkeep Period Specification at the discretion of the Authority's Authorised Representative but no EMERGENT WORK is to be carried out without the Authority's authorisation.
- EXTRA WORK** Work not encompassed by the original contract but required by the MOD, e.g. introduction of Alterations and Additions (A&A's) and Modifications, change to specified standards, or change of requirement. EXTRA WORK may be included in the contract at the discretion of the Authority's Authorised Representative, but no extra work is to be carried out without their authorisation.
- FLUSH** Prime and cycle the normal working fluid or other acceptable cleaning medium through an equipment or system, according to a pre-planned scheme to prove it is unobstructed and remove contamination until a measured cleanliness standard is achieved which is appropriate to the equipment/system under consideration and provide certification. Include the cost of supply, storage and disposal of all fluids and arisings. Include the cost of supply, operation and maintenance of plant.
- FUNCTIONAL TEST** Where an equipment or system is operated over the range of its normal parameters according to a pre-planned trial procedure or as specified. Include the costs of adjustment and calibration when appropriate to the equipment/system under consideration. Certification is to be provided for the outcome.
- INSPECT** Visually and dimensionally examine, to a standard accuracy appropriate to the system/equipment under consideration, items or components for defects, provide a written report and recommendations for action.
- INSTALL** Unpack, transport, secure in place, provide new consumables, re- preserve coatings, align, connect to interfaces, insulation and earth bonding/testing, etc, items to the positions required. Include the costs for adjustment, calibration and functional testing of the system/equipment as appropriate and provide test documentation.
- ISOLATE** Removal from service to make safe for the purpose of carrying out work. LOTO procedures designed to ensure isolation are to be employed.
- LOAD TEST** Test a system or equipment with a "test load" in accordance with recognised procedures. Provide certification, register in shipboard documentation, and supply and fit tallies as required.
- LOCK OFF TAG OUT** The specified/agreed procedure for identifying and recording the isolation of systems, or parts of systems, to allow work to proceed safely.