DEFENCE MARINE SERVICES – NEXT GENERATION

STATEMENT OF REQUIREMENT

DEFENCE MARINE SERVICES – INSHORE SUPPORT TO MILITARY TRAINING, TESTING AND EVALUATION

SCHEDULE 2

CONTENTS

Page

SERVICE DELIVERY

PART 1

INTRODUCTION

PURPOSE

1. The purpose of this Statement of Requirement (SOR) is to define the Authority's requirements for Services. The service delivery will be monitored, reported and managed in accordance with the Payment, Pricing and Incentivisation Mechanism (PPIM) (Schedule 4).

BACKGROUND

2. 'Defence Marine Services – Next Generation' is a Navy Command Category A programme, consisting of four distinct procurements:

   - Contract 1: Defence Marine Services – Support to In-Port Marine Services and Delivery of a Vessel Replacement Programme (Service Delivery Areas 1 to 3);

   - Contract 2: Defence Marine Services – Inshore Support to Military Training, Testing and Evaluation (Service Delivery Areas 4, 5 and 7);

   - Contract 3: Defence Marine Services – Supply and Maintenance of Authority Moorings, Markers and Targets (Service Delivery Area 8); and

   - Contract 4: Defence Marine Services – Offshore Support to Military Training and Exercises (Service Delivery Area 6).

INSHORE SUPPORT TO MILITARY TRAINING, TESTING AND EVALUATION REQUIREMENT – OVERVIEW OF THIS SOR

3. For this Contract 2 (Inshore Support to Military Training, Testing and Evaluation), the Contractor shall provide the Services in Service Delivery Areas (SDA) 4, 5 and 7 (set out below). For the sake of clarity, SDAs 1 to 3 are 'In Port' marine service requirements, SDA 6 is 'Support to Military Training and Exercises', and SDA 8 is 'Support to MOD Moorings and Navigational Markers and Targets', all of which are delivered under separate contracts.

   The SDAs for this Contract are:

   - **SDA 4 -** Support to trials sponsored by the Authority, primarily at the British Underwater Test And Evaluation Centre (BUTEC) range, but also in specified 'off range' locations;

   - **SDA 5 -** Clearance diving training for Royal Navy divers and general air diving training for Royal Engineers off the North West coast of Scotland; and

- **SDA 7** - Range Safety and Aircrew Training (RSACT) and support to Operational Sea Training (OST).

VESSEL ADMINISTRATION, VESSEL REQUIREMENTS & SUBSTITUTION

4. All Vessels shall be UK flagged and certified in accordance with the following table:

SDA	Vessel Class	Flag Classification	Is there a requirement to maintain Vessel to Class
4	Tugs / Tenders	Class IX	Yes
4	Trials Support Vessel and Workboat	Class VIII(A) (Cat 2/3)	Yes
5	Dive Support Tenders	Class IX	Yes
7	Range Safety/Sea Training Workboats	Class VIII(A)(Cat 2)	Yes
7	Dual certified High Speed Passenger Craft	EU Class B	Yes

Table 1.0 (UK Flag and Class Certification)

5. For Vessels transferred from the Authority to the Contractor under the Contract, extant Vessel Safety and Environmental Cases shall be the basis of safety cases in the Contract.

6. The Contractor shall obtain prior written approval from the Authority before using any Vessel that is not identified in the Service Delivery Plan.

7. Vessel(s) assigned by the Contractor to deliver a Task shall have the specific attributes described under such Task in the relevant Statement of Requirement Table (SOR Table).

CODES OF PRACTICE AND AFFECTED SERVICES

8. Codes of Practice (CoP) are instructions presented in the manner of a formal agreement between the Authority, the Entitled Customer and the Contractor. They provide a means of governing the provision of marine support to the Tasks where there is potential for command and control issues between the various parties. They also provide for onboard protocols and guidance to enable the crew and embarked personnel on the Vessels allocated to the programmed Tasks to identify areas of responsibility and control during the training (Tasks). In so doing, they aim to emphasise the delineation between activities undertaken in support of the Task and those undertaken as part of the general operation of the Vessel.

9. Where established, CoPs will form part of the document suite used to govern the execution of the Authority training Tasks. The guidance and instruction contained within them do not override or prejudice any of the Contract terms and conditions.

10. The commercially operated status of the Vessels used in support of the Contract, requires that the Contractor complies with all applicable UK, European and international maritime legislation in their management and operation. The Authority is required as far as possible, to ensure that such provision is in compliance with UK, European and International Maritime Legislation. Where there is no relevant legislation in place, or the application of civil maritime legislation is not possible to specific training Tasks, then Authority regulations and standards are to be applied in order to manage risks responsibly and to optimise the balance between risk and benefit.

11. Except where the service (Task) is designated as an Affected Service, Vessel activity is within the scope of the Merchant Shipping Legislation, and full compliance with those rules will be the responsibility of the Master. The following Tasks are Affected Services and will be specifically identified as such within the Codes of Practice.

Training Task	**Activity Triggering the Affected Service Categorisation**
Marine Target Towing for Maritime Sniper Training and Fast Jet Training	The Authority is considered to be far better placed to determine the level of risk associated with these Tasks and thus regulate them, than the MCA.
FOST Swarm and FIAC Attacks	Contravention of Rule of Road between Vessels participating in the training Task.
FOST Boarding Exercises	Boarding exercises whilst under way, making way are undertaken as a matter of course rather than as an exception.
Sea Survival Drills for Tri-Service Aircrew	'Passengers' jumping overboard. Dragging 'passengers' through the water. Departing from and returning to port with different numbers of 'passengers'.

12. The management and regulatory control of these activities shall be in accordance with the MOU between the MOD and the MCA.

13. No Task involving Affected Services, or in any way outside the scope of normal merchant marine activity, shall be undertaken without a fully developed risk assessment, and supporting procedures for undertaking the Task and the approval of the Authority.

14. Many of the Tasks covered by this contract involve a degree of risk to Authority Personnel, the Contractor's crews and the general public. Safety, and in particular the management of risk, shall be paramount, to ensure the safety of all personnel engaged in any of the Tasks covered by this Contract. The Contractor is to ensure that a full safety assessment, commensurate with the risks involved, is undertaken and documented for each new Task and kept under review thereafter.

15. In general, the Contractor and the Entitled Customer will ensure the provision of appropriate instructions for the Tasks that will encompass and amplify much of the content in the Tasking Guidelines in Part 6 of this SoR.. Where such instructions and procedures exist, they will take precedence over those Tasking Guidelines.

16. Where such instructions and procedures do not exist the Tasking Guidelines in Part 6 shall provide the basis for the conduct of training Tasks, or the basis on which the Vessel's Master should seek further amplification of the role he is required to undertake in support of the Task. The Contractor shall immediately bring to the attention of the Authority any conflict between the Tasking Guidelines and any instructions, procedures or work instructions provided by the Contractor or End User, or any absence or insufficiency of guidelines or instructions for the Task.

SDA 4 – SUPPORT TO BUTEC

INTRODUCTION

1. This section defines the Authority's requirement for SDA 4 which relates to the provision of Services to the BUTEC.

MAIN TRIALS AREA

2. The BUTEC main trials area lies in the Inner Sound midway between the Applecross coast and the eastern coastlines of the Islands of Raasay and Rona, as indicated on Admiralty Charts 2479 and 2480. The BUTEC land and sea areas, including the inner and outer sea areas are the subject of a byelaw (Statutory Instrument 2016, No. 654).

3. The BUTEC comprises a Range Terminal Building at Applecross, a Shore Support Base (SSB) located at Kyle of Lochalsh and navigation marks situated on the Island of Raasay. The area of operations is normally confined to the Raasay/Rona South waterspace and in the immediate vicinity of the SSB at Kyle of Lochalsh. The protected land base areas and protected outer and inner sea area are detailed (maps, charts and coordinates) in the Byelaw.

OFF RANGE TRIALS

4. Off range trials are conducted in exercise areas off the North West coast of Scotland with an occasional requirement for trials beyond this. The area of operation of these trials shall be confined to UK continental waters and within 60 miles of a Safe Haven. The Remotely Operated Vehicle (ROV) host craft may have to deploy elsewhere in the UK in response to a requirement for its specialist capability.

WORKING DAYS AT BUTEC

5. There are different definitions of working days which apply specifically to SDA 4, namely the Business Day (BUTEC) - Standard Day and Business Day (BUTEC) - Extended Day.

BUTEC REPRESENTATIVE

6. For the period of the T3E, the BUTEC range is operated by QinetiQ staff who are responsible for the day to day running of the BUTEC facility (**BUTEC Representative**). The Contractor will be notified by the Authority of any change in the BUTEC Representative.

PROGRAMMING

7. The Contractor shall comply with the programming requirements for the SDA 4 which shall, except in relation to short notice changes, be provided by the Authority with one week's notice. The Contractor will be provided with the BUTEC Trials and Range Maintenance Plan which provides a rolling, three-month provisional plan based on the likely employment of the range Vessels within the BUTEC planning/operating cycle.

The BUTEC Trials and Range Maintenance Plan shall be made available to the Contractor with the aim of providing advanced warning of the requirement to work a Business Day (BUTEC) - Extended Day and/or a modified Business Day (BUTEC) - Standard Day during busy periods on the range. However, the programming requirements for the SDA 4 are not known until one week before such Tasks are due to take place. Accordingly, the BUTEC Trials and Range Maintenance Plan provide provisional guidance on programming only.

SAFETY MANAGEMENT SYSTEM AND HEALTH AND SAFETY

8. The Contractor shall comply with the Safety Management System and health and safety policies and proecedures that apply at BUTEC. The Contractor shall send a representative to the BUTEC site Health and Safety Committee meetings. The Contractor shall notify the Authority if it considers that there are any discrepancies between the site Safety Management System and other legislation applicable to the Contractor. The Contractor shall ensure that all Tasks are undertaken in accordance with the relevant Safety and Environmental Case. The Contractor shall participate and contribute to reviews of relevant Safety and Environmental Cases that are linked to their Vessels and/or personnel.

BUTEC TASKING

9. The Contractor shall attend the weekly and/or Task specific planning meetings requiring coordination with the relevant Tasks. Due to the unpredictable and constantly changing requirements of the Authority, Entitled Customers and range maintenance, there will inevitably be a significant number of short notice Tasks, which are impracticable to programme in advance. Short notice Tasks will be instructed by delegated officers representing the Authority (usually MSS OOP), the Authority Representative or a delegated officer, and will be subject to minimum notice periods as follows:

    a. for short notice Tasks required on a Tuesday, Wednesday, Thursday or Friday, notice will be given no later than 1200 on the previous day;

    b. for short notice Tasks required on a Saturday, Sunday or Monday, notice will be given no later than 1600 on the preceding Thursday; and

    c. for critical short notice Tasks, the Task will need to be commenced within 2 hours of notification by the Authority.

MEETING ATTENDANCE BY THE CONTRACTOR

10. The Contractor shall meet with the BUTEC Representative monthly, and informally on a daily basis (subject to range activity) to agree the programmes as set out in Paragraph 7.

11. The Contractor shall attend QinetiQ's health and safety and pre-trial planning meetings, as required.

PASSENGER TRANSPORTATION

12. The Contractor shall provide a safe system to transfer passengers in accordance with the Safety Management System and Marine Guidance Note 432. The Contractor shall ensure that all passenger transfers to ships or submarines both static and dynamic (underway, making way) require the use of specialised transfer systems which shall be provided by the Contractor. Underway / making way passenger transfers are an Affected Service.

COMMUNICATION BETWEEN THE VESSELS AND RANGE CONTROL

13. The Contractor shall provide a facility on all service assets to allow robust two-way communication between the Vessels and Range Control using both VHF and UHF; these communications are to be available whenever services are being delivered.

LIMITATIONS AND CONSTRAINTS

14. The Masters of Vessels allocated to support BUTEC activities shall work under the direction of the Authority Representative.

15. Traditional anchoring arrangements are unacceptable within the byelaw area due to the possibility of damage to in-water range equipment.

16. All trials equipment, including the ROV and its associated equipment, is supplied by the Authority or QinetiQ.

17. Royal Navy Vessel movements at Loch Ewe are controlled by the Duty Fleet Controller at Fleet Operations, Northwood. Vessel towage at Loch Ewe is advised by QHM Clyde.

SOR TABLE - LINE ITEM COLUMN HEADINGS (ALL SERVICE DELIVERY AREAS)

18. Each SDA SOR Table contains eight columns. The information contained within each column is:

Column Heading	Description
1. Contract	Contract 2 Defence Marine Services – Inshore Support to Military Training, Testing and Evaluation
2. Service Delivery Area (SDA)	**SDA 4 -** Support to trials sponsored by the Authority, primarily at the BUTEC range, but also in specified 'off range' locations. **SDA 5 -** Clearance diving training for Royal Navy divers and general air diving training for Royal Engineers off the North West coast of Scotland; and **SDA 7** - RSACT and support to OST.
3. Task Number	A unique reference number for each Line Item.
4. Task – Line Item Description	The description of the service output required, which shall include: • Vessel and service capability requirements; • operational parameters (Sea State); • programming information; • geographical areas; • chart numbers and other key references; and • concurrency requirements.
5. Quantity	Maximum: Maximum quantity of support required per annum in each Line Item based on best known future activity. It is expressed in days, (and nights where required) or numbers of Tasks per annum. The duration of each Task (the Task window) shall also be given where the duration of the support requirement is less than 1 day. Where relevant to each Line Item requirement, weekdays and weekends will be specified and, length of day. Core (SDA 4 and SDA 5) or Baseline (SDA 7): The quantity of support estimated by the Authority as most likely to be required in any given Contract Year, to assist in planning.

6. Vessels / Assets	Authority Vessels and/or Assets identified as suitable for the identified Task. The Contractor may propose the use of alternative Vessels for the identified Task, and subject to obtaining the Authority's prior approval, these may be used by the Contractor. The Vessels in the SOR Table that are referred to by their name represent the Vessels currently used on the existing contract.
7. Remarks	Any pertinent remarks.

Table 1.1 - SOR Table - Line Item column headings

STATEMENT OF REQUIREMENT TABLE

Contract	SDA	Task Number	Task - Line Item Description	Quantity	Vessels	Remarks
2	4	1	**Heavyweight Weapon Recovery** Tasking in support of submarine torpedo/crew certification requiring recovery of heavyweight torpedoes. Normal recovery will be required if the heavyweight torpedoes are buoyant which will require 24 days of support per year (surge 6 submarines maximum, 4x days worst case per submarine normal recovery). 24 days of additional support will be required if the heavyweight torpedoes have sunk (based on 25% requiring bottom recovery of 6 weapons per year - 4 days worst case for each weapon). The service will require the embarkation of up to 19 third party trials crew and associated trials equipment to recover heavyweight weapons from either the surface or bottom with the support of ROV (Quantum) . The service shall be delivered up to and including Sea State 4. The Vessel shall have capacity to store 7 heavyweight recovered weapons. The heavyweight weapon recovery service asset shall be capable of making passage to other sea areas in conditions up to and including Sea State 6.	Core - 30 Business Day (BUTEC) - Extended Day	SD Warden	Maximum - 48 Business Day (BUTEC) - Extended Day. Min notice provided is 6 hours (36 hours for unprogrammed Tasks on the weekend)
2	4	2	**Target Launch and Recovery** A service to allow up to 10 third party trials crew and associated trials equipment, to launch and recover targets (subsurface, surface and static targets to/from the surface in accordance with Line Items 2.4.2.1, 2.4.2.2 and 2.4.2.3). The service shall be provided in up to and including Sea State 4. The service asset shall have capacity to securely store the targets, launch and recovery equipment, including RIB, and Control Cabin ISO container on deck. The Contractor shall provide 2 linesmen and a crane driver (from the crew) as part of the service as defined in the launch procedures.	Core- 60 Business Day (BUTEC) - Extended Day (comprised of Line Items 2.4.2.1, 2.4.2.2 and 2.4.2.3 below)	Raasay Kyle of Lochalsh (safety) Mars (safety)	2 Vessels will normally be required to provide Range Safety in addition to the target launch platform (see Task 2.4.5) Maximum - 126 Business Day (BUTEC) - Standard Day Min notice provided is 6 hours (36 hours for unprogrammed Tasks on the weekend)
2	4	2.1	**Sub surface targets** The launch and recovery of sub surface targets which are supplied by the Authority or Range Administration Unit, including the Autonomous Mobile Acoustic Submarine Simulator (AMASS) and other Underwater Autonomous Vehicles (UAV).	Core - 20 Business Day (BUTEC) - Extended Day	Raasay Kyle of Lochalsh (safety) Mars (safety)	Max - 40 Business Day (BUTEC) - Extended Day Min notice provided is 6 hours (36 hours for unprogrammed Tasks on the weekend)

Contract	SDA	Task Number	Task - Line Item Description	Quantity	Vessels	Remarks
2	4	2.2	**Surface Target** The Contractor shall provide a service asset, as a surface target during a trial involving the discharge of a weapon. The service asset acting as the surface target requires approval from the Authority before deployment of the weapon. When no weapons are involved no Authority approval is required. When the service asset is acting as the target it shall be capable of maintaining course and speed as reasonably directed by Range Control / Range Administration Unit.	Core - 23 Business Day (BUTEC) - Extended Day	Raasay Kyle of Lochalsh (safety) Mars (safety)	This is an Affected Service Maximum - 48 days (ED) Min notice provided is 6 hours (36 hours for unprogrammed Tasks on the weekend)
2	4	2.3	**Static Target** When deploying static targets the service asset shall be capable of maintaining position to within 10 metres and adopting a quiet state for the duration of the trial. The contractor that has responsibility for the range will supply a quiet state generator if required. The Contractor shall deploy bullet moorings (supplied by the Range Administration Unit) when deploying static targets in the quiet state.	Core - 18 Business Day (BUTEC) - Standard Day	Raasay Kyle of Lochalsh (safety) Mars (safety)	 Maximum - 38 days (SD) SD = Business Day (BUTEC) - Standard Day Min notice provided is 36 hours.
2	4	3	**Mine Target Laying & Recovery** A service to allow 1 third party trials crew and associated trials equipment, to lay, recover and survey mine targets with support from the ROV. The service shall be provided in up to and including Sea State 4. The service shall include the provision of 2 linesmen and a crane driver. The service is primarily in support of Sandown class Mine Hunter Sonar (ST2093) acceptance trials and will be coordinated and prioritised by BUTEC range authorities.	Core – 12 days (ED) ED – Extended Day Maximum - 12 days (ED) Targets required to be recovered every 24 months and position checked every 3 months by ROV	KOL, or Raasay	Min notice provided is 36 hours.
2	4	4	**Sonobuoy Trials** The Vessel shall remain on station to observe and recover sonobuoys as directed by the Authority. The service shall be provided in up to and including Sea State 4. Recovered buoys shall be returned to the Kyle of Lochalsh upon completion of the day's trial. This service will not be required concurrently with Line Item 2.4.1 or 2.4.2.	Core - 40 Business Day (BUTEC) - Extended Days Maximum – 62 Extended Days	Mars, or KOL, or Raasay	The sonobuoys are normally dropped by helicopter. The Core quantity is made up of 20 Tasks each lasting an average of 2 Business Day (BUTEC) - Extended Days)
2	4	5	**Range Safety** A range safety service, comprising 2 Vessels to divert vessels approaching from both the north and south ends of the range, as per range byelaws (SI 2016 No.654 for The British Underwater Test and Evaluation Centre Byelaws 2016, active from 29 June 2016), which require a	Core - 50 Business Day (BUTEC) - Extended Days Maximum – 140 Extended Days	2 x Vessel requirement Raasay, Mars, KOL	The Contractor is responsible for ensuring that there is a controlled waterspace when carrying out the Tasking (including in accordance with the Task's safety case)

Contract	SDA	Task Number	Task - Line Item Description	Quantity	Vessels	Remarks
			range safety service whenever the range is active. The service shall be provided in up to and including Sea State 4. Routine Tasks such as taking sound velocity profiles, passenger transfers and transferring gash from ships/submarines to shore will either be concurrent with or sequential to the range safety service.			
2	4	6	**Range Maintenance** A service to support range maintenance through provision of a suitable Vessel to act as ROV operation host craft and capable of supporting maintenance Tasks, including, but not limited to: survey and replacement of hydrophones/Under Water Telephone (UWT), EM survey and changeover, ancillary range equipment (wave buoys, VLA) and cabling on the seabed. Required service, capabilities and support facilities: -Embarkation of up to 12 third party trials crew to conduct range maintenance Tasks, including replacing hydrophones and associated cable on the seabed with the support of the ROV and deployment, operation and recovery of other range maintenance equipment -Embarkation of an Authority provided Remotely Operating Vehicle (ROV)(Quantum) and its associated equipment. -The service shall be capable of ROV deployment and recovery in up to and including Sea State 4. -A service to support range calibration by running a noise source over the range as directed by range operators ashore; this will include towing a Submerged Towable Acoustic Body (STAB) weighing no more than 20Kg or a Calibrated Sound Source (CALSS) (in air weight 200Kg) deployable by crane. The CALSS is supported with one 10ft ISO container onboard and a stand-alone winch for deployment and recovery of the CALSS. -The Vessel shall be fitted with sea-chests or other arrangements for the simultaneous fit of up to three tracking transducers. -The Vessel shall be able to DP (Dynamic Positioning) in real time, to an accuracy of +/- 5 metres in Beaufort Force 6 and a 1.5 knot current. The DP system shall be capable of accepting real time positional information from the ROV tracking system and ‘drive’ the Vessel such that it remains close to vertical above the ROV. -The service shall include the provision and operation of a RHIB (with coxswain, linesman and crane operator) and be capable of launch and recovery in up to and including Sea State 4. This shall include safe embarkation and disembarkation of	Core - 50 Business Day (BUTEC) - Extended Days Maximum – 100 Extended Days	Warden + either Raasay or KOL	-Range Hydrophone/UWT survey - 14 days -VLA 8 days -Hydrophone/UWT maintenance - 4 days -EM survey 4 days + EM changeover - 12 days -Wave buoy clean - 4 days -ADCP - 8 days

Contract	SDA	Task Number	Task - Line Item Description	Quantity	Vessels	Remarks
			coxswain and 2 trials personnel to and from a RHIB. -The service shall be capable of making passage to other sea areas in conditions up Sea State 6. -The Contractor shall berth the ROV host craft at SSB Kyle of Lochalsh while the ROV is embarked to facilitate 3rd party maintenance of the ROV. The Vessel's available ships services shall be provided to 3rd party maintenance personnel during maintenance periods who shall be provided with access to the Vessel alongside.			
2	4	7	**Passenger Transfers** A service to transfer up to 30 personnel (normally, but on occasion may exceed this particularly for submarine crew changes) between locations and ships/submarines in the Kyle of Lochalsh area and the Raasay Ranges. The service shall be capable of at least 9 knots in Sea State 2 conditions and shall have suitable fendering and transfer arrangements for ship and submarine transfer. *These transfers are separate/standalone transfers required in addition to those transfers that take place in association with Line Items 2.4.1, 2.4.5.*	Core / Maximum - 150 Tasks	Mars KOL Raasay	Average return journey 2.5 hrs Min notice provided is 24 hours.
2	4	8	**Visiting Ships Stores, Mail and Garbage collection & delivery** This service, contained within the working day (Extended Day or Standard Day), and normally concurrent with routine range Tasks, is to collect and deliver hand portable stores, mail and garbage from/to the range and locations in the Kyle of Lochalsh area. The Contractor is to provide a service to offload an average of 30 bags of gash (including food waste) per day to shore at Kyle of Lochalsh to a skip provided by the Range Administration Unit.	Core / Maximum – 90 Tasks. Generally undertaken in concurrence with Line Items 2.4.5 and 2.4.7.	Raasay KOL Mars	Ships are instructed to give waste transfer notes (duty of care) to Contractor crew who in turn hand over to Range Administration Unit for waste disposal.
2	4	10	**Sound Velocity Profiles and Ambient Noise Measurement** This is a daily range requirement that will take place concurrently with other range Tasks. The service is required to allow 7 third party personnel to deploy equipment to conduct sound velocity profiles and ambient noise measurements. The service asset shall provide secure stowage for one 20ft ISO container.	Daily Task requirement concurrent with other Tasks Core – 70 Tasks Maximum – 190 Tasks	1 Asset: Raasay, Warden, Mars, KOL	This Task is generally undertaken concurrently with the other Range maintenance Tasks.
2	4	11	**Maintenance of Navigational Shore Beacon** A service to transfer up to 2 third party Range Administration Unit maintenance	Core / Maximum - 8 Business Day (BUTEC) - Standard Days	Raasay, or MARS, or	

Contract	SDA	Task Number	Task - Line Item Description	Quantity	Vessels	Remarks
			staff between locations in the Kyle of Lochalsh area to shore beacons at remote sites on Rona and Raasay. The service asset shall be capable of at least 9 knots in Sea State 2. A service to launch and recover a 4m RHIB. Undertaken once per quarter plus any reactive maintenance. Average duration of 4 hours on site; with passage, 1 day per Task.		KOL	
2	4	12	**Towed Array** A service to support the deployment and recovery of towed arrays including Day Accommodation of a 7x personnel third party towed array team. The service shall provide facilities in accordance with Babcock procedure TA PTI-074.	Core - 12 Business Day (BUTEC) - Standard Days Maximum – 20 Standard Days	KOL	Towed array party is based in Clyde Naval Base. Use of BUTEC SSB jetty and carnage shall be in accordance with Babcock procedure TA PTI-074. Min notice provided is 3 days
2	4	13	**Novel and Development Trials** Support and services to Authority novel and development trials which include laser trials, towing and unmanned surface and unmanned underwater vehicle trials. Tasks may require up to 4 Vessels. Support requirements shall include: • A service to enable (support) up to 20 third party trials crew and associated trials equipment to launch and recover systems under trial such as lightweight weapons. • The Contractor shall provide linesmen (normally 2) and a crane driver (from the crew). • The service shall be provided in up to and including Sea State 4. The service asset shall have capacity to store weapons and systems under trial.	Core / Maximum - 35 Business Day (BUTEC) - Extended Days	Raasay, KOL and for range safety: Mars KOL Trial dependent	

SDA 5 – SUPPORT TO MILITARY DIVING

INTRODUCTION

1. This section defines the Authority's requirement for SDA 5 which involves the provision of support to military diving.

SUPPORT TO MILITARY DIVING TRAINING

2. The Contractor shall provide support to military diving training in water depths up to and including 85 metres whilst moored fore and aft, which shall be undertaken in the local waters off the coast of North West Scotland specifically in the Kyle of Lochalsh or Oban areas and otherwise in accordance with the SOR Table Line Item 2.5.1.

TASKING AUTHORITY AND TASK PRIORITISTAION/DE-CONFLICTION

3. The MSS OOP is the Tasking Authority and will resolve any conflicting Tasks provided to the Contractor. The MSS OOP shall be the primary point of contact for deconfliction, including arbitrating between Entitled Customers, as required.

CERTIFICATION OF SPECIAL PERSONNEL (HEALTH, SAFETY AND FITNESS)

4. The Contractor shall ensure that all persons considered to be Special Personnel (which, for the purposes of this paragraph, shall have the meaning ascribed to that term in the MGN 515 Special Purpose Ship Code (SPS Code) as amended from time to time) comply with the SPS Code, including by:

    a. meeting the the certification requirements in the SPS Code;

    b. maintaining onboard records of Special Personnel; and

    c. ensuring the Special Personnel comply with the standards in the SPS Code on medical fitness and safety training and abilities, which includes demonstrating their medical fitness with an ENG1 or recognised equivalent medical fitness certificate, providing evidence of safety training and ability such as completion of basic training in personal survival techniques as laid down in the STCW Code.

5. Authority Personnel embarked on Vessels for the purposes of military diving are considered to be Special Personnel. The Authority or the Entitled Customer for the relevant Line Item in the SOR Table, will provide the Contractor with appropriate evidence of compliance with medical fitness and safety training and ability for the Authority or the Entitled Contractor's personnel (whichever is applicable).

6. The Contractor shall ensure that any non-UK sponsored Authority Personnel who have embarked the Vessel also comply with the requirements above, including the SPS Code.

DIVING TENDER REQUIREMENTS

7. The Contractor shall ensure that the Vessel(s) used in the provision of Line Item 2.5.1 shall be capable of supporting diving training of military divers in water depths of up to, and including 85 metres, whilst moored fore and aft. The Vessel(s) shall be capable of mooring in up to and including Sea State 4 (operate and moor in winds gusting up to 40 knots) with maximum yaw of +/-10 degrees.

8. The Contractor shall be required to provide a service under Line Item 5.2.1 during Business Days only on the basis that the Vessel is not required to accommodate any Authority Personnel overnight. The Contractor shall ensure that the Vessel(s) include the following capabilities and facilities:

   a. the capability to launch and recover dive support boats (Rigid Hulled Inflatable Boat (**RHIB**)) in Sea State 4 and wind speeds of up to 40 knots;

   b. the capability to locate accurate depth and achieve an accurate chartered position;

   c. echo sounder to be in same vicinity of onboard deck dive site;

   d. the ability to conduct two Tasks concurrently at different locations, in the waters off the North West Coast of Scotland, in up to and including Sea State 4, and shall have a speed of 10 knots or more in Sea State 2;

   e. the capability to support a normal maximum diving team of 30 personnel;

   f. the provision of Compressed Natural Breathing Air (the Contractor shall be responsible for air sampling (in accordance with JSP 319 Annex E) and the maintenance of air standards (DEFSTAN 68-284/3));

   g. the Service shall be provided in accordance with the general regulations contained within BR 2806, and for Transportable Manned Compression Chamber (TMCC) requirements within BR 2807(5)(P);

   h. each Vessel shall be capable of embarking an ISO container for a:

      i. TMCC (maximum weight 6.7 tonnes; dimensions (metres): L. 6.1 x W. 2.74 x H. 2.43); and

      ii. support unit for the TMCC (weight 7.5 tonnes; dimensions (metres) L. 3.04 x W. 2.43 x H. 2.43);

   i. direct access from dive platform to TMCC in order to easily transport casualty and there must be a 3 metres clearance at door and 1 metre all round the ISO container to allow access of stretcher;

   j. the capability to store 2 x Authority provided Medium Inflatable Boats (MIBs);

k. electrical supplies: 240v @ 50Hz, or 115v @ 60 Hz, @ 13.5 kw;

l. a dive station with the following: Suitable clear working area (3m x 3m) with easy access and entry to water via door or gateway; a dive platform rigged at the waterline to facilitate diver entry and exit from the water, able to conduct casualty evacuation. Divers' shot line to be rigged at dive platform - ability to hoist and lower shotline under power. (Ideally) dive platform to be hydraulically/electronically driven in order to hoist to deck edge level from waterline for CASEVAC. Freeboard no greater than 3 metres (1.5m ideal); suitable diving ladder for entry/exit by divers; means of hoisting/lowering diving shot line at the dive site; adequate means for recovery of stricken diver; clear of all compressor/machinery noise hazards; Storage space for 4 quads of therapeutic/diving gases;

m. upper deck HP Air Systems to drive mixed gas booster pumps and provision of diving compressed air at recharging points;

n. workshop with the following: An oxygen clean area for maintenance of closed and semiclosed circuit breathing apparatus; 4 square metres for 2 outfits of clearance diving breathing apparatus. The workshop shall be in the proximity of dive station in order to facilitate diving (workshop to be between decks or in containerised chacon on upper deck);

o. laundry and drying room facilities for diving equipment (suitable stowage and drying facilities for life support apparatus and divers personal diving kit (up to 27 personnel).

p. suitable area for rewarming casualties;

q. toilet, shower and changing facilities (male and female);

r. fresh water supply at dive station;

s. classroom/briefing room with IT for up to 30 personnel and a separate staff admin office with IT facility, facility to brief and conduct private student interviews;

t. storage facility for divers' personal dive kit/bags etc.;

u. preparation areas with suitable lighting and sturdy preparation tables for assembling dive equipment (up to 10 sets) within dive hold;

v. suitable hatch access to crane load dive equipment into dive hold lifting capacity of SWL 1 tonne at 4 metres on either side; secure storage for 20 sets of diving kit, and 3 inflatable craft (including Delta RIB);

w. training/lecture room with tables/chairs for 30 personnel; and within dive hold, heated classroom area with IT facilities for teaching purposes;

x. basic catering facilities (to allow Authority personnel to heat pre-prepared Authority provided food);

y. upper deck diving equipment preparation area with suitable height sturdy prep tables, covered and heated, suitable upper deck briefing area within dive station for surface support dive team, heated and covered facility; and

z. at least one of the two Vessels shall have overnight accommodation for crew only (note that the Vessels do not have to accommodate any overnight accommodation for Authority Personnel).

Contract	SDA	Task	Task - Line Item Description	Quantity	Assets	Remarks
2	5	1	**Support to Military Diving** Support to Defence Diving School military diving training of military divers and force generation of RN and Army diving units in water depths of up to and including 85 metres, whilst moored fore and aft.	Core - 306 days Task duration - between 10 and 33 days, including loading and unloading of equipment (excludes passage time to and from areas of operation). Concurrency - on 185 days there will be two concurrent Tasks	MOORHEN MOORFOWL	Contractor is given 10 Business Days notice

SDA 7 - SUPPORT TO RANGE SAFETY, SEA TRAINING AND AIRCREW TRAINING

SECTION 1 – TASKS

INTRODUCTION

1. This section defines the Authority's requirement for SDA 7 which involves the provision of Services to range safety, sea training and aircrew training around the coast of the UK. The Tasking Guidelines are set out in Section 2 – Tasking Guidlines.

PROGRAMMING

2. All programming by the Contractor shall meet the individual Tasking requirements in all Line Items in this SOR and applicable Tasking Guidelines (as set out in Section 2 – Tasking Guidelines). Due to the nature of military training at sea, and the effect of external constraints on training organisations, the Authority may have to adjust their programming at short notice to meet operational requirements. Accordingly, the Contractor shall ensure that the Service can respond to short notice changes. The Contractor shall, however, be guided by the following when planning the Tasking for SDA 7:

   a. South Coast Training: Annual programming for the Defence SERE Training Organisation (DSTO) at the Survival, Evasion, Resistance and Extraction Training Centre (SERE (TC)) at RAF St Mawgan (Line Item 2.7.2.1) will normally be published 6 weeks in advance. Similarly, training based at Yeovilton and Culdrose is stable with sea survival support requirements (Line Item 2.7.2.5) published 2 weeks in advance and aviation training not later than the Thursday of the preceding week.

   b. West Coast Aircrew Training: The training programme for 202 Squadron at RAF Valley changes frequently and at short notice which means that meeting their Tasking requirement by means of a pre-determined programme is not possible. The service, therefore, needs to be made available to meet an extremely fluid daily programme during the required periods. Access to the West Coast service by other customers will be coordinated through the Officer Commanding 202 Squadron as the priority customer.

   c. East Coast Aircrew Training: Provision of marine support to East Coast Sea Survival Tasks is to be undertaken in accordance with a programme produced by the Contractor and distributed to relevant points of contact at RAF Lossiemouth, RAF Leeming, RAF Coningsby; RAF Marham and 3 and 4 Regiment Army Air Corps (AAC) at Wattisham Airfield. In general, a Vessel is to be programmed to be available for East Coast Sea Survival Tasks on a 4-weekly basis across the period from mid-January to mid-December to support sea survival drills (Line Items 2.7.2.1 and 2.7.2.2) across that period. The main pick-up and drop-off port for sea survival drills will be as stated within the individual Tasks. In addition to providing marine support to sea survival drills there will be a need to meet occasional Target Towing for fast jet aircraft based

at RAF Coningsby, RAF Marham and RAF Lossiemouth; this is generally undertaken off Blyth.

d. Operational Sea Training and Exercise Joint Warrior (ExJW): Notice of support for OST mostly in the Clyde area for FOST (Submarines) and in the South Coast Exercise Areas (predominantly south of Plymouth, for FOST (Ships)) should not be less than 2 weeks' notice and in the case of support to ExJW (twice yearly), planned significantly in advance by the Joint Tactical Exercise and Plans Staff – JTEPS.

e. Range Safety Craft: Programmes are provided by individual ranges and vary in both notice and surety.

CREW QUALIFICATIONS AND TRAINING

3. The Contractor shall ensure that Masters of Aircrew Training Craft working in support of Tasks in Line Items 2.7.7.1 to 2.7.7.3 are qualified to at least the STCW 95 standard of Master Near Coastal < 500gt. In addition, the Contractor shall ensure that all new Master/skippers of any craft, other than those with recent relevant experience, shall be required to complete the following minimum initial training requirements before taking on the full role of Master/Skipper:

a. Helicopter winching or fast roping training – 2 Tasks;

b. Sea survival drills – 3 Tasks;

c. Swarm Tasks – 2 Tasks;

d. Target Towing for fast jets – 2 Tasks; and

e. Target Towing for Maritime Sniper Training (MST) – 1 Task.

4. The Contractor shall include its policy, procedure and plans, in its Human Resources Management Plan, for familiarisation of its Vessel crews with the Tasking requirements listed above in paragraph 3.

VESSELS AND EQUIPMENT

5. The following Vessels are deemed suitable to deliver the Tasks in this SDA 7:

Vessel	**Class**	**Vessel Classification**	**Remarks**
YARE	27 Metre fast launch	Class VIII(A) Category 2	Target Reel fitted
SPEY	27 Metre fast launch	Class VIII(A) Category 2	Target Reel fitted
DEE	27 Metre fast launch	Class VIII(A) Category 2	

DON	27 Metre fast launch	Class VIII(A) Category 2	
DART	27 Metre fast launch	Class VIII(A) Category 2	Dual categorised as a work boat & passenger Vessel
ROTHER	12 Metre Range Safety	Class VIII(A) Category 2	
ROMNEY	12 Metre Range Safety	Class VIII(A) Category 2	
STOUR	12 Metre Range Safety	Class VIII(A) Category 2	
FROME	12 Metre Range Safety	Class VIII(A) Category 2	
WEY	12 Metre Range Safety	Class VIII(A) Category 2	
CERNE	12 Metre Range Safety	Class VIII(A) Category 2	
PENALLY	12 Metre Range Safety	Class VIII(A) Category 2	
MERRION	12 Metre Range Safety	Class VIII(A) Category 2	
NEYLAND	12 Metre Range Safety	Class VIII(A) Category 2	

Table 1.2 – Vessels suitable for SDA 7

6. The Contractor shall ensure that the range safety and aircrew training Vessels comply with the following certification, maintenance and key equipment requirements:

a. The 27 metre fast launches are to be certificated under the MCA Workboat Code Edition 2 as category 2 Vessels. These craft should be surveyed under the MC Workboat Code Edition 2 through the offices of a member of IACS using a class surveyor with the appropriate experience of the MCA Workboat Code Edition 2.

b. One 27 metre fast launch (DART) is to be maintained as a dual certificated Vessel in compliance with European Directive 98/18/EC as a Class B passenger craft and MCA Workboat Code Edition 2 as a category 2 Vessel. This craft shall be surveyed under the MCA Workboat Code Edition 2 through the offices of a member of IACS using a class surveyor with the appropriate experience of the MCA Workboat Code Edition 2.

c. The Contractor shall ensure that the High-Speed Passenger Vessel (DART) is ISM certificated and shall at all times hold a Document of Compliance. The Authority requires that all other craft are to have the principles of ISM applied to their safety management to an extent commensurate with their size. This is to be included in the Contractor's Health, Safety and Environmental Protection Management Plan.

d. Any alternative approach to the certification and maintenance requirements in 6(a) to (c) above is to be approved by the Authority.

e. Range Safety Craft (12 metre) are to be operated as a category 2 Vessel under the MCA Workboat Code Edition 2.

f. All craft (27 metre fast launches and 12 metre Range Safety Craft) are to be fitted and operated with AIS Class A and this is to become part of the ship's equipment fit.

g. All Range Safety Craft are to have marine VHF radios crystallised with a private frequency for speaking privately with the Range Administration Unit. This may require crystallisation of the VHF sets based ashore on the ranges and this is to be checked and provided for by the Contractor where required.

SDA 7 – VESSEL REQUIREMENTS

INTRODUCTION

7. Due to the specific safety and training requirements of helicopter winching / military search and rescue operations, sea survival training, fast jet target practise, marine sniper training and range safety, the Vessel(s) providing or supporting the training must have the specific attributes detailed below.

DHFS RAF SHAWBURY & RAF VALLEY 202 SQUADRON (H135-Juno; H-145 Jupiter) (LINE ITEM 2.7.1.1)

8. Vessel requirements for DHFS RAF Shawbury & RAF Valley 202 Quadron are as follows:

a. Minimum length – 202 Sqn require the length of Vessel to be such that the helicopters (Juno; Jupiter) will not have to hover with the rotor blades over the top of any mast when winching over the stern of a Vessel, to ensure this, the distance from any aft winching point to a mast forward should be at least 12 metres. An overall **minimum length of 16 metres** and a maximum air draught of between 10-15 metres;

b. well-lit clear areas of 2 metres square (or circle of radius 1.2 metres) at the forward end and on each quarter of the Vessel to allow for the safe transfer of a crewman vertically and by hiline transfer; these areas to be clear of significant dangerous obstruction which could cause injury to the crewman;

c. Vessels shall carry a RHIB and be capable of launching, operating and recovering the boat in up to and including Sea State 4 (up to 2 metre significant wave height). This would be used to recover any personnel from the water during wet winching Tasks;

d. good sea keeping qualities in providing a safe and relatively stable platform throughout the required range of sea conditions onto which trainee aircrew in

the early stages of SAR training can undertake deck winching drills without the risk of injury to winchmen;

e. an electronic position fixing system capable of storing and retrieving a MOB position, to an accuracy of 10 metres, with a single button operation;

f. in addition to VHF, a UHF radio communications system capable of transmitting and receiving in the frequency range 225 MHz -399 MHz (in 25kHz steps) to allow the Master to maintain constant two-way communication with the helicopter throughout an exercise; and

g. a 'Dan' type marker buoy for marking aircraft crash sites.

202 SQUADRON INSHORE RESCUE BOAT (RHIB) REQUIREMENTS (LINE ITEM 2.7.1.1)

9. Vessel requirements for 202 Quadron inshore rescue boart (RHIB) are as follows:

a. an open RHIB design with a minimum length of 6.5m and maximum length of approx. 7.5m;

b. clear space forward for a helo winchman to winch into with no obstructions likely to cause an injury and the largest practical clear even deck space to land on (within the limits of the hull shape);

c. capable of speeds of up to 25kts in seas with a significant wave height of 1 metre and capable of operating in Sea State 4 at lesser speeds; and

d. RHIB to be MCA categorised for daylight operations within 5 miles of the harbour breakwater.

JOINT HELICOPTER COMMAND (LINE ITEM 2.7.1.2) AND MERLIN HELICOPTER FORCE (LINE ITEM 2.7.1.3) REQUIREMENTS

10. Vessel requirements for the Joint Helicopter Command (**JHC**) and Merlin Helicopter Force (**MHF**) are as follows:

a. **Vessel Length**: Marine services Vessels are to be of minimum length to ensure sufficient elements of the Vessel remain visible during a manual hover whilst completing a winch transfer to the bow and stern. The helicopter is required to maintain a minimum vertical clearance of 3 metres between the rotor blades and the highest obstruction on the Vessel or a lateral clearance of 5 metres when the blades are in a horizontal plane below the highest obstruction on the Vessel. As a training guideline (particularly relevant at night) the helicopter will aim to hover above the sea at a minimum height of 13 metres. The following minimum Vessel lengths are required for each aircraft type:

i. **Merlin** - minimum Length Overall is to be **25.6 metres;**

ii. **Chinook** - minimum Length Overall is to be **26.8 metres**; and

iii. **Puma** - minimum Length Overall is to be **20.9 metres**.

b. **Vessel Speed**: The Vessel shall have a minimum speed of 15 knots in Sea State 3, 12 knots in Sea State 4 and an ability to maintain a stable heading (within 2º either side of the required heading) at a constant speed over the ground of 5 knots;

c. Well-lit areas of at least 2 metres square (or circle of radius 1.2 metres) at the forward end and on each quarter of the Vessel to allow for the safe transfer of a crewman and simulated casualty vertically and by hi-line transfer; these areas to be clear of significant dangerous obstruction which could cause injury to the survivor or crewman;

d. A full 360-degree searchlight facility able to illuminate a figure in the water at a distance of 150 metres;

e. Carry a RHIB and be capable of launching, operating and recovering the boat in Sea State 4 conditions (only up to 2metre significant wave height) (this is used to recover any personnel from the water during wet winching Tasks);

f. An electronic position fixing system capable of storing and retrieving a MOB position***,*** to an accuracy of 10 metres, with a single button operation;

g. In addition to marine VHF, a UHF am communications system capable of transmitting and receiving in the frequency range 225 MHz -399 MHz (in 25kHz steps) to allow the Master to maintain constant two-way communication with the helicopter throughout an exercise;

h. A voice communication system which must guarantee direct communications with the flight operations room during the programmed Tasking period, regardless of the whereabouts of the Vessel within the 'normal' area of operations; and

i. At night, aircrew may use Night Vision Devices (NVD); marine service Vessels will need therefore to be NVD compatible (i.e. upper deck lighting should be dimmable or shielded (so that it only shines downwards) such that aircrew are not dazzled).

VESSELS SUPPORTING WILDCAT MARITIME FORCE (LINE ITEM 2.7.1.3)

11. Vessel requirements for support to the Wildcat Maritime Force (**WMF**) are as follows:

a. The minimum suitable length for a WMF will be between 12m and 15m with the length closer to 15m being more suited to the training Tasks;

b. A minimum speed of 15 knots in Sea State 3 and an ability to maintain a stable heading (within 2° either side of the required heading) at a constant 5 knots;

c. Well-lit clear areas of 2 metres square (or circle of radius 1.2 metres) at the forward end and on each quarter of the Vessel to allow for the safe transfer of a crewman vertically and by hiline transfer; these areas to be clear of significant dangerous obstruction which could cause injury to the crewman;

d. A full 360-degree searchlight facility able to illuminate a figure in the water at a distance of 150 metres;

e. An electronic position fixing system capable of storing and retrieving a MOB position, to an accuracy of 10 metres, with a single button operation;

f. A UHF am communications system capable of transmitting and receiving in the frequency range 225 MHz -399 MHz (in 25kHz steps) to allow the Master to maintain constant two-way communication with the helicopter throughout an exercise;

g. A 'Dan' type marker buoy for marking aircraft crash sites;

h. An 'Aldis' lamp with red and green filters; and

i. At night, aircrew may use NVD; marine service Vessels will need therefore to be NVD compatible (i.e. upper deck lighting should be dimmable or shielded (so that it only shines downwards) such that aircrew are not dazzled).

VESSEL REQUIREMENTS – ALL SEA SURVIVAL TRAINING TASKS (LINE ITEMS 2.7.2)

12. Vessels supporting all sea survival training, including 'ab initio' training at the DEFENCE SERE TRAINING ORGANISATION (DSTO - RAF ST MAWGAN), and revalidation training at all operational and training flying stations shall have the capabilities detailed below. These Vessel attributes shall apply to the following SDA 7 Line Items under 2.7.2.1; 2.7.2.2; 2.7.2.2.1 to 2.7.2.2.4; 2.7.2.3 to 2.7.2.3.2; 2.7.2.4 to 2.7.2.4.3; 2.7.2.5.1; 2.7.2.5.2.

13. **Major / Dispatch Vessel Specifications**: The major / dispatch Vessel is to have the following minimum specifications and capability requirements:

a. The minimum Vessel length required is 25.6 metres, in accordance with Para 4 a (1) (Merlin) above;

b. A minimum speed of 12 knots in Sea State 4 and capable of transiting to and from the exercise area with the students within a period of 30 minutes. If the transit period is to be longer then showering and changing facilities must be provided on board;

c. An ability to maintain a stable heading (within 2º either side of the required heading) at a constant speed over the ground of 5 knots;

d. Well-lit areas of 3 metres by 2 metres at the aft end of the Vessel to allow for the safe transfer of students to the Vessel; these areas to be clear of significant dangerous obstruction which could cause injury to the student or crewman;

e. Well-lit areas of at least 2 metres square (or circle of radius 1.2 metres) at the forward end and on each quarter of the Vessel to allow for the safe transfer of a crewman and simulated casualty vertically and by hi-line transfer; these areas to be clear of significant dangerous obstruction which could cause injury to the survivor or crewman;

f. A full 360-degree searchlight facility able to illuminate a figure in the water at a distance of 150 metres;

g. The capability of recovering life rafts up to 4.5 metres in diameter and weighing up to 80 kg (dry weight) to the deck prior to deflation. Such capability will need to be borne in mind in the event of a failure of any mechanical means of recovery

h. The capability of recovering aircrew safely to the deck from the safety boats in use. This capability must take into account the possibility that some aircrew will be severely impaired in their ability to move due to the deleterious effects of motion sickness;

i. Good sea keeping qualities in providing a relatively stable platform throughout the required range of sea conditions to provide a safe and relatively comfortable base from which the students can undertake their drills;

j. Capable of safely undertaking a parachute dragging exercise. This requires the ability to drag a man safely astern at a speed of between 1 and 4 knots and to stop within half the Vessel's length without endangering the towed person;

k. No exhausts in the vicinity of the stern;

l. Access to a flat clear deck space or platform at the stern, visible from the bridge and at a height of between 0.7 and 1.5 metres (optimum 1.0 metres) above the water from which aircrew can safely jump into the sea;

m. An electronic position fixing system capable of storing and retrieving a MOB position, to an accuracy of 10 metres, with a single button operation;

n. A UHF am communications system capable of transmitting and receiving in the frequency 225 MHz - 399 MHz (in 25kHz steps) to allow the Master to maintain constant two-way communication with the helicopter throughout an exercise;

o. A Digital Selective Calling (DSC) capability on both MF and VHF marine bands;

p. A voice communication system which must guarantee direct communications with the SAR flight operations room during the programmed Tasking period,

regardless of the whereabouts of the Vessel within the normal SAR area of operations;

q. An AIS Class A shall be fitted and maintained in a fully operational state on all Contractor owned or operated craft supporting these specific sea survival drills; and on any sub-contracted craft operating in support of more than 5 of these Tasks per year;

r. An 'Aldis' lamp with red and green filters; and

s. Any deck lighting required for use during winching exercises must be shielded so that it only shines downward to avoid dazzling crew when they are using NVD.

14. **Additional Safety Boats:** Additional safety boats shall have:

a. the capability to recover aircrew from the water and be large enough to safely carry up to 6 aircrew;

b. a minimum speed of 12 knots fully loaded; and

c. the capability to operate in up to 2m significant wave height, Sea State 4 conditions.

MARINE TARGET TOWING – VESSEL (TOWING CRAFT) REQUIREMENTS

Not required. **MARINE SNIPER TRAINING (MST) (WILDCAT MARITIME FORCE) (LINE ITEM 2.7.3.2).**

15. Due to the specific safety and training requirements of Target Towing for military aircraft, any Vessel(s) engaged to meet such training must have the specific attributes in sub paragraphs 16(a) to (c) above and be able to deploy and recover the target at tow lengths up to 500 metres.

SUPPORT TO OPERATIONAL SEA TRAINING – VESSEL REQUIREMENTS (ALL LINE ITEMS IN 2.7.5)

16. SURFEX 425 FAST ATTACK CRAFT (FAC); MARITIME INTERDICTION OPERATIONS (MIO); PATROLEX; SALVEX; BOARDEX; 'OTHER TASKS'

17. Due to the specific safety and training requirements of providing support to Operational Sea Training (**OST**), any Vessel engaged in meeting such training must have the following minimum specific attributes:

a. a craft of at least 25m overall length;

b. an MCA type approved radar with a radar range of at least 12nm and an automatic plotting aid;

c. an electronic position fixing system capable of storing and retrieving a MOB position with a single button operation;

d. a dual watch marine band VHF transceiver and MF/HF transceiver; and

e. capable of operating at speeds of 18 knots in Sea State 3 and at a lesser speed in up to Sea State.

FAST INSHORE ATTACK CRAFT (LINE ITEM 2.7.5.1.2)

18. The Fast Inshore Attack Craft (**FIAC**) Vessel requirements are as follows:

a. a small fast craft of around 10-15m overall length;

b. radar with a minimum effective range of at least 12nm, a minimum radar horizon of 5 nm and an automatic plotting aid;

c. an electronic position fixing system capable of storing and retrieving a MOB position with a single button operation, accuracy to within 10 metres for 95% of the time;

d. dual watch marine band VHF and DSC;

e. capable of operating at speeds in excess of 28 kts (a lesser speed may exceptionally be acceptable but not less than 25kts); capable of operating at 25 knots in Sea State 3, 18 knots in Sea State 4 (up to 2m significant wave height) and capable of undertaking the Task at lesser speed in up to Sea State 5 (these criteria are not required to be met when carrying passengers); and

f. capable of operating at up to 60 nm from a Safe Haven.

SWARM ATTACK CRAFT (LINE ITEMs 2.7.5.3 and 2.7.5.4)

19. The Swarm Attack Vessel requirements are as follows:

a. a small fast craft of around 8m-15m overall length;

b. an electronic position fixing system capable of storing and retrieving a MOB position with a single button operation, accuracy to within 10 metres for 95% of the time;

c. marine band VHF;

d. capable of operating at speeds in excess of 30 kts (a lesser speed may exceptionally be acceptable, though not less than 25kts); capable of operating at 25 knots in Sea State 3, and capable of undertaking the Task at lesser speed in Sea State 4 (up to 2m significant wave height);

e. at least one of the craft is to be fitted with a radar with a minimum effective range of 12nm, a minimum radar horizon of 5 nm and an automatic plotting aid;

f. at least one of the craft is to be fitted with a dual watch marine band VHF and DSC; and

g. capable of operating up to 30 nm from the coast with a suitable ‘mother craft’.

TASKING GUIDELINES

Detailed Tasking Guidelines are contained in Section 2 – Tasking Guidelines which contain training Task specific preparations, responsibilities, standard operating procedures, including communications and emergency procedures for each Line Item Task.

STATEMENT OF REQUIREMENT TABLE

Notes on the SOR Table:

1. The Contractor must be available for the Task at the specific location in the range that is identified in the Task.

2. A more detailed description of the Task requirement can be found in the Section 2 - Tasking Guidelines.

Contract	SDA	Task Number	Task - Line Item Description	Quantity	Vessels	Remarks
2	7	1	**Support to Helicopter Training** a. In this Task the stated weather limits reflect a safe weather window for helicopter training purposes and as such the decision on whether conditions are suitable or not for the Task, from the helicopter perspective, will rest with the crew of the helicopter. The suitability of the weather for operation of the Contractor's Vessel will rest with the Master of that Vessel.	The maximum quantities reflect 'on Task times' and do not include any element of transit time to/from Tasks. Indicative transit times are given in some cases, but these do not form part of the 'maximum' requirement.		

2	7	1.1	**Support to Defence Helicopter Flying School (DHFS) - RAF Shawbury and 202 Squadron at RAF Valley** b. The main service required is to provide a winching platform for deck winching training, a safety boat for 'survivors' in the water during wet winching training, drum winching and, parachute dragging and cutting exercises. The service will be required usually during daylight hours only. Deck winching training is conducted with the Vessel on a variety of headings and speeds from stationary up to 15 knots. c. DHFS / 202 Squadron helicopters can undertake training sorties in up to 50 knot winds. The service is to be provided in the full range of Sea State 4 conditions. Recovery of personnel from the water will be required in Sea State 4 conditions (only up to 2 metre significant wave height) by day only. d. The type of helicopters currently in use are the Juno (Shawbury) and the Jupiter (202 Squadron). e. In the event of unavailability of the service, alternative provision, acceptable to the Entitled Customer, is to be made by 1200 hrs on the next working day. f. There is a requirement to provide an additional RHIB capable of speeds of up to 25 knots in seas with a significant wave height of 1 metre and capable of operating in Sea State 4 (only up to 2 metre significant wave height) at lesser speeds. This provides the opportunity to train for working with RNLI Inshore Rescue Boats (IRB). This service is to be made available such that it can be provided concurrently with the main service. The operation of this RHIB is to be entirely independent of the major Vessel. g. Normal area of operations: Holyhead Bay and out toward the Skerries, within 15 nautical miles of the coast (see Admiralty chart Nos 2011 and 1413). The ideal run length is 45 mins at a speed of 5 knots. h. The normal area of operations for the RHIB will be within 5 nautical miles of the harbour.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			Programming: a. The service will be provided at 30 minutes notice within the daily Tasking period, unless advised otherwise by the Entitled Customer. b. The additional RHIB shall be provided at 24 hours notice. c. 202 Sqn will close for Bank Holidays and for a block leave period over Christmas of up to 2 weeks duration. d. De-confliction of access to the craft for use by other Entitled Customers will be undertaken by OC 202 Sqn. e. Normal hours will be Mon-Fri (except public and bank holidays in the United Kingdom), 0900-1700, usually daylight only. The Contractor shall be prepared to operate 0800-1800 May-Aug inclusive. f. Most sorties will be 60-90 mins duration with usually no more than two sorties per day. Maximum hours per day will be 4 hours. g. A break from operations for a minimum of 45 mins will be provided between 1130 and 1430 (finishing no later than 1430) for Vessel crews to take a lunch break.	Maximum 245 days of support Task duration maximum: - for the 27 metre Vessel is 4 hours; and - for the RHIB, 20 hours per month Baseline: 208 days of support (duration maximum as above)	DON RHIB	

			h. Usually the Inshore Rescue Boat (IRB) RHIB will only be required for up to 4 sorties of 45 mins on Task on any one day within an overall total of 20 hrs on Task time per month. it will only be required to operate during daylight hours.			
2	7	1.2	**Support to Helicopter Training - Joint Helicopter Command** a. The service required is to provide a marine platform for helicopter training. The service is required during daylight and night-time hours. b. JHC helicopters can undertake training sorties in up to 50 knot winds. The service is to be provided in Sea State 5 conditions (only up to 3m significant wave height). Recovery of personnel from the water will be required in Sea State 4 conditions (only up to 2 metre significant wave height) during daylight and night-time hours. c. The type of helicopters currently requiring the service include: Chinook, Merlin, Wildcat, and occasionally Puma. d. Task Area - areas are indicated in each Line Item. Requests may be made for the service in any of the areas in which suitable Vessels are operating, including: - 7 Sqn, 18 Sqn and 27 Sqn, RAF Odiham – primarily off the south coast between Portland and the Solent. - 845, 846 Sqns & 847, Commando Helicopter Force (CHF), RNAS Yeovilton – Primarily off Portland. - 33 and 230 Sqns, RAF Benson – primarily off the south coast between Portland and the Solent.			
			Programming: a. It is intended that the Entitled Customer will provide at least two weeks' notice of a requirement. The Task should still be met if less notice is given where this allows sufficient time for the Contractor to mobilise suitable assets to the required training and where it will not conflict with other Authority or commercial customers.	Maximum 60 Tasks Duration - maximum 2 hours per Task. Average - 31. Baseline: 51 Tasks (duration maximum as above)	SPEY	

			b. Any requirement to support helicopter training on the East Coast will be met within a Contractor provided programme for meeting Tasks undertaken on the East Coast of Scotland and England. c. Support for CHF off Portland is to be on the basis of a Vessel being available for a period of 2 working weeks in every 4 weeks.			
2	7	1.3	**Support to Helicopter Training - Wildcat Maritime Force, RNAS Yeovilton** a. The service required is to provide a marine platform for helicopter training Tasks. The service is required during daylight and night-time hours. Deck winching training is conducted with the Vessel on a variety of headings and at a variety of speeds from stationary up to 15 knots. b. WMF helicopters can undertake training sorties in up to 35 knot winds. The service is to be provided in the full range of Sea State 6 conditions (only up to 3 metre significant wave height), except for wet winching where Sea State 4 (only up to 2 metre significant wave height), is the criterion. Recovery of personnel from the water will be required in Sea State 4 conditions (only up to 2 metre significant wave height) during daylight and night-time hours. c. The service will be required by the Wildcat Maritime Force, RNAS Yeovilton – up to 30nm from Portland Bill. However, requests may be made for the service in any of the other areas where suitable Vessels are operating in support of aircrew training.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			Programming: a. The unit requirements for the week will be advised by the Entitled Customer (operations team of the Royal Naval Air Station) on the previous Thursday. b. The station will be closed for Bank Holidays and for a block leave period over Christmas of up to 2 weeks duration and there will be a reduced activity period for the whole of August. c. A Vessel is to be programmed to be available for a period 2 working weeks in every 4.	Maximum 29 Tasks/year, 1 Task = 1 day Baseline: 25 Tasks/year (duration of Task as above)	SPEY	1 Task/month for winchman training (825 Sqn). 1 Task/4 months for ab initio aircrew training (825 Sqn). 1 Task/6 months for continuation flying (815/825 Sqns). 1 training period of (2 days + 2 nights)/4 months for MST Training (815 Sqn).
2	7	1.4	**Support to Helicopter Training. MHF RNAS Culdrose.** A service to support core maritime aviation skills and search and rescue training for helicopters in the vicinity of Falmouth and St Austell Bay, including the following requirements: a. recovery of personnel from the water using an inflatable rescue craft and can recover 10 single man dinghies; b. provision of an afloat platform for personnel to be lowered to helicopters during winching exercises; c. provision of compatible Ultra High Frequency (UHF) communications equipment;			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			d. the service shall be in accordance with BR 766; e. the service to be provided in up to and including Sea State 4 and the Vessel shall have a speed of 10 knots or more in Sea State 2; f. the service is to be capable of recovering up to 24 personnel from the water at one time; and g. the service is to have sufficient clear deck space to support winching exercises from helicopters.			
			Programming	Maximum 200 A maximum requirement of 200 Tasks per year with an average duration of 2 hours on Task. Baseline: 170 Tasks per year (Task duration as above)	YARE	On average 2/3rds of the Tasks will be in daylight hours. Typical transit time to/from Task location 3 hours.
2	7	1.4.1	Support to Launching & Recovery of 700X drones in Falmouth Danger Areas			See Additional Services (Clause 7) below
2	7	2	**Support to Sea Survival Training** a. Training is undertaken in up to 2m significant wave height, Sea State 4 conditions, and all Vessels allocated to the Task must be capable of safely deploying and recovering both personnel and liferafts in such conditions. Liferafts will vary in size from small single seat types to those having a capacity of 33 persons (diameter 4.5 metres, dry weight up to 80 kg).			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			b. All sea survival drills will involve the attendance of military directing and assisting staff, in addition to the aircrew undertaking the drill. Up to 6 additional military supervisory and support staff should be allowed for on each station drill (a minimum of 1 x Unit SERE Instructor (Maritime) (USI(M)), 1 x Unit SERE Assistant (Maritime) (USA(M)) and 2 x Safety Equipment (SE) Fitters, with capacity for 2 x observers)) and up to 10 on sea survival drills run by the Defence Survival, Evasion, Resistance and Extraction Training Organisation (DSTO) (2 x USI(M), 2 x USA(M), 3 x SE Fits, up to 3 observers. c. There are 3 main types of sea drill; parachute drag, helicopter jumping and multi-engine painter line drills: i. Fast-jet aircrew (those aircraft fitted with ejection seats) will simulate being dragged by a parachute across the water before inflating and boarding their liferaft. This requires that the aircrew be dragged safely through the water at a speed of between 1 and 4 knots. ii. Helicopter jumping drills will despatch the trainees into the water from the back of the Vessel moving at between 1 and 12 knots, before they inflate and board their liferaft. iii. Multi-engine aircraft trainees use a large liferaft attached to the Vessel with a painter line. The liferaft is inflated before the students enter the water, once in the water the students conduct a righting drill and board the liferaft. d. Except in the case of the Defence SERE Training Organisation's Survival, Evasion, Resistance and Extraction (SERE) Training Centre, where no preferred day of the week is identified it can be taken that any working day (Mon to Fri), except bank holidays, will be acceptable. e. All sea survival drills require the support of one major Vessel as the main ferrying and dispatch Vessel, together with a second safety boat (typically a RHIB). f. A more detailed description of the Task requirement can be found in the Tasking Guidelines in Part 6.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			Programming	a. All hours referred to are 'on Task time' and do not include any element of time required for transiting to and from the Tasks. b. Further details relating to the timings and programming of sea survival drills are contained in the Programming Section.		
2	7	2.1	**Support to Sea Survival Training - Defence SERE Training Organisation (DSTO) (RAF St Mawgan)** a. The Services in this Task require the Contractor to ferry aircrew out from Fowey harbour to a position in exercise area D007 (see Admiralty Practice and Exercise Area chart Q6402) and assist with their sea survival drills. b. For reasons of safety, one major Vessel and two safety boats will be required on each Task. The Task is undertaken from the major Vessel whilst the other two Vessels provide safety boat support. c. Most Tasks are undertaken during daylight hours with a small number of specialist Tasks undertaken during the hours of darkness. d. When weather conditions preclude drills from Fowey, Tasks may be undertaken in either Falmouth Bay – embark Falmouth (Admiralty chart No 154), or Cawsand Bay – embark Plymouth (Admiralty chart No 30). Suitable changing and showering			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			facilities for both sexes must be identified or provided at the alternative sites or provided on board (6 shower cubicles required).			
2	7	2.1	**Programming:** a. Sea survival drills will be required for the following DSTO courses, programmed throughout the year: i) Up to 35 basic aircrew survival courses, one per day, on predominantly Tuesdays or Fridays. However, up to 10 of these drills may take place on a Wednesday; and ii) in addition, up to 10 specialist advanced drills (5 x USI(M) and 5 x USA(M))	Maximum 45 Tasks/year Baseline: 39 Tasks/year Maximum Tasks in any one month will be 6. Maximum students/drill will be 30.	DEE or DART	Within the 45 Tasks, the Contractor shall make allowance should be made for up to 7 'equipment trials' per year. These will last for up to 8 hours per trial in any one day. Duration - 34 of the Tasks will last 4 hours;

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			will be undertaken each year, one per day, on a Thursday. b. Timings. Drills are normally programmed 1000 to 1600 (local). However, the USI(M) courses are programmed to take place for an extended period from 1100 to 2200 local. c. Programmes. A programme detailing DSTO's requirement for sea drill support will be issued for 3 months ahead every 6 weeks. d.Periods of Notice. A minimum 6 weeks' notice will be provided of a requirement. Changes notified less than 14 days in advance will need to be met by the Contractor except where this will conflict with prior bookings made by other Service customers. Block Leave. The DSTO will be closed for a 3-week period during August and a 2.5 week period around Christmas.			11 Tasks may last up to 9 hours.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	2.2	**Support to Sea Survival Training** RAF Operational Flying Stations (see list below) a. All operational fast jet aircrew are required to undergo biennial revalidation sea survival training which takes the form of a wet winching sea drill. b. To ensure the safety of those personnel deployed in the water, each drill requires the support of one major Vessel as the main ferrying and dispatch Vessel with a second safety boat (typically a RHIB). c. A maximum of 12 single seat liferafts or 2 multi-seat liferafts may be deployed at any one time, this may be increased to up to 24 single seat liferafts if a second major Vessel is made available.			
2	7	2.2	**Programming**: a. The Task is to be met within the programmed periods and it is intended that the Entitled Customer (air station or squadron) will provide at least two weeks' notice of a requirement. The Task should still be met if less notice is given where this allows sufficient time for the Contractor to mobilise suitable available assets to the required training area and where it will not conflict with other Authority or commercial customers.	a. The Quantity for this Task is listed in Line Items 2.2.1, 2.2.2 and 2.2.3. b. Drills will be undertaken throughout the entire year.		Each RAF flying station has a total number of aircrew requiring refresher training on a biennial basis. For convenience the total number is divided by two to establish an annual figure for aircrew requiring sea drills. An indication of a likely average number of aircrew undertaking the drills is also provided. Owing to the vagaries of operational requirements these figures are subject to

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
						variation but should be used to determine the resource required to meet this Tasking. Each Task listed below may last up to 2½ hours.
2	7	2.2.1	**Support to Sea Survival** **Training** **RAF Operational Flying** **Stations: Lossiemouth** **(Fast Jets)** a. Area of operations: vicinity of Ullapool (embark Ullapool) or Buckie. See Admiralty chart No 2500 or chart No 223. b. The primary liferaft type in use will be the single seat, though a 10-man multi - seat dinghy may be used in	Maximum 10 Tasks / year. Duration - 2.5 hours / Task. Baseline: 9 Tasks/year (Task duration as above)	SPEY	Up to 70 aircrew will require a Task every 2 years. Maximum 12 aircrew will undertake the course (Average 4/course).

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			addition on occasion.c. There is no preferred day of the week.			
2	7	2.2.2	**Support to Sea Survival** **Training** **RAF Operational Flying** **Stations: Lossiemouth - Maritime Surveillance** **Force (P-8A)** a. Area of operations: vicinity of Ullapool (embark Ullapool) or Buckie. See Admiralty chart No 2500 or chart No 223. b. The primary liferaft type in use will be the 10-man multi - seat dinghy. c. There is no preferred day of the week.	Maximum 12 Tasks / year. Duration - 2.5 Hours / Task. Baseline: 10 Tasks/year (Task duration as above)	SPEY	Maximum 180 aircrew / 2 years.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			d. These drills will normally be planned to take place on the day before or the day after any fast jet drill.			
2	7	2.2.3	**Support to Sea Survival** **Training** **RAF Operational Flying Stations: Coningsby (CGY), Marham (MRM) and Lakenheath (LKH)** a. Area of operations: Aircrew from both Air Stations will normally embark in Kings Lynn; there may be occasions when embarkation will be from Grimsby, Bridlington (Marham) or Lowestoft (Lakenheath). For areas of operations: vicinity of Withernsea or Hornsea (embark Grimsby or Bridlington). See Admiralty chart No 109 or vicinity of Gorleston (embark Gt Yarmouth or Lowestoft). See Admiralty Chart No 1536.	Maximum - 16 Tasks / year (combined CGY & MRM) Duration: 2.5 Hours / Task Baseline: 14 Tasks/year (Task duration as above)	SPEY	CGY max 10 per course. 8-12 aircrew/Task 196 aircrew will require a Task every 2 years, as follows: -CGY:130 aircrew / 2 years; average 5.4/course -MRM: 82aircrew /2 years; average 2.5/course

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			b. The primary liferaft type in use will be the single seat, though a 10-man multi - seat dinghy may be used in addition on occasion. c. No preferred day of the week. -CGY & MRM training will be delivered at Kings Lynn; individual Air Station requirement is: CGY:130/ 2 years; average 5.4/course MRM: 60/2 years; average 2.5/course			-LKH: 40 aircrew / year with SPEY based at Royal Quays (Lowestoft)
2	7	2.3	**Support to Sea Survival Training - RAF Flying Training Stations** Aircrew undergoing initial flying training, together with the flying instructors at each station, will require to undertake sea survival training in the form of wet dinghy drills (WDD). To ensure the safety of those personnel deployed in the water, each sea survival drill requires the support of one major Vessel as the main ferrying and dispatch craft with a second Safety Vessel (typically a RHIB).			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			A maximum of 12 single seat liferafts may be deployed, this may be increased to 24 if a second major craft is available. **Programming** a. Sea drills for RAF Shawbury and RAF Valley will be undertaken at Holyhead and programming for these drills will be agreed with 202 Squadron. b. End Users will provide two weeks' notice of a requirement. The Task should still be met if less notice is given where this allows sufficient time for the Contractor to mobilise suitable available assets to the area and where it will not conflict with other Authority or commercial customers. c. Each drill listed below may last up to 2½ hours. d. Drills will be undertaken throughout the entire year. e. Each station has a total number of aircrew requiring refresher training on a biennial basis. The total number is divided in two to establish an annual figure for aircrew requiring sea drills. An indication of a likely average number of aircrew undertaking the drills is also provided. Owing to the vagaries of operational requirements these figures are subject to variation but should be used to determine the resource required to meet this Tasking.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	2.3.1	**Support to Sea Survival Training RAF Flying Training Stations: RAF Valley (Fast Jet Aircraft)** a. Area of operations: Holyhead Bay (embark Holyhead). See Admiralty chart No 1413. b. Primary liferaft will be a single seat. c. No preferred day of the week.	Maximum 20 Tasks / year Duration: 2.5 Hours / Task Baseline: 17 Tasks/year (Task duration as above)	DON	Maximum 12 aircrew / Task 180 - 220 aircrew will require a Task each year. Increase in Maximum Tasks/yr and Baseline Tasks/yr forecasted from 2024-2025 will be subject to Additional Services (Clause 7) – see below
2	7	2.3.2	**Support to Sea Survival** **Training** **Flying Training Stations:** **RAF Shawbury (including** **202 Squadron)**	Maximum 3 Tasks / year Duration: 2.5 Hours / Task Baseline: 3 Tasks/year (Task duration as above)	DON	5 to 12 aircrew per Task; Up to 15 aircrew will require a drill each year.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			a. Area of operations: Holyhead Bay (embark Holyhead). See Admiralty Chart No 1413. b. The primary liferaft types in use will be the 10- man multi-seat & the single seat. c. No preferred day of the week. d. 202 Squadron is the Entitled Customer for this Task.			
2	7	2.4	**Support to Sea Survival Training** **Sea Survival Drills for Joint Helicopter Command** a. All operational aircrew undertake periodical refresher sea survival training in accordance with JHC Flying Order Book, Annex A to Order J2130. To ensure the safety of those personnel deployed in the water, each drill requires the support of one major Vessel as the main ferrying and dispatch craft with a second Safety Vessel (typically a RHIB). b. A maximum of 12 single seat liferafts may be deployed. This may be increased to 24 if a second major craft is available. **Programming**:			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			a. Sea survival drills for AAC Wattisham are to be met within the east coast programme (See SDA 7 - Para 2. Programming). b. End Users will provide two weeks' notice of a requirement. The Task should still be met if less notice is given where this allows sufficient time for the Contractor to provide assets to the required training area and where it will not conflict with other Authority requirements. c. Each drill listed below may last up to 2½ hours. d. Drills will be undertaken throughout the year. e. Each station has a total number of aircrew requiring refresher training on a biennial basis; the total number is divided in two to establish an annual figure for aircrew requiring sea drills. Likely average number of aircrew requiring drills is also provided. Operational requirements dictate that these figures are subject to variation but should be used for planning and resource allocation.			
2	7	2.4.1	**Support to Sea Survival Training AAC Operational Flying Stations:** **3 & 4 Regt AAC,** **Wattisham**	Maximum: 3 Tasks / year. Baseline: 3 Tasks/year	SPEY	Up to 12 aircrew per drill. Up to 36 aircrew per year.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			a. Area of operations: vicinity of Lowestoft (embark Lowestoft). See Admiralty Chart No 1504. b. The primary liferaft types in use will be the 10man multi-seat & the single seat. c. No preferred day of the week. Normally only the nominated maritime Squadron will undertake these drills. This maritime role will be rotated between the Squadrons making up the two Regiments.			
2	7	2.4.2	**Support to Sea Survival** **Training** **Operational Flying Stations: RAF Odiham** a. Area of operations:	Maximum 6 Tasks / year Duration: 2.5 hours / Task Baseline: 5 Tasks/year (Task duration as above)	SPEY	Up to 12 aircrew per drill.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			vicinity of Poole or Portland (embark Poole or Portland). See Admiralty Chart No 2615. b. The primary liferaft type in use will be the 10-man multi-seat. c. No preferred day of the week.			
2	7	2.4.3	**Support to Sea Survival** **Training** **Operational Flying** **Stations: Commando Helicopter Force (CHF)** a. Area of operations: vicinity of Portland (embark Portland). See Admiralty Chart No 2255.	Maximum 12 Tasks / year. Duration: 2.5 Hours / Task. Baseline: 10 Tasks/year (Task duration as above)	SMIT SPEY, or, DEE or DART	The preferred day of the week for Tasking is Thursday.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			b. The primary liferaft types in use will be the 10-man multi-seat & the single seat.			
2	7	2.5	**Support to Sea Survival Training** Sea survival drills for Fleet Air Arm operational and flying training stations (RNAS Yeovilton and RNAS Culdrose). All operational aircrew undertake periodical refresher sea survival training; this may take the form of a wet winching drill at sea. To ensure the safety of those personnel deployed in the water, each drill requires the support of one major Vessel as the main ferrying and dispatch craft with a second safety boat (typically a RHIB). A maximum of 12 single seat liferafts may be deployed, this may be increased to 24 if a second major craft is available. **Programming** a. A programme of drill dates will be provided by RNAS Yeovilton and RNAS Culdrose. b. End Users will provide two weeks' notice of a requirement. The Task should still be met if less notice is given where this allows sufficient time for the Contractor to mobilise suitable available assets to the required training area and where it will not conflict with other Authority or commercial customers. c. Each Task listed below may last up to 2½ hours.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			d. Tasks will normally be required on Thursdays with the exception of 3 weeks over Christmas, 2 weeks over Easter and the whole month of August. e. Each station has a total number of aircrew requiring refresher training on a biennial basis; the total number is divided in two to establish an annual figure for aircrew requiring sea drills. Likely average number of aircrew requiring drills is also provided. Operational requirements dictate that these figures are subject to variation but should be used for planning and resource allocation. f. RNAS Culdrose Aircrew undertake biennial SERE Maritime currency requirements (as detail at para e above). RNAS Culdrose (Merlin Helicopter Force - MHF) additional residual requirement is detailed in 2.5.2 below.			
2	7	2.5.1	**Support to Sea Survival Training Operational and Flying Training Stations:** **RNAS Yeovilton** a. Area of operations: vicinity of Portland (embark Portland Marina). See Admiralty Practice and Exercise Area chart Q6402.	Maximum 6 sea drills (Tasks) / year. 2.5 Hours / Task. Up to 144 aircrew will require a drill each year; 6 Tasks per year with a 10-12 aircrew per Task. Baseline: 5 sea drills (Tasks) / year (Task duration as above, up to 144 aircrew) Baseline: 10 Tasks/year (Task duration as above, with a 10-12 aircrew per Task)	SMIT SPEY, or, DEE or DART	The required day of the week for Tasking is Thursday.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			b. The primary liferaft types in use will be the 10man multi-seat & the single seat.			
2	7	2.5.2	**Support to Sea Survival** **Training Operational and Flying Training Stations:** **RNAS Culdrose** **(MHF)** a. Area of operations: vicinity of Falmouth Bay. b. The primary liferaft type in use will be the single seat life raft.	Maximum 3 sea drills (Tasks) / year. Duration: 2.5 Hours / Task. Baseline: 3 Tasks/year (Task duration as above)	YARE	The required day of the week for Tasking is Thursday. Maximum 3 drills / year Maximum of 6 aircrew / Task.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	3	**Marine Target Towing for Maritime Sniper Training (MTT-MST)** For this Task, the Authority shall provide, maintain and replace its own target. The Contractor shall provide the following services in relation to this Task: a. Marine Target Towing will be required in the full range of Sea State 4. b. The target will be required to be towed at speeds of between 12 and 18 knots. c. A more detailed description of the Task requirement can be found in the Tasking Guidelines in Part 6. d. The provision, maintenance and replacement of the Entitled Customer agreed target will be the responsibility of the Entitled Customer. **Programming and Availability** a. All hours referred to are 'on Task time' and do not include any element of time required for transiting to and from the Tasks. b. Further details relating to the timings and programming of Marine Target Towing are contained in the programming paragraphs of the individual Tasks.			
2	7	3.1	**NOT USED**			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	3.2	**Marine Target Towing - Maritime Sniper Training (MST) (Portland Area).** a. Tow an Authority agreed target for RM sniper teams operating from Wildcat helicopters as part of training courses undertaken from RNAS Yeovilton and occasionally from RM Poole. b. Area of operations: Portland Exercise Areas: (See Admiralty Practice and Exercise chart Q6405). **Programming** a. Tasking for 42 Cdo RM will generally be programmed during Mar/Apr and Sep/Oct. b. During the summer months the service may be required on the range up to 0100.	Maximum: 30 Tasks / year. Duration: - up to 6 hours / Task Baseline: 26 Tasks/year (Task duration as above)	FROME, WEY	Maximum of 30 Tasks comprised of 23 day and 7-night Tasks, programmed as: - FPGRM - 3 courses/ year (each 3 day + 1night Task) - 815 Sqn MCT - 2 courses/year (each 2 day + 2-night tows) - An additional 10-day Target Towing for WMF aircrew training/year

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			c. To undertake the Target Towing Task given 1 months' notice of a requirement subject to other Authority Tasking priorities. d. The Task should still be met if less notice is given where this allows sufficient time for the Contractor to mobilise suitable available assets to the required training area and where this will not conflict with other Authority or commercial customers.			
2	7	4	**Range Clearance and Safety Duties** a. The service required is to provide marine support for range clearance and range safety duties in and around the various Sea Danger Areas of military live firing ranges situated around the coastline of the British Isles. b. The service will be required to be undertaken in Sea State 5 conditions unless stated otherwise under the individual range Tasks. c. The Task generally requires the provision of one or more Range Safety Craft to assist the individual ranges in ensuring that the Sea Danger Areas on each range are cleared prior to the planned time for commencement of firing and			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			maintained clear throughout the firing period. A more detailed description of the Task requirement can be found in Tasking Guidelines in Part 6. d. A 'suitable Vessel(s)', as required on each range, will need to meet the certification, maintenance and key equipment requirements outlined in this SOR unless otherwise agreed with the individual Range Administration Unit. **Programming** a. All hours referred to are 'on Task time' and do not include any element of time required for transiting to and from the Tasks. b. Stated firing times given are the normal programmed start and finish times. In the event of a misfire a 'soak period' will be activated to ensure the shell is safe prior to its removal and this period may extend for up to one hour after the normal programmed finish time. A Range Safety Craft will be required on station during this 'soak period'. **Performance**. The Contractor is to be on Task and on time. Delivery of the Task must meet the Entitled Customer's requirement on the day and be in accordance with any operating guidelines and procedures provided by the Authority.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	4.1	**Range Clearance and** **Safety Duties - Cinque** **Ports Training Area (DTE SE)** **Hythe Range Complex** a. The core requirement is to provide a single Vessel on each firing day and firing night throughout the year. b. Area of operations – off Hythe, just south of Folkestone (see Admiralty Practice and Exercise Area chart Q6401). c. Suitable representatives of the Contractor will be required to attend a fisheries liaison meeting at the range complex at 6 monthly intervals. **Programming**	Maximum 400 days (310 day; 90 night) Baseline: 340 days (264 day; 76 night)	ROTHER, ROMNEY, STOUR (all based in Dover)	The range can be activated on up to 320 days each year. Normal Task allocation/ requirement is 240 daylight and 70 night time firings during weekdays; 70 daylight and 20 nighttime firings during weekends.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			a. The range complex operates throughout the year with the exception of Christmas Day. b. There are also a number of weekends when the range is closed and whenever possible these closed weekends are planned to include Bank Holidays. c. Weekday and weekend firings will normally occur 0830 to 1630. Night firings will occur: 18:30-23:00. d. The latest time the service will be required on the range is 2300. e. The Range Administration Unit will provide a monthly programme 6 weeks ahead. Normally at least 24 hours notice will be given of any programme changes; this may be reduced to 12 hours notice to meet urgent operational requirements.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	4.2	**Range Clearance and** **Safety Duties – Cinque** **Ports Training Area (DTE SE)** **Lydd Range Complex** a. The core requirement is for a single 'suitable Vessel' on each firing day and firing night throughout the year. b. Area of operations – between Rye and Dungeness Point (see Admiralty Practice and Exercise Area chart Q6401). **Programming** c. The range complex operates throughout the year, except on Christmas Day. d. There are also a number of weekends when the range is closed,	Maximum 375 Tasks (260 day; 115 night) Baseline: 319 days (221 day; 98 night) The range is active 320 days/year, comprised of: 210 daytime & 100 night time firings during weekdays; 50 daytime & 15 night time firings during weekends.	1 of: ROTHER, ROMNEY, STOUR Based: Dover	

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			whenever possible these are planned to include Bank Holidays. e. Weekday and weekend firings will normally occur between the times of 0830 to1630. Night firing will normally take place 18302300. f. The latest time the service will be required on the range is 2300. g. The Range Administration Unit will provide a monthly programme 6 weeks ahead. Normally at least 24 hours notice will be given of any programme changes; this may be reduced to 12 hours notice to meet urgent operational requirements. The Southern and Eastern Extensions are automatically notified for each Tuesday and Thursday for heavy calibre firings – 12 hours notice is given if there is no requirement. (The eastern extension is encompassed			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			within the full SDA and is managed daily when live firing is taking place).			
2	7	4.3	**Range Clearance and** **Safety Duties - Air Defence** **Range Manorbier** a. The core requirement is for a single 'suitable Vessel' on each firing day throughout the year. b. Secondary Tasks will include: the laying and recovery of small buoys for trials; acting as a radar calibration target and assisting the Target Recovery Launch (not provided for within this contract) in the event that more than one target needs to be recovered simultaneously; support to Penally Range as per Task 2.7.4.4. c. Area of operations – Close West of Tenby, SW Wales (see Admiralty	Maximum 130 days Baseline: 111 days	PENALLY, MERRION, NEYLAND. (all based in Pembroke Dock).	The range can be activated 255 days/year (inclusive of 40 weekend firing days). Normal Task allocation is 100 daytime firings (+25 night time) during weekdays. 5 daytime firings during weekends (up to 12 hours per weekend).

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			Practice and Exercise Area chart Q6402). **Programming** d. The range complex operates throughout the year on weekdays and weekends including public and statutory holidays in the United Kingdom, with the exception of the month of August when the Range is normally closed for maintenance. e. e. Weekday firings will normally occur between 0900 – 1700. f. Night-time cover will be required 1800-2300 for up to 25 days per year. g. Weekend firings will normally occur between 0900 – 1700. h. The Range			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			Administration Unit will issue an annual programme at the end of February for the period 1 Apr to 31 Mar of the following year. Monthly updates will be issued by the middle of the previous month to which they refer.			
2	7	4.4	**Range Clearance and Safety Duties - Penally Training Camp Range**	Maximum 55 days Baseline: 47 days	PENALLY, MERRION,	
			a. The core requirement is for a single 'suitable Vessel' on each firing day from May to September subject to Manorbier Range commitments. b. If Manorbier and Penally are active concurrently then the active Manorbier craft will assist Penally, noting that support to Penally will be subordinate to Manorbier range.		NEYLAND. Based: Pembroke Dock.	The range can be activated 100 days/year (inclusive of 30 weekend firing days). Normal Tasking allocation is 35 daytime firings during weekdays; 20 daytime firings during weekends (for up to 12 hours per weekend).

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			c. Area of operations – Close West of Tenby, SW Wales (see Admiralty Practice and Exercise Area chart Q6402). **Programming** d. The range complex operates from January to December on weekdays and weekends including public and statutory holidays in the United Kingdom holidays and throughout the month of August. e. Weekday firings will normally occur from 0830 to 1630. f. Night-time cover will be required 1800-2230 for up to 40 days per year. g. g. Weekend firings will normally take place between 0830 – 1630. h. The Range Administration Unit will issue an annual programme at the			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			end of February for the period 1 Apr to 31 Mar of the following year. Monthly updates will be issued by the middle of the previous month to which they refer.			
2	7	4.5	**Range Clearance and** **Safety Duties -** **Castlemartin** a. The core requirement is for two Vessels for all daytime firings throughout the year.	Maximum 308 'days' (220 day; 88 night). Baseline: 262 days (187 day; 75 night) The range can be activated 220 days/year.	2 of: PENALLY, MERRION, NEYLAND. Based: Pembroke Dock.	Normally only one 'suitable' Vessel will be required for each night time firing throughout the year, though occasionally a second 'suitable' craft will be necessary.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			b. Secondary Tasks will include range radar tests and occasional support to conservation work. Area of operations – Between Milford Haven and Barafundle Bay, SW Wales (see Admiralty Practice and Exercise Area chart Q6402).	There is no Tasking at weekends or Bank Holidays due to the local bye laws.		
			Programming d. The range complex operates throughout the year from January to mid-December with the exception of two weeks at Easter, the whole of August and two weeks at Xmas/New Year. e. Daylight weekday firings normally take place 0900 – 1630. f. Night firings normally take place 1830 – 2359 hrs.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	4.6	**Range Clearance and Safety Duties - Lulworth Ranges** a. The core requirement is for two 'suitable Vessels' on each firing day and night throughout the year except Nov – Feb inclusive when only one 'suitable Vessel' is required after 2130. In addition, a third suitable Vessel will be required during the period Easter to end of September for all daytime firings only. Both Vessels are to be on range 1 hr	Maximum 271 days Baseline: 230 days Notes: The range can be activated 230 days / year. Normal Tasking requirement is: 190 daytime & 70 night time firings during weekdays; 5 daytime firings & 6 night time firings during weekends.	FROME, WEY	
			before firing during the period May – September. During other times of the year one craft is to be on range ¾ hr before firing is due to commence and the other craft is to be on range ½ hr before firing is due to commence.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			The third Vessel need not be on range until commencement of firing. b. Secondary Tasks for the Vessel will include supporting range radar calibrations. c. Area of operations – Lulworth Cove and St Alban's Head (see Admiralty Practice and Exercise Area chart Q6402). **Programming** d. The range complex operates throughout the year on weekdays and weekends with the exception of the following: public and statutory holidays in the United Kingdom; 10 - 14 days over the Christmas period, one week over late May Bank Holiday and the complete month of August.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			e. Weekday firings will normally occur between 0930 – 1600 Mon - Thur; 0930 - 1200 Fri. f. On firing weekends timings for Saturday are 0930 - 1600 and for Sunday, 0930 – 1300. g. Night firings normally take place on a Tues & Thur Nov - Feb inclusive 1800 – 2359 Mar - Apr 2000 - 2359 May - Jul 2100 - 2359 Sep – Oct 2000 - 2359			
2	7	4.7	**Range Clearance and** **Safety Duties Straight Pt Range, Exmouth** a. The core requirement is for one 'suitable Vessel' for all daytime and night firings throughout the year. b. During applicable live firing days the Vessel is to be on station (western	Maximum: 348 days (278 day; 70 night) Baseline: 296 days (236 day; 60 night) Notes: The range can be activated 342 days/year.	CERNE Based Exmouth.	By exception, the Range could be activated 365 days/year to meet urgent operational necessity (in accordance with the Change Control Procedure).

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			edge of the Sea Danger Area and be prepared to interdict any potential incursion and reposition as required by Range Control) at least 20 mins before live firing commences. For night firing, the Vessel is to be positioned to the North-East of the Sea Danger Area to observe for any incursion from the area of Budleigh Salterton. When the conditions (Sea State) preclude this prepositioning prior to live firing, the Vessel should remain 'on call' (in the area of the Exmouth Marina) at 30 mins notice to deploy, should the Authority require the Vessel on station, or the conditions improve. c. Area of operations – off Straight Pt, close east of Exmouth (see Admiralty Practice and Exercise Area chart Q6402).	Normal Task allocation is: Weekdays: 230 daytime & 70 night time firings. Weekends: 48 daytime firings; 0 night time firings.		

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			Programming d. The range complex operates throughout the year on weekdays and weekends with the exception of 1 week over the Christmas period, Easter (4 days which includes the Easter weekend) and public and statutory holidays in the United Kingdom, the range remains operational/bookable at all other times. e. Weekday firings will normally occur 0900 – 1600 Mon - Fri. c. On firing weekends timings are 0900 – 1600. Normally Sat only f. Night firings normally take place on one to two nights per week. Times (all local) are:			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			Mar - Oct 1700 – 2345 Nov – Feb 1700 – 2130			
2	7	4.8	**Range Clearance and Safety Duties - RN Naval Gunfire Support Range, St Alban's Head** a. A suitable Vessel will be required for each programmed exercise. b. Area of operations – Off St Alban's Head, Dorset (see Admiralty Practice and Exercise Area chart Q6402). **Programming** c. Range firings take place 0930-1800 Mon - Thu; 0930-1500 Fri. d. No night time or weekend firings. e. The Vessel provided for this Task can be the same Vessel supporting	Maximum 20 Tasks Duration - up to 5 hours / Task Baseline: 17 Tasks (duration as above) Notes Up to 20 daytime firing exercises (each exercise may last up to 5 hours).	FROME, WEY	

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			the eastern end of Lulworth range, when activated.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	4.9	**Range Clearance and Safety Duties - Dodman Point** A single Vessel will be required for the safety and clearance service for the firing range off Dodman Point. The Task will be carried out in accordance with FLOOS Vol 2 0121.	Maximum: 80 Baseline: 75 An average of 75 Tasks per year with an average duration of 3 hours per Task, excluding passage time.	YARE	- FOST will book the range in accordance with FLOO Vol 2 0121. -Priority given to ships undergoing OST.
2	7	5	**Marine Support to Operational Sea Training (OST)** a. Detailed Tasking requirements will be issued by the appropriate Fleet Staff Warfare Officer (SWO) sponsoring the Task. b. Nominally one aircrew training Vessel is to be programmed primarily for FOST (Ships) Tasking in the Plymouth locality and a second programmed primarily for FOST (Submarines) Tasking in the Clyde locality. c. Tasks 2.7.5.1, 5.2, 5.5 and 5.6 will be required in up to and including Sea State 5 conditions (up to 3m significant wave height). d. Tasks 2.7.5.3, 5.4 and 5.7 will be required in Sea State 4 (up to 2m significant wave height). e. For all Tasks, craft will not be required to work outside the geographical limits of their MCA Workboat Code Edition 2 certification.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			Programming f. Block leave is normally taken by FOST staff at Christmas (2 weeks) and August (4 weeks) but support to these traditional leave periods may be required to meet training or operational requirements. g. Unless stated otherwise in the Line Item, Tasking requests will normally be provided a minimum of 2 weeks in advance. h. All hours referred to are 'on Task time' and do not include any element of time required for transiting to and from the Tasks. i. FOST Tasks will normally take place during the working week - 0800 to 2200 on Mon, 0730 to 1800 Tue – Thu and 0730 to 1700 on Fri. Occasional Tasking beyond these periods may be required and occasionally during the hours of darkness, particularly in winter and will be subject to a minimum of 24 hours notice.			
			Performance a. a. The Contractor is to be on Task (in accordance with the start times given). b. Delivery of the Task must meet the Entitled Customer's requirement on the day and be in accordance with any operating guidelines and procedures provided by the Authority and any specific Task instructions. **Concurrency and Priority** c. Notwithstanding the nominal allocation of one aircrew training Vessel to meet FOST (Ships) Tasking and one to meet FOST (Submarines) Tasking, the following concurrency and priority considerations will apply:			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			-Lossiemouth sea survival drill commitments will take priority over FOST (Submarines) Tasking; -The Vessel allocated to Task 2.7.5.2 may be the aircrew training Vessel nominally allocated to FOST (Submarines) Tasking; -When only one aircrew training Vessel is available for FOST (Ships) Tasking then priority between conflicting requirements will be determined by the FOST (Ships) organisation; -When only one aircrew training Vessel is available for FOST (Submarines) Tasking then priority between conflicting requirements will be determined by Director Training (North).			
2	7	5.1	**Marine Support to Operational Sea Training (OST) – FOST (Ships)** **Force Protection Training Tasks**			
			a. One or more Vessels are required to participate in surface warfare exercises. This will require the Vessels to undertake the role of surface combatants, including providing Fast Attack Craft (FAC) or Fast Inshore Attack Craft (FIAC) threat simulations, or targets of interest for Maritime Interdiction Operations (MIO), including board and search Tasks, and may require a combination of roles with multiple Vessels. Threat simulations may be of the designated type e.g. specific country FIAC or the generic type e.g. a fishing Vessel. Specific Tasks are itemised in 2.7.5.1.1 - 5.1.6 below. **Types & Areas of operation** b. Surfex 421 and Other Tasks – As directed by the relevant SWO within the South Coast exercise areas.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			c. Surfex 425 and Phase 3 (FF / DD) - English Channel between Lands End and Portland and up to 50 nm from the coast. d. ISTAR – between Mull of Kintyre, Isle of Skye and South Uist. **Programming** e. Surfex 429 / 981 - Tasks take place on a Monday between 1900 and 2200 hrs. f. Surfex 421 - Tasks may occur on a weekly basis, generally on Mon – Wed. FIAC threat but may be required on alternative days. Bookings will be made two weeks in advance. g. Surfex 425 – required each Thursday as part of the 'Weekly War' scenario for up to 44 weeks. h. Phase 3 / DCT training Tasks - generally takes place on any working day with the exception of Thursday; it is also common for these Phase 3 Tasks to take place on a number of weekends. i. Other Tasks. These will be undertaken during the normal FOST working week. j. ISTAR – an ad hoc requirement in support of SSN OST programmes. On average there are 3 SSN OSTs per annum, in addition to the Submarine Command Course (SMCC). k. Other than for Task Surfex 429 / 981, the Contractor is to allow for up to 15 early starts / late finishes per year.		

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			I. For Phase 3 Tasks the Contractor is also to allow for Tasks to take place on up to 20 weekend days per year and on up to 10 separate weekends.			
2	7	5.1	All 5.1 Tasks are grouped together as 'Force Protection training Tasks'. Specific requirements are detailed in 2.7.5.1.1-5.1.6 below.	Maximum 200 Tasks (5.1 total) Baseline: 170 Tasks (5.1 total) Duration - each Task may last up to 3 hours, see individual sub Tasks 1.1-1.6.		

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	5.1.1	Surfex 429 / 981 – to provide suitable asset to act as a suspicious merchant vessel or an opposition warship in a surface exercise scenario.	Maximum 50 Tasks a year. Each Task will be 2 to 3 hrs duration 1900 and 2200.	Changeable; actual asset provision will be dependent on available assets. Any Vessel may be sufficient (provided it is approved by the Authority)	
2	7	5.1.2	Surfex 421 - to provide a simple or advanced simulation of a Fast Inshore Attack Craft (FIAC) during a FIAC encounter exercise. As directed by FOST SO2 (Phase 2).	Maximum 50 Tasks a year. Each Task will last from 30 - 120 minutes, predominantly during daylight hours with an occasional night requirement	Any Vessel may be sufficient (provided it is approved by the Authority)	
			Warships may use laser pointers directed at marine services vessels (enables assessment of firing platform accuracy).			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	5.1.3	Surfex 425 – to simulate a FAC designated threat as directed by the sponsoring FOST SWO. This Task forms a part of the 'Thursday War' exercise.	Maximum 40 Tasks a year. Each exercise duration will be up to 2½ hours between 0800 and 1400 Local Time.	Any Vessel may be sufficient (provided it is approved by the Authority)	
2	7	5.1.4	BoardEx – Boarding Training involving the boarding and searching of the contracted Vessel and the participation of the Vessel crews in role-playing different scenarios.	Maximum 25 Tasks a year. Each Task duration will be 2-3 hrs.	Any Vessel may be sufficient (provided it is approved by the Authority)	
2	7	5.1.5	Phase 3 / DCT for Frigates and Destroyers (FF and DD) - usually a generic surface threat, but may include a designated surface threat such as that provided for Surfex 425, or a FAC and/or FIAC threat.	Maximum 10 Tasks a year. Each Task duration will be 2-3 hours for a FAC/FIAC threat and a half day for a designated threat, on occasions extending up to 8hrs. On a number of occasions multiple FIACs will be required.	Any Vessel may be sufficient (provided it is approved by the Authority)	

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	5.1.6	Other Tasks – these may include: Index; Transits; Maritime Security; Salvex; Surface Search; Salvex and /or Towex; and NATO Boardex.	Maximum 25 Tasks a year.	Any Vessel may be sufficient (provided it is approved by the Authority)	
2	7	5.1.7	ISTAR. Provide an asset to act as a hostile target to locate, monitor, track and report.	ISTAR: 3 days/year Baseline: 3 days/year	Any Vessel may be sufficient (provided it is approved by the Authority)	
2	7	5.1.8	Safety boat. Provide asset to act as a safety boat for SMU exercises in Loch Long (D98) and at BUTEC.	Safety boat: 5 days a year. Baseline: 4 days a year	Any Vessel may be sufficient (provided it is approved by the Authority)	

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	5.2.1	**Marine Support to JTEPS - FAC/FIAC Force Protection Exercises (Ex Jt Warrior (ExJW)) - FAC/FIAC** a. The service required is to provide a Fast Attack Craft (FAC) and Fast Inshore Attack Craft (FIAC) threat simulation, FAC for Anti Surface Force Air Operations (ASFAO), FAC / FIAC co-ord as part of a Swarm Attack, surface target for subs. **Operational area** Within the Joint Warrior area of operations as defined by the following points: 5500N 01200W - 6100N 01200W – 6100N 00000W – 5500N 00000W – origin.	Maximum:50 days Baseline: 43 days Notes A minimum of 2 x FAC operating for 12 full days – two times per year (24 days). 2 x FIAC Vessels operating for 12 full days each – two times per year (24 days). A minimum of a further 3 Vessels maybe required for up to 5 days per ExJW (5 days). 1 x ExJW per year requires a third week (7 days) of FAC support).	Changeable, Depending on available assets.	Within this overall boundary, Vessels will not be required to work outside the geographical limits of their MCA Workboat Code Edition 2 certification.
			Programming The Tasks form part of 2 exercise periods of 2 or 3 weeks in the window end of March to mid-May and the end of September to mid			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			Nov each year. The third week requirement supports CSG GROUPEX and CERTEX. There may be a need for further FAC/FIAC support in other areas of the UK such as Celtic Sea or Irish Sea and in the North Sea for aircraft carrier air integration training during ExJW.			
2	7	5.2.2	**Marine Support to JTEPS** **(South Wales) - FAC/FIAC** This support shall be provided concurrent with ExJW, for FAC/FIAC support comprised of 1 x group pf 3 FAC/FIAC to support Amphibious Task Group (ATG) Training. **Operational Area** South Wales - Carmarthen Bay. **Programming** The Tasks form part of 2 exercise periods of 3 or 4 days in the window end of March to	Maximum: 8 days Duration - 4 days in each of the 2 exercise periods. Baseline: 6 days total (3+3).	Changeable, Depending on available assets.	Within this overall boundary, craft will not be required to work outside the geographical limits of their MCA Workboat Code Edition 2 certification.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			mid-May and the end of September to mid Nov each year.			
2	7	5.3	**Marine Support to Operational Sea Training (OST) – FOST (Ships) Swarm Attack Tasks (South)** a. a.The service required is to provide suitable marine assets for multiple vessel (swarm) fast inshore attack simulations to predesignated formats. b. b.The service required will consist of a number of Tasks within an overall duration of 6-8 hrs in daylight hours. The overall duration will be subject to	Maximum - 6 Tasks per year (6-8 hours each equating to 6 days). Baseline: 5 Tasks per year (duration as above)	DEE, WEY & up to 13 x RIBs (sub charter).	

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			weather conditions and the ability of Vessel crews to remain at sea. c. The overall total number of Vessels required will be between 10 and 15, to form 3 to 4 groups of 3 to 5 Vessels. The craft are to include 1 x 27m control Vessel, 1 x 12m craft as a group leader. **Operational Area** Plymouth exercise areas.			
2	7	5.4	**Marine Support to JTEPS - Swarm Attack Tasks - Exercise Joint Warrior (ExJW)** a. The service required is to provide suitable marine assets for multiple vessel (swarm) fast inshore attack simulations to predesignated formats. b. The service required will consist of a number of Tasks within an overall duration of 8-10 hrs in daylight hours.	The Task to be programmed for 2 days (1 programmed and second day as a spare) Baseline: 2 days (1 programmed and second day as spare)	DEE, WEY & up to 13 x RIBs (sub charter).	Within this overall boundary, craft will not be required to work outside the geographical limits of their MCA Workboat Code Edition 2 certification.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			The overall duration will be subject to weather conditions and the ability of Vessel crews to remain at sea. c. The overall total number of Vessels required will be between 12 and 16 in total to form 3 to 4 groups of 3 to 5 Vessels. The craft are to include 1 x 27m control Vessel, and 1 x 12m craft as a group leader.			
			Operational Area Within the Joint Warrior area of operations as defined by the following points: 5500N 01200W - 6100N 01200W – 6100N 00000W – 5500N 00000W – origin. **Programming** The Tasking forms part of 2 exercise periods of 2 or 2.5 weeks undertaken from end Mar to mid May and end Sep to mid Nov.			

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	5.5	**Marine Support to Operational Sea Training (OST) – FOST (Ships)** **Board and Search Exercises (1 Assault Group (RM))** a. The service required is to provide a platform or platforms for board and search training Tasks and exercises. b. Specific Tasks at 5.6.1-2 below **Areas of operation** Plymouth Sound (all Tasks). **Programming** i. Board and Search Courses (BSC) take place 7 times a year in accordance with the dates in the BSS Training Programme for that training year. Each course lasts 3 weeks; boarding Tasks take place in Week 2: Tue 1200 - 1600; Wed: 0800 – 1600 Thu: 0800 - 1600 & Fri: 0800 - 1200 and week 3: Wed 0800 – 1600 ii. Advanced Tactical Coxswain Course. These courses take place 6 times per year in accordance with the dates in the Royal Navy School of Seamanship training programme for that training year.			
		5.5.1	**Board and Search Course. Craft boarding.**	Maximum 37 Tasks / year	DEE, DART	37 Tasks allow for additional courses (re-shows) and cancellations.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
			-Crew are required to 'role play' with the minimum participation of a Master, mate and 2 x crew.	Duration - Maximum 3 hours / Task Normal requirement is up to 6 Tasks in any 1 month. Baseline: 32 Tasks / year (duration as above)		Authority and/or MCA to allow for the maximum of 15 students on board for training.
		5.5.2	**Advanced Tactical Coxswain Course** A suitable marine asset with which to undertake pacing drills. This involves approaching a vessel that is making way and holding position adjacent to the boarding ladder. Plymouth Sound.	Maximum 54 Tasks / year Duration - 4 hours / Task (18 Tasks) Duration - 3 hours / Task (36 Tasks) up to 9 Tasks in any one month. Baseline: 46 Tasks / year (15 Tasks of 4 hours / Task; 31 Tasks of 3 hours)	DEE, DART	
ADDITIONAL SERVICES (to shall be requested in accordance with Clause 7 (Additional Services))						

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	1.1	Support to Helicopter Training. As yet unspecified increase in support. Possible use of an additional 12m boat	Not yet specified but within the Maximum of 245 days per year allocated in the Statement of Requirement	Not yet identified	Additional detail to be provided by 202 Sqn for use of 12m boat
2	7	2.2.1 & 2.2.2	Support to Sea Survival Training. Additional day of tasking to cover E7 Wedgetail aircrew training	1 extra days' training at Buckie to increase requirement to 3 days	SPEY	E7 Wedgetails is a Boeng 737 AIEW&C due to arrive from end 2024. Further detail on maximum tasks per year / duration of task and baseline of number of tasks will be required.
2	7	2.2.3	Support to Sea Survival Training.	Increase from 4 sea drills per year to 12 sea drills per year (1 per month)	SPEY	Additional 8 pilots per annum from Marham and additional 40 personnel per year from Lakenheath. With SPEY based at Royal Quays (Lowestoft), this will increase berthing costs.

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
2	7	2.3.1	Support to Sea Survival Training / RAF Flying Training Stations: RAF Valley (Fast Jet aircraft) Area of Operations: Holyhead Bay (embark Holyhead) see Admiralty caart No 1413) Primary liferaft: Single Seat Preferred day of the week: Nil specified	Maximum 30 Tasks / yr Duration: 4.0hrs / task Baseline: 24 Tasks/yr (duration as above)	DON	Maximum 12 aircrew / Task 180 – 220 aircrew will require Task training each year The maximum increase in tasks/year (20 to 30), Baseline Tasks/yr (17 to 24) and increase in duration (2.5 to 4.0 hrs) will need to be funded by an Additional Service agreement from OC Flying 202 Squadron
2	7	1.4.1	Support to Launching & Recovery of 700x Drones in Falmouth Danger Areas	Maximum: 48 tasks per year broken down as below: Duration: average 5 hrs / task. • Air 442 course (Puma AE course) –12 boat tasks per year	YARE	

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
				• Proficient in Role training (Puma flight commander training) – 6 boat tasks per year • Pre-Deployment Training – 12 boat tasks per year • Air 445 course (Malloy training) – 12 boat tasks per year • TacDev/Currency/Future Open-S1 maritime training – 6 boat tasks per year Area of Operations: Falmouth Danger Areas Support to the launch, operation and recovery of Puma (Specific S2 Category) RPAS for maritime training element.		

Contract	SDA	Task Number	Task – Line Item Description	Quantity	Vessels	Remarks
				The vehicle is operated under positive control at all times so should not be classed as autonomous. Requirement for embarkation of 700X personnel for the task. Use of upper deck for launch of Puma AUV into protected airspace IVO Falmouth/Culdrose. Support to the recovery of the RPAS from the water after landing.		

SDA 7 - SUPPORT TO RANGE SAFETY, SEA TRAINING AND AIRCREW TRAINING

SECTION 2 – TASKING GUIDELINES

TASKING GUIDELINES - GENERAL INTRODUCTION

20. The Tasking Guidelines provide direction and guidance to Vessels supporting Line Items 2.7.1 to 2.7.6 in the SOR Table for SDA 7.

    It is envisaged that much of the information provided within the Tasking Guidelines will be subsumed into the Contractor's Operational Work Instructions (OWIs). The responsibility for amending the Tasking Guidelines rests with the Authority. The Tasking Guidelines will be the subject of a joint review between the Authority's contract manager and the Contractor as a regular part of the contract review process and the Contractor shall identify and report to the Authority any areas where it is considered these Tasking Guidelines are in any way inaccurate, insufficient or inappropriate for their intended purpose.

GENERAL OPERATIONAL RESPONSIBILITIES

21. Task Responsibilities. The overall safe conduct of military training Tasks, exercises or trials is the responsibility of the entitled customer (or end user) in charge of the event. However, the Master has responsibility for his Vessel's involvement in those Tasks and his ability to be able to conduct his part of the activity with due regard to the safety of his Vessel and its crew and all others on board directly affected by his Vessel's operations. Both the Master and the military person in charge are required to assess the suitability of the proposed operating environment, weather conditions and Sea State; each individual can decide unilaterally that circumstances for meeting their own aspects of the Task are unsuitable or unsafe and re-locate, suspend, postpone or cancel the Task whilst keeping all affected parties fully informed.

22. Master's Specific Responsibility. The Master of a Vessel has responsibility for the safety of the Vessel, its crew and all other personnel whilst embarked on his Vessel; he may postpone or terminate the Task at any time if circumstances dictate such a course of action.

PRE-TASK BRIEFING

23. Before sailing for any Task, the Master of a Vessel shall obtain a verbal or written brief from the user unit (such as the lead FOST staff warfare officer or Tasking Authority containing Task specific instructions). This briefing shall include:

    a. a description of the required exercise;

    b. exercise sponsor (FOST or Air Station/squadron lead) and user requirements;

    c. details of the location, timings (if different from Line Item start requirements) and duration of Vessel participation;

    d. the number and type of aircraft, ships, or other units participating (if applicable);

e. the number and type of weapons to be used;

f. the number of persons to be carried onboard and their roles;

g. communications arrangements including call signs, radio frequencies, signals, communications failure procedure etc.

h. any specific safety procedures or deviation from existing agreed procedures;

i. any special requirements.

24. If all necessary information is not available before sailing, the remainder may be obtained on route, or prior to commencement. However, the Master is to satisfy himself that he has, and understands, all the information he will require to successfully undertake the Tasks, before he elects to commence the Task. The Master is to brief his crew on the conduct of the Task is to and ensure that they understand their individual duties and responsibilities.

TASKS INVOLVING AIRCRAFT

25. Avoidance of Navigational Hazards. Tasks involving aircraft shall be conducted well clear of shipping traffic, land and fixed and floating obstructions. If the Master is not ready to commence or continue the exercise, or if a close-quarter situation threatens, the Master shall advise the aircraft pilot to keep clear so that the appropriate action may be taken to avoid collision or grounding.

26. Emergency Preparedness. Whenever a Vessel is participating in any Task involving aircraft (including helicopters), the Master shall place his crew at immediate notice to act appropriately in the event of an aircraft crash into the sea or on the foreshore. The onboard RHIB shall be prepared for launching and the marker buoy, mooring and sinker rigged and ready for immediate use.

27. Bird Strike Precautions. Birds are a major hazard to low flying aircraft. To avoid attracting sea birds to the vicinity of Vessel, the Master shall prohibit the dumping over-side of galley waste or garbage of any kind. Masters are to report bird concentrations (which could pose a hazard to aircraft) to the captains of helicopters or fixed wing aircraft with whom they are working.

28. Notification of Delay or Cancellation. Tasks / training involving aircraft may have to be aborted, with very expensive consequences, if Vessels do not meet their Tasking commitments. To be effective, notification of delay or cancellation shall reach the Entitled Customer in good time to prevent aircraft from becoming airborne on unproductive sorties. Therefore, should any delay or cancellation become necessary, the Master shall, at the earliest opportunity, inform those units he has been Tasked to support. He shall also to take immediate steps to remedy any defect that is within his control so that the Task may be resumed at the earliest practicable time. In the event of the unavailability of a Vessel, the Contractor shall take immediate steps to furnish a suitable alternative Vessel in order to meet the requirements of the Task.

29. Crash Action. In the event of an aircraft crash in his vicinity, the Master shall take immediate action in the following order of priority:

a. Proceed to the scene and alert the Coastguard and other ships in the area, giving crash position, time of incident, aircraft type and details of survivors / parachutes / wreckage seen.

b. Assist the escape and rescue of personnel without putting the Vessel's crew at risk. Arrange for medical attention / evacuation of casualties.

i. Accurately fix the crash position as soon as possible and mark it with the marker buoy if the depth of water makes this feasible (when laying in the marker buoy, the mooring must be of sufficient length to take account of the tidal stream and range of tide). Also fix relative positions where personnel or wreckage is seen to fall.

ii. Unless certain that all personnel have been recovered, commence a search pattern using the crash position as the datum. Broadcast situation reports to co-operating authorities.

iii. Report wreckage to the Coastguard and obtain clearance from the Authority before attempting recovery, unless safety of life is involved.

30. In addition to the preceding instructions, Masters shall be familiar with relevant guidance given in the Annual Summary of Admiralty Notices to Mariners and the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR).

TASK 2.7.1 - SUPPORT TO HELICOPTER TRAINING

SAFETY UNDER HELICOPTERS

31. Masters operating with helicopters should be particularly aware of the flight safety risks to the helicopters from loose articles of clothing, equipment or other items being ingested into the aircraft's engine. Before any Task involving helicopters begins (applies to all categories of Helicopter Exercise (HELEX), the Master is to ensure that all small equipment is secured or stowed away, and that the jack and ensign staffs and radio aerials (as appropriate) are removed to a secure stowage. Guardrails should not be lowered unless the helicopter captain so requests, and then only if the Master considers it safe to do so.

32. Radio Transmission. Radio communication between the Vessel and helicopter is to be established at the outset; the Master must normally avoid transmitting whenever the helicopter is involved in close quarters manoeuvring or at any time when the pilot may be receiving directions from the winchman. In an emergency, the Master is to call "BREAK OFF, BREAK OFF, BREAK OFF" on the radio.

33. Onboard RHIB Readiness. During any Task or training involving helicopters, the Master shall ensure that the onboard RHIB is prepared so that it is ready in all respects for 'quick-reaction' launching for rescue and recovery purposes. Additionally, the boat's crew (comprising at least 2 personnel) shall wear suitable protective clothing and have life-

jackets ready to hand for an emergency. During the hours of darkness, 3 pyrotechnic illuminants and a portable searchlight are to be carried in addition to the boat's normal equipment.

34. Outboard Motor (OBM) Fuel Tanks. During any operation involving helicopters, Masters of Vessels are to ensure any outboard motor fuel tanks being carried are secured in the Onboard RHIB. This is to avoid the danger of petrol ignition by static discharge spark from the helicopter wire.

35. Wire Cutters. Wire cutters, suitable for cutting 6mm extra flexible steel wire rope (helicopter winching wire) are to be carried on all Vessels working with helicopters.

36. Noise Levels. The Noise Contours for a Merlin show, that within a distance of 15 metres, noise level exposure may exceed 100 DbA.

TASK REQUIREMENT

37. A Vessel shall act as a platform from which trained and experienced helicopter crews can practice the winching of personnel to and from the helicopter. The Vessel shall also act as a safety boat when personnel are being winched to and from the helicopter into a liferaft or the sea. This Task is commonly referred to as a HELEX or Helicopter Exercise.

38. The following paragraphs provide guidance on the type of HELEX Tasks likely to be undertaken by Authority helicopters undertaking winching training Tasks.

CONDUCT OF TRAINING TASK

DECK WINCHING

39. During deck winching the helicopter winchman is lowered to the Vessel and recovered to the aircraft. The winchman may practice various techniques (detailed below) which may include the rescue of 'survivors' from various parts of the Vessel.

ORTHODOX DECK PROCEDURES

40. The standard deck procedure involves winching onto the stern of the Vessel. The Vessel will be required to steer a course with the wind approximately 40 degrees off the port bow. The helicopter's start point is normally in a relative hover, aircraft into wind, approximately 20 'units' astern of the Vessel (where a 'unit' equates to a variable distance of between 2 to 3 metres).

41. The downwind deck procedure is the reverse of the standard deck, involving winching on the bow. The Vessel will be required to steer a course with the wind approximately 40 degrees off the starboard quarter. The helicopter's start point is normally in a relative hover, aircraft into wind, approximately 20 'units' ahead of the Vessel.

42. The left to right deck procedure normally involves winching on the Vessel's stern or starboard side, with the pilot's references predominantly on the right. The Vessel steers a course 90 degrees to starboard of the wind direction (wind direction Red 90°). The

helicopter's start point is normally in a relative hover, aircraft into wind, approximately 20 'units' from the Vessel.

43. The right to left deck procedure normally involves winching on the bow or port side, with the pilot's references predominantly on the right side. The Vessel steers a course 90 degrees to port of the wind (wind direction Green 90°). The helicopter's start point is normally in a relative hover, aircraft into wind, approximately 20 'units' from the Vessel.

44. The 4 orthodox profiles form the basis of deck winching procedures; if the Vessel is unable to steer the required heading, the pilot may consider operating the aircraft out of wind to achieve an orthodox profile.

ALTERNATIVE DECK PROCEDURES

45. Trapped deck. If the Vessel is not underway, or it is deemed safer to have its engines stopped, the trapped deck procedure will be used. It is anticipated that the Vessel will lie beam on to the sea for this drill, however, the Vessel should be allowed to drift naturally and should only be manoeuvred into a position beam-on if deemed necessary for safety by the Master.

46. Parallel deck. The parallel deck procedure is useful when the lift can be made from the port side of the Vessel and the aircraft can formate parallel to the deck, normally into the wind. During this procedure the pilot may lose sight of the Vessel. The aircraft will position abeam the winching point at approximately 510 'units' off and trimmed to match the Vessel speed.

47. Co-Pilot deck winching (mirror decks). If circumstances dictate that the safest method of carrying out the operation is with the co-pilot flying the aircraft the above procedures may be modified, with adjustments made to the relevant headings. For example, a standard mirror deck will require the Vessel to head approximately 40 degrees port of the wind. During this procedure the winch operator will not see the target until the last few units during the run in.

48. The Hi-line Transfer. The Hi-line technique entails a crewman on the Vessel tending a light line attached to the hook of the winch wire; this procedure simulates a rescue operation where it is not practicable for the helicopter to hover directly overhead. The hi-line may be passed to a Vessel by lowering the hi-line vertically; trawling the hi-line or by lowering the winchman with the hi-line to such a position that he can pass the hi-line to a crew member. The crew member will be required to tend the line, keeping it clear of any obstructions. The hi-line must not be secured to the Vessel. Once the hi-line is deployed to the Vessel the aircraft can be moved from the immediate overhead datum position which may enable the pilot to maintain visual references away from obstructions. Where possible a winchman will be lowered to control the operation on the Vessel together with aircrew 'survivors'. Survivors can then be uplifted as singles or doubles under the supervision of the winchman, using one or two strops.

PROCEDURE WHEN ON TASK

49. Before commencing the exercise, the helicopter pilot will specify the course and speed required of the Vessel. The Master shall ensure that these are very carefully adhered to.

Winching is normally commenced at the afterdeck but may be undertaken from any part of the Vessel and the pilot should advise the Master of his intentions. The Master shall beware of the radar becoming fouled by the helicopter wire. At night the all-round masthead light is to be lit to provide a height reference for the pilot, and the Master is to ascertain whether the winching area should be illuminated. When re-positioning the Vessel, the all-round masthead light is to be switched off.

50. Deck controller. For the duration of deck winching the Master is to detail one of his crew to act as Deck Controller to assist the helicopter winchman as necessary and ensure that the winch wire does not become fouled on the Vessel. When the helicopter first joins the Vessel for the exercise, the Deck Controller is to hold aloft the wire croppers to show the aircrew that they are ready for immediate use. The Master is to brief the Deck Controller as to his duties beforehand.

51. Emergency action. Should the winch wire become fouled, the Master shall make every effort - by radio or otherwise - to alert the helicopter crew. If the fouled wire cannot safely be freed then, only on instruction from the helicopter crew (signalled by making a cutting motion across the throat with the edge of the hand) is the wire is to be cut. In any event the wire is not to be cut under tension. The helicopter also has the ability to cut the wire and this should be the first option for cutting the wire.

52. Warning - Static Electricity Hazard. The person being lowered from the helicopter and the wire may carry a high voltage charge of static electricity, which will discharge on contact with the Vessel or any person who touches it. The static discharge generated by a helicopter is hazardous. Therefore, when working with helicopters, the Master is to warn his crew and any passengers embarked that no-one is to touch the wire or the person being winched down until earthing has taken place.

53. Communication Failure. If radio communication fails, the exercise will normally be terminated. However, the following procedure may be used to recover the winchman in extremis. The Master is to proceed at minimum speed with the wind 30 degrees on the port bow and then signal the helicopter with the Aldiss lamp with a green filter to indicate that it is clear to close for deck winching. The Master is also to have the Aldiss red filter ready for immediate use to indicate that it is not safe / appropriate for the exercise to continue.

WET WINCHING

54. During wet winching exercises, the Vessel is required to stand by as a safety boat whilst the helicopter crew practise rescuing a ‘survivor’ from the sea or from a liferaft. The Master of the Vessel shall be responsible for:

    a. providing safety cover for the aircraft;

        i. as far as is possible, overseeing the wellbeing of personnel whilst in the sea or the liferaft;

        ii. Providing a means of recovery for the winchman and / or the survivor in the water if the helicopter has to depart for whatever reason.

If the Master considers that prevailing circumstances may prevent him from meeting any of his responsibilities, then he shall advise the helicopter at the earliest possible moment.

55. The RHIB shall be the primary means of recovery of personnel from the water. Any deviation from this is to be logged and notified to the Authority giving full details. Prior to sailing for the Task, the Master is to ensure that all systems for the launch and operation of the RHIB are fully checked. The Master is then to assess the suitability of the local weather conditions for launching the RHIB 30 minutes before commencement of the Task. Any shortcomings or restrictions are to be reported immediately to the helo and preferably prior to its take off, if known or advised by the helo. As soon as the Master is advised by the helo that he is on route for a wet winching Task then the onboard RHIB is to be launched. If a deck Task is to precede wet winching then launch of the RHIB may be delayed to a point to be mutually agreed with the helo.

56. At any point before the launch or during the wet winching Task, if there is any doubt, for whatever reason, that a safe recovery by the RHIB cannot be assured then the Master is to advise the helicopter captain of this and either recommend postponement or cancellation of the Task. If, following a risk based assessment, the helicopter captain wishes to continue with the Task then he must accept that the helo will be the primary means of recovery for any personnel in the water or liferaft throughout the duration of the Task; the Vessel will only be responsible for providing an emergency recovery role. The Master's recommendation and the response from the helicopter should be entered in the deck log book.

57. Throughout the Task, the Master is to maintain radio contact with the helicopter and keep it under visual observation; he is also to maintain close surveillance over personnel in the sea or in the liferaft. The Master must be ready to act quickly in response to any emergency.

WET WINCHING IN DARKNESS

58. The role of the Vessel is to act as a safety boat during exercises conducted by helicopters in darkness, where 'survivors' are to be winched to and from the sea or a liferaft. This operation imposes upon the Master additional specific responsibilities in terms of the safety of any personnel acting as survivors (and for crew embarked in the onboard RHIB) because of visibility restrictions in darkness.

59. The Master is responsible for maintaining constant visual surveillance of the 'survivor'. Moreover, he must position his Vessel so as to be able to render immediate assistance or recover the 'survivor' should the helicopter be unable to do so. In addition to the Master, a crew member is to keep the 'survivor' under constant observation and is to operate the searchlight should this become necessary.

60. Whenever personnel enter the water during darkness, the time of the event and an accurate datum fix are to be entered in the deck log book in case a search is subsequently necessary.

61. Before personnel enter the water, the onboard RHIB and its crew are to be at immediate readiness in all respects. The RHIB is to carry a portable searchlight, 3 pyrotechnic illuminants and a radio in addition to standard rescue equipment.

62. 'Survivors' will normally be winched down into the sea from the helicopter. When the 'survivor' is to enter the water from the Vessel, the Master is not to dispatch him until instructed to do so by the helicopter pilot. Before entering the water the 'survivor's' lifejacket is to be fully inflated and serviceable, and the lifejacket light is to be lit. The Vessel is to remain close by the 'survivor' to monitor his wellbeing until he is safely embarked in the liferaft and has indicated that he is ready for winching.

63. Once the 'survivor' is ready (indicated by a thumbs up signal) and the Master is satisfied that he is safe, the Vessel should stand-off to allow the helicopter to commence the winching exercise.

64. If the light on the lifejacket of the survivor or that on his liferaft cannot be seen by the Master he is to recommend immediate termination of the exercise to the helicopter. Such recommendation and the helicopters response should be entered in the deck log book. The Vessel's searchlight is to be ready (with cover off and functionally tested) so that the survivor can instantly be illuminated should this light fail or be obscured, but care must be taken to avoid dazzling the helicopter pilot or crew.

65. When moving to the 'stand-off' position, the Master of the Vessel is to adopt the following standard manoeuvre:

    a. From the 'survivors' / liferaft position, proceed the required distance on a steady course with the wind on the port beam.

        i. Turn the Vessel short round to port (through the wind) to bring the 'survivor' / liferaft ahead.

        ii. Stop the Vessel to lie with the wind on the starboard side. The Vessel will then be between the 1 o'clock and 3 o'clock position on the starboard side of the winching helicopter - which is desirable.

        iii. The relative position of the Vessel and the 'survivor' / liferaft is to be maintained by use of helm and engines as necessary.

        iv. On completion of the exercise, the Vessel may be required to recover the liferaft, but should not do so until clearance is received from the captain of the helicopter.

TASK 2.7.1.1 SUPPORT TO HELICOPTER WINCHING TRAINING - THE SEARCH AND RESCUE TRAINING UNIT (202 SQUADRON)

TASK REQUIREMENT

66. The Search and Rescue Training Unit (202(R) Sqn) is based at RAF Valley, Anglesey and is the operational training unit for SAR helicopter aircrew. Marine aspects of training

include deck winching, wet winching, drum winching and simulating winching into an Inshore Rescue Boat (IRB).

CONDUCT OF TRAINING

67. Deck and wet winching. 202(R) Sqn deck winching training is carried out clear of other marine traffic in Holyhead Bay. With novice aircrew it is more important for the craft to adhere closely to the required courses steered and for increased vigilance by the Master and crew.

DECK WINCHING TASKS

68. During deck winching the helicopter winchman is lowered to the Vessel and recovered to the aircraft. The winchman may practice various techniques (explained below) which may include the rescue of 'survivors' from different parts of the Vessel.

69. Orthodox Deck Procedures. The orthodox deck winching Tasks detailed under 2.7.1 in Part 5, Support to Helicopter Winching Training, are representative of those training Tasks that will be undertaken by 202 Sqn and its affiliates. The 4 orthodox profiles form the basis of deck winching procedures. If the Vessel is unable to steer the required heading, the pilot may consider operating the aircraft out of wind to achieve an orthodox profile.

70. Alternative Deck Procedures. The following three alternative deck procedures described under Task 2.7.1.1 Support to Helicopter Winching Training shall also be utilised:

    a. Trapped Deck;

        i. Parallel;

        ii. Hi-Line Transfer.

PROCEDURE WHEN ON TASK

71. The procedures in Paragraphs 40 to 44 (procedures when on Task; deck controller; emergency action; static hazard; communications failure), under Task 2.7.1 above, shall be complied with by the Contractor.

WET WINCHING

72. During wet winching exercises, the Vessel is required to stand by as a safety boat whilst the helicopter crew practise rescuing a 'survivor' from the sea or from a liferaft. The Master of the Vessel is responsible for:

    a. providing safety cover for the aircraft;

        i. as far as is possible, overseeing the wellbeing of personnel whilst in the sea or the liferaft;

        ii. Providing a means of recovery for the winchman and / or the survivor in the water if the helicopter has to depart for whatever reason.

If the Master considers that prevailing circumstances may prevent him from meeting any of his responsibilities, then he is to advise the helicopter at the earliest possible moment.

73. The RHIB is to be the primary means of recovery of personnel from the water. Any deviation from this is to be logged and notified to Defence Marine Services giving full details. Within 30 mins of the helicopter's programmed take-off, the Master is to ensure that all systems for the launch and operation of the RHIB are fully checked. Any shortcomings or restrictions are to be reported immediately to the helo prior to its take off. As soon as the Master is advised that the helo is airborne then the onboard RHIB is to be launched.

74. At any point before the launch or during the wet winching Task, if there is any doubt, for whatever reason, that a safe recovery by the RHIB cannot be assured then the Master is to advise the helicopter captain of this and either recommend postponement or cancellation of the Task. If, following a risk based assessment, the helicopter captain wishes to continue with the Task then he must accept that the helo will be the primary means of recovery for any personnel in the water or liferaft throughout the duration of the Task; the Vessel will only be responsible for providing an emergency recovery role. The Master's recommendation and the response from the helicopter should be entered in the deck log book.

75. Throughout the exercise, the Master is to maintain radio contact with the helicopter and keep it under visual observation; he is also to maintain close surveillance over personnel in the sea or in the liferaft. The Master must be ready to act quickly in response to any emergency.

76. 'Survivors' for single seat liferaft procedures will normally be winched down into the sea from the helicopter. The Vessel is to remain close by the 'survivor' to monitor his wellbeing until he is safely embarked in the liferaft. When the 'survivor' is to enter the water or the liferaft from the Vessel, the Master is not to despatch him until instructed to do so by the helicopter pilot. Before entering the water from the Vessel, the 'survivor's' lifejacket is to be fully serviceable but will be remain deflated unless they get into difficulty. Once the survivor is ready (indicated by a thumbs-up signal) and the Master is satisfied that he is safe, the Vessel should stand-off to allow the helicopter to commence the winching exercise. The Master should confer with the helo to determine the best stand-off position in relation to the 'Survivor' and the helo.

77. On completion of the exercise, the Vessel may be required to recover the liferaft, but should not do so until clearance is received from the captain of the helicopter.

78. MS10 Dinghy Task. Service personnel taking the role of 'survivors' for any MS10 Task will normally arrive by road and taken to the training area onboard the Vessel. In exceptional circumstances, these personnel may be winched to the Vessel from the helo and in this event the MS10 is to be securely stowed to one side of the deck for the duration of the winching operation. Once the exercise is set to commence the inflated MS10 should be deployed and tethered to allow boarding of the survivor(s). Once all survivors have entered the MS10 the tether can be released and the sea drogue deployed by the occupants once the support Vessel is clear (ensuring the Vessels propellers cannot be fouled by the drogue or its securing line). The Master of the Vessel is responsible for

providing safety cover for the aircraft and for overseeing the wellbeing of the personnel in the sea or in the liferaft. Throughout the exercise, the Master is to maintain radio contact with the helicopter and keep it under visual observation; he is also to maintain close surveillance over the personnel in the sea or in life rafts and must be ready to act quickly in response to any emergency. The Master is responsible for recovering any survivors and the MS10 upon completion of the exercise. On occasions, in place of living 'survivors' the Vessel may be asked to deploy a dummy in the MS10 liferaft. Exceptionally when sea conditions preclude survivors being able to board the liferaft when secured alongside the support Vessel, the helo may authorise any 'survivors' to enter the water and self-board the MS10. This will only be undertaken on the understanding that responsibility for the any safety issues that arise rest with the helo pilot. The Master of the Vessel is to advise the helo pilot on his ability to recover any 'survivors' should this be required. Before personnel enter the water, the onboard RHIB and its crew are to be at immediate readiness in all respects.

INSHORE RESCUE BOAT (IRB) WINCHING

79. The IRB must be manned by a trained and competent crew to ensure maximum training value for the aircraft. A portable radio for communications with the helicopter, and a small steering compass must be carried. As the onboard RHIB is required to work within the helicopter downwash, the crew are to wear appropriate protective clothing. The IRB should expect the Helo to establish radio communications when it arrives on scene.

80. For a trapped IRB, the sea drogue may or may not be deployed and this should be requested by the aircraft Captain – if this does not occur then the IRB crew should declare its current status. The IRB crew are to maintain 'dead in the water' and the aircraft will position and deploy the Winchman.

81. For formation IRBs, the initial aircraft recce of the deck will be completed with the IRB 'dead in the water' and drogue deployed. Once complete the aircraft will indicate the Task is to commence and will establish in a 5-10kt hover taxi and deploy the Winchman; during this time the IRB should position ready for the Task but not begin its approach. Once the Winchman has been lowered from the aircraft and is at a suitable height (usually a few feet above the water) and not still being winched out the IRB should begin its approach. This gives the Winchman a chance to stabilise, face the oncoming IRB and fend off any obstacles without having to worry about his height at the same time. The IRB should approach the winching zone from the 4 o'clock direction (relative to the helo) and depart in the 3 o'clock direction (relative to the helo); the latter can be readily achieved by the coxswain adding 60 degrees to the IRB heading and doubling its speed. This procedure will ensure the winch operator remains visual throughout.

DRUM WINCHING

82. During a drum winching exercise, the Vessel is required to stand by as a safety boat whilst the helicopter crew practise rescue techniques. Throughout the exercise the Master is to maintain radio contact with the helo. He must also be ready to act appropriately in an emergency and should ensure his Vessel remains within the normal training area in Holyhead Bay. If this is not possible the Master needs to advise the helo accordingly as soon as this becomes apparent. It is recognised that at times the Vessel may be engaged

in training Tasks with other helicopters whilst required to stand-by as a safety boat for a drum winching Task.

BREAKWATER WINCHING

83. During a breakwater winching exercise, the Vessel is only required to stand by as a safety boat. The Master is to inform Port Control of the intentions of the Helicopter and maintain radio contact with the aircraft throughout the exercise. He must also be ready to act appropriately in an emergency and should ensure his Vessel remains within the normal training area in Holyhead Bay. If this is not possible the Master needs to advise the Helo accordingly as soon as this becomes apparent.

TASK 2.7.1.2 SUPPORT TO HELICOPTER TRAINING -

JOINT HELICOPTER FORCE TASK REQUIREMENT

84. In the absence of any specific agreed procedures, the general guidelines under Task 2.7.1, Support to Helicopter Training are to be adopted.

TASK 2.7.2 SUPPORT TO SEA SURVIVAL TRAINING

TASK REQUIREMENT – GENERAL

85. The contracted Vessels are required to provide a ferrying and safety boat service for aircrew carrying out sea survival drills in single-seat or multi-seat inflatable dinghies. This Task is variously referred to as a sea drill, a sea survival drill or occasionally, a wet dinghy drill (WDD).

86. This activity is an Affected Service under the Contract.

87. Master's Responsibility. When an Entitled Customer arranges for aircrew to undertake sea-survival exercises from the Vessel, a qualified Unit SERE Instructor Maritime (USI (M)) will be embarked to conduct / lead the drill and is referred to as the In Command, known as the IC. The USI (M) will be assisted by a qualified Unit SERE Assistant Maritime (USI (M)) who will generally act as the 'Dispatcher' for the Task. Whilst responsibility for the safety of the Vessel and all personnel embarked rests entirely with the Master; he is only responsible for the safety of those Service personnel in the water or in liferafts in the context of manoeuvring his Vessel and their safe recovery to his Vessel by RHIB, should that be the chosen method of recovery for the trainees. Responsibility for medical support, beyond the level for which the Master is obligated for the passengers and crew on his Vessel, will rest with the IC.

TERMS

88. The following terms are used throughout Task 2.7.2:

    a. Major Vessel – The main Vessel used to transport students to the drill sight and from which the drill will generally be undertaken.

b. Dispatch Vessel – The Vessel from which the students are dispatched into the water. In general, this will be the major Vessel but does not have to be if there are reasons for dispatching from an alternative Vessel.

c. Safety Boat – An additional Vessel used to assist with maintaining a close eye on students when in the water and for recovering equipment and personnel (as required) to the major Vessel.

GENERAL SAFETY CONSTRAINTS

89. The following safety constraints shall apply to all drills/Tasks except where the IC and Master of the major Vessel agree that conditions require stricter constraints; there shall be no more than 6 students in the water at any one time (once in liferafts students are deemed out of the water) and, no more than:

a. 24 students in single seat liferafts at any one time.

b. 30 students in multi-seat liferafts at any one time.

TASK 2.7.2.1 SUPPORT TO SEA SURVIVAL TRAINING

THE DEFENCE SERE (SURVIVAL, EVASION, RESISTANCE, EXTRACTION) TRAINING ORGANISATION (DSTO) TASK REQUIREMENT

90. The DSTO conduct sea drills from its Training Centre at RAF St Mawgan as part of its remit to train RAF, RN and Army aircrew in survival techniques at sea. Students undergoing training are given a practical exercise using the clothing, Life Preserver (LP), liferaft relevant to their aircraft type and a helicopter winch recovery. The method of entering the water to initiate the drill depends on their aircraft type:

a. Students who fly aircraft equipped with ejection seats are dragged through the water by a parachute harness behind the Vessel.

i. Helicopter crew jump into the water from a rapidly moving craft to simulate the disorientating effects of escape from an upturned and sinking helicopter.

ii. Aircrew from large fixed wing aircraft such as Hercules enter the water from a stationary Vessel and pull themselves towards their liferaft along a painter line.

91. DSTO also train the unit instructors and their assistants who are in turn then responsible for continuation training undertaken from the operational flying stations and the flying training stations.

92. DSTO staff, comprising SERE Instructors (USI) and SERE Assistants (USA), are embarked for the duration of the sea drill and are responsible for the organisation of the training and the dispatch and recovery of the students, and their equipment. Task equipment provided by DSTO comprises single or multi-seat liferafts, immersion suits,

helmets and a specially designed and Authority issued para-dragging harness and drag line.

93. The Contractor is to provide a major Vessel and 1 or 2 additional safety boats (usually RHIBs) in accordance with SOR(T) Task 2.7.2. The number of safety boats required will be dependent on the number of liferafts to be deployed and the likely weather conditions to be encountered and will be pre-determined by the drill IC with input from the Master of the major Vessel.

SAFETY

94. These potentially high-risk Tasks are conducted under the close supervision of DSTO Instructors and support staff. A maximum of 6 DSTO staff will be embarked at any one time, 3 SERE Instructors (one being the IC) and 3 SERE Assistants. DSTO will also be responsible for appropriate medical arrangements to cover the additional risk elements posed by the Training Task.

95. Throughout all stages of the operation a RHIB (with a SERE Instructor (USI) or SERE Assistant (USA) embarked) is required to act as a safety boat. The safety boat is to be fitted with a suitable and effective propeller guard.

96. The Master of the major Vessel is to ensure that any RHIB safety boat is handled by a thoroughly competent coxswain, and to satisfy himself that both coxswain and bowman have a full understanding of their roles and duties. Prior to the commencement of the Training Task, the Master is to ensure he has direct oversight of the area astern where the Task is to be conducted, and that he has direct communication with the DSTO IC. The IC is to be made aware of any need to use the Vessels propeller(s) to adjust position during the Training Task. All parties are to be fully aware of the need to ensure that trainees do not enter the water without clearance from the Master; this is to preclude use of propulsion movements that could to pose a risk to the safety of personnel in the water in the vicinity of the Vessels stern. Before each dispatch, the Master should position the Vessel to minimise any rolling motion. A small section of the transom guardrail will be removed to allow for the safe dispatch of the trainee.

97. As an additional safeguard, a simple and clearly understood system of hand signals, agreed between the IC and the Master in advance, is also to be used to reinforce verbal communication.

    a. Thumbs up – OK to start drill.

    b. Thumbs down – Not OK to start drill.

    c. Flat hand, palm up repeatedly raised – speed up.

    d. Flat hand, palm down repeatedly lowered – slow down.

    e. Flat hand, palm facing Master – stop the drill or stop the drag (the latter would entail stopping the engines but not reversing any means of propulsion unless it has been unequivocally established that there are no persons in the water in the vicinity of the Vessels stern or quarter.

98. The USI/ USA carried in the RHIB is responsible for monitoring the safety and well-being of the students as they enter the water, and subsequently whilst they are in the liferaft(s) to detect the onset of hypothermia, severe seasickness or other incapacity, and to provide training advice. It is a requirement that each student is checked from close quarters at least once every 15 minutes or any lesser period determined by the ECO.

99. The chosen exercise area must be sufficiently clear of traffic lanes and navigational dangers to allow for the predicted tidal and wind drift of the liferafts for the intended duration of the Task, with a margin for error and safety. It should also be well clear of any outfalls from the shore or publicised areas of contaminated water.

100. Up to 24 students may be trained on each sea drill. Given sufficient safety boats, a maximum of 24 single-seat liferafts (usually no more than 16) or 3 multi – seat liferafts may be deployed at any one time.

GENERAL CONDUCT OF OPERATIONS

101. On passage to the exercise area, the students prepare for the drill and are briefed by the IC who is himself to be advised by the Master of the major Vessel regarding nautical aspects of the intended exercise. Responsibility for the safety of the Vessels and of all personnel onboard rests with the Master of the major Vessel. He may postpone or terminate the operation at any time if circumstances dictate such a course of action and in such circumstances, is to notify the Authority immediately.

PARACHUTE DRAGGING DRILLS

102. The para-dragging exercise is designed to enable trainees to experience the effects of being dragged through the sea when attached to a parachute which is being blown across the surface of the sea, following a low-level ejection. There are two dragging methods - Main Vessel Drag and RHIB Drag.

103. Main Vessel Drag. The normal method for the para dragging exercise is for the major Vessel, with a low freeboard or a stern platform (ideally visible to the Master), is used to drag the trainee by a specifically designed harness secured to the stern area of the Vessel. When cleared by both the Master of the Vessel and the IC, a USI (designated as the Dispatcher) is to control the trainee's entry into the water over the stern of the Vessel. The speed of dragging is controlled by the dispatcher via the Master and will normally be around 3-4 knots). If the trainee experiences distress during the drag, the Dispatcher is to indicate a reduction in drag speed or will operate the emergency release. The RHIB safety boat is to follow the drag, monitoring the trainee's performance and be ready to render immediate assistance if required.

104. RHIB Drag. Whilst not the usual method, a RHIB may be used to drag trainees away from the stern of the major Vessel where for whatever reason the major Vessel is unable to drag safely at a slow enough speed. When cleared by both the Master and IC, the Dispatcher is to control the trainee's entry into the water. The speed of dragging is controlled by the Instructor aboard the RHIB, who is also responsible for operating the

emergency release mechanism and rendering assistance if required. The exercise is carried out as follows:

a. After completion of their parachute drill, the trainee takes up a position on the edge of the transom, steadying themselves on the stanchion and facing toward the forward end of the Vessel.

i. When ready, the Master is to ensure that the propeller(s) has / have stopped rotating. He is not to permit any further movement of the propellers until he is certain it is clear to do so.

ii. The RHIB, rigged with the quick-release towing bridle attached to a 25ft towing line and float, closes one quarter of the Vessel and passes the towline and hook to the Dispatcher. This is attached to the liftwebs of the trainee's harness.

iii. On being given clearance by the Dispatcher, the RHIB moves in a straight line away from the stern, pulling the trainee into the water and then continuing with the drag. The trainee should allow himself to be pulled into the water rather than jump.

iv. The coxswain of the RHIB, under the advice of the USI/USA, must control its speed to allow the trainee to keep his face clear of the water. If a potentially dangerous situation develops, the USI/USA in the RHIB safety boat is to release the towline and assist the trainee in the water at once.

v. On completion of each drag, the RHIB is to recover the tow rope, harness and PSP (liferaft container), before coming back alongside for the next drill, or resuming surveillance of trainees in liferafts previously launched.

vi. After each trainee has been in the liferaft for the appropriate period, (30 minutes or more depending on weather conditions) he / she is to be recovered to the major Vessel. Recovery may be by the RHIB, but normally the exercise culminates with the trainees being winched up by a helicopter and transferred to a Helicopter Landing Site (HLS) on the nearby coastline or to the Vessel.

HELICOPTER SINGLE-SEAT AND HELICOPTER MULTI-SEAT DRILLS

105. The Helicopter single-seat and multi-seat drills are designed to simulate the disorientation and water turbulence effects likely to be experienced following a ditching. The Dispatcher controls the trainees' entry into the water after being cleared to do so by both the IC and Master.

106. Helicopter single-seat drills. The trainees jump into the water over the stern of the Vessel whilst the Vessel is travelling forward at a constant speed (up to 10 knots). The RHIB safety boat is to be in close proximity to the trainees as they jump from the dispatch Vessel and give a clear hand signal to the IC when all trainees have inflated their Life Preserver (LP). A maximum of 4 trainees are to jump into the sea on a single pass of the dispatch

Vessel. Given sufficient safety boats, the maximum number of single-seat liferafts to be deployed at any time is 24.

107. Helicopter multi-seat drill. Provided the sea conditions are suitable, all trainees are to enter the water from the dispatch Vessel (at 1 – 4 knots) in groups of up to 6 prior to the inflation of the liferaft. In poor sea conditions trainees are to enter the water in smaller groups. Multi-seat liferafts are not to be inflated until the trainees have swum to the side of the valise or container. The liferaft is not to be boarded until the Instructor in the RHIB safety boat has ascertained that no-one is trapped underneath. The righting drill for the liferaft will only be carried out if it has inverted on inflation.

FIXED WING MULTI-SEAT LIFERAFT DRILLS

108. These drills are designed to give practice in the deployment, righting, boarding and the use of multi-seat liferafts at sea following an aircraft ditching. Whenever practicable trainees conduct the drill with the appropriate liferaft carried on their aircraft type. There are two methods for initiating multi-seat liferaft drills, the Valise and the Pannier.

109. Valise Method. This method is for use with liferafts which are stowed in either a valise or container, inside an aircraft fuselage. Two trainees carry the valise or container to the stern of the dispatch Vessel and attach it to a nominated strongpoint using a painter line. The valise or container is thrown into the sea and the liferaft allowed to inflate. The painter line is to be extended by adding a section of floating rope to keep the liferaft clear of the Vessel. The DSTO staff at the stern of the dispatch Vessel may invert the liferaft to enable trainees to practice righting drills. The 2 trainees inflate their LP before entering the water, righting and boarding the liferaft. When all trainees are aboard the liferaft the painter line is cut by the trainees.

110. Pannier Method. This method is for use where liferafts are stowed inside aircraft panniers and released by remote means. The liferaft is inflated adjacent to the dispatch Vessel and attached to the Vessel by means of an extended painter line. Whenever possible the liferaft will be launched inverted to enable trainees to practice righting drills. Two trainees inflate their LP before entering the water, righting and boarding the liferaft. When all trainees are aboard the liferaft the painter line is cut by the trainees.

111. Righting drills for multi-seat liferafts require the most stringent safety precautions as it is the only time trainees may be out of sight of the DSTO Instructors. The following safety precautions are to be adhered to:

a. The RHIB safety boat with a SERE Instructor and the coxswain, is to be positioned on the side of the liferaft away from the dispatch Vessel. Where large liferaft are being righted, an additional DSTO staff member will be placed on the RHIB safety boat.

i. For the largest MS 26 and MS 33 liferafts, 2 trainees will be required to attempt to right the liferaft at any one time; if required the IC may send a third trainee to assist. No other trainees are permitted in the water. For MS 10 liferafts only one trainee will initially be required to attempt to right the liferaft.

ii. As the liferaft is righted, the instructor in the RHIB safety boat and the Dispatcher will indicate the number of trainees they can see clear of the liferaft. If it is suspected that a trainee may be trapped beneath the liferaft the RHIB safety boat is to move alongside, and the SERE Instructor will lift the side of the liferaft clear of the water. The instructor will then pull the liferaft round, balanced on the side of the RHIB safety boat until the trainee is freed.

iii. The SERE Instructor may enter the sea to assist the trainee, but only when the liferaft is held balanced on the RHIB safety boat by the crewman.

iv. If further trainees are required to replace exhausted 'righters', the first 'righters' are to be recovered into the RHIB safety boat before the new 'righters' start to right the craft.

v. If required, the RHIB safety boat may be required to assist the 'righters' by turning the liferaft into the wind. A maximum of 6 trainees may be on the painter line at any one time.

GENERAL

112. High Speed Passes. Once the trainees are secure in their liferaft, and if sea conditions are calm (Sea State 0 or 1), the major Vessel may be requested to make high speed passes at a safe distance from the liferafts to simulate rough weather conditions. When such passes are being carried out the safety boat must be underway and ready to offer assistance.

113. Recovery of Liferafts. A trained Authority person is to be transferred to the RHIB Support Boat to recover single-seat liferafts. Multi-seat liferafts are to be recovered by the use of mechanical means to the major Vessel and returned with the Vessel to harbour.

114. Recovery of Trainees. There are three main methods by which trainees may be recovered. They are as follows:

a. Winching into the helicopter and then transfer to the land using a Helicopter Landing Site (HLS). This is the preferred method.

i. Winching into the helicopter and lowering back into the liferaft or the sea before being recovered to the major Vessel by the RHIB Boat. This may be done individually for each trainee or after a group of trainees has been winched up into the helicopter.

ii. Winching into the helicopter and lowering back onto the aft deck of the major Vessel. This may be done individually for each trainee or after a group of trainees has been winched up into the helicopter.

NIGHT DRILLS

115. Night sea survival drills are only conducted as part of the DSTO Instructor course. Para-dragging is not permitted. In calm to moderate conditions singleseat liferaft trainees are

to jump into the water with the liferaft deployed. A maximum of 6 single-seats will be deployed at any one time.

116. Each safety boat is to be illuminated with a different colour cyalume to assist with night ID. These will be provided by DSTO.

117. Multi-seat liferaft 'righting' drills are only to be conducted in calm to moderate conditions and at the discretion of the IC. A maximum of three multi-seat liferafts are to be deployed at any one time.

TASKS 2.7.2.2, 2.3 AND 2.4 – SUPPORT TO SEA SURVIVAL TRAINING

SUPPORT TO SEA SURVIVAL TRAINING OPERATIONAL FLYING STATIONS, FLYING TRAINING STATIONS, AND JOINT HELICOPTER FORCE TASK REQUIREMENT

118. Operational aircrew undergo refresher sea-survival training in the form of liferaft drills as mandated in JSP 911. The drills are supervised by a DSTO qualified Unit SERE Instructor Maritime (USI(M)) and should be undertaken in the same manner as described under contract Task 2.7.2.1 All safety assessments and the division of roles and responsibilities have been based on the DSTO drill formats and any need to adopt a different approach to that described under 2.7.2.1 is to be addressed to DSTO and DMS.

CONDUCT OF THE TASK

119. The trainees and staff are embarked at a nominated location together with their equipment, which consists of single or multi-seat liferafts, immersion suits, helmets and para-dragging harness. They are to be conveyed to the selected exercise area which will normally be near to a SAR Helicopter Flight location to enable the trainees to be landed at the helicopter base or winched back on board the Vessel at the conclusion of the sea drill. The Task is to be conducted sufficiently clear of traffic lanes and navigational dangers to allow for predicted tidal and wind drift of the liferafts, with a margin for error and safety. On the way to the exercise area, the students prepare for the drill and are briefed by the IC who is himself to be advised by the Master of the Vessel regarding nautical aspects of the intended exercise. On arrival in the exercise area, the RHIB, manned by a suitably qualified and competent 2-man crew, must first be launched as a safety boat.

120. Before the exercise commences, the main engines of the Vessel may be stopped if the Master considers it safe to do so. After a final briefing from the training supervisor, and on receiving clearance from the Master, the Dispatcher will allow the students to enter the water with their liferafts; these may be either single-seat or multi-seat**.** Depending on weather conditions, trainees will spend at least 30 minutes inside their liferafts, the instructor in the RHIB safety boat will conduct a close quarter inspection of each liferaft at least every 15 minutes. The Master is to ensure that liferafts do not spread out over too large an area and the RHIB must be able to reach any trainee within 3 minutes. Both the RHIB safety boat and the major Vessel are to patrol among the drifting liferafts: the RHIB safety boat is to continue to give priority to this surveillance while the helicopter is winching trainees to the shore or the major Vessel. Empty liferafts (and associated equipment) are to be retrieved, care being taken to avoid damage to the fabric and fittings; rafts are to be deflated and securely stowed for the return passage to port.

121. Where possible, aircrew are to be embarked / disembarked via pontoons with gangways rather than vertical ladders.

122. A maximum of 12 single-seat dinghies or 2 multi-seat dinghies will be deployed at any one time; this may be increased to 24 single seat dinghies if a second major Vessel and its RHIB safety boat are available for safety cover. A combination of multi-seat and single-seat dinghies will not be launched at the same time without the prior approval of the Authority.

TASK 2.7.2.5 SUPPORT TO SEA SURVIVAL TRAINING – RNAS YEOVILTON

TASK REQUIREMENT

123. The procedural framework for Task 2.7.2.1 (in paragraphs 57 to 72 above) is to be used as guidance.

TASK 2.7.3.2 MARINE TARGET TOWING (MTT) - MARITIME SNIPER TRAINING (MST)

124. The following operating procedure is an extract from 'WILDCAT MARITIME FORCE (WMF) STANDING OPERATING PROCEDURE 28 - MARITIME SNIPER TEAM LIVE FIRING AGAINST CONTRACTOR TOWED TARGET'.

INTRODUCTION

125. Maritime Sniper Teams (MST) enable the airborne use of non-lethal force to counter-drug operations and the use of precision anti-personnel and non-lethal on-disabling fire to counter acts of piracy in specified operational theatres. In order to confirm the competency of 42 Cdo RM MST it is required to conduct live firings against a towed target.

AIM

126. To detail the procedures to be followed to ensure the validation process presents the greatest level of realism and provides all personnel involved a format to ensure safety at every stage.

TASK REQUIREMENT

127. A Vessel is to tow a 'Go Fast / Skiff' target in support of Maritime Sniper Training undertaken from Wildcat helicopters. The requirement may be called for up to 3 times a year, normally with up to 2 months' notice given and never less than 2 weeks. The aim of this Tasking is to allow snipers to practice their skills on a mobile marine target from a helicopter. Each training course may involve up to 6 snipers, with each pair undertaking 2 day and 1 night shoots, requiring up to 2 day and 1 night (Profile 2 and 3 only on NVG) 'Go-Fast' Target Towing Tasks.

AIRCREW ASSURANCE

128. Aircrew are trained in accordance with Authority policies and the appropriate Authority air course (Air Course 262 (Aircrew Maritime Sniper Training)). One of the aircrew must be

an Air Gunnery Instructor (AGI) in order to conduct the Range Conducting and Safety Officer roles (RCO and RSO).

MARINE SNIPER TEAM ASSURANCE

129. All 42 Cdo Royal Marine Sniper Teams will have conducted AGI covered shoots to the required standard in order to operate the M3M machine gun and the AW50 and LT129 sniper rifles from the cabin of a Wildcat Helicopter in accordance with training and operational requirements.

EXERCISE PREPARATIONS AND RESPONSIBILITIES

130. 815 Naval Air Squadron (NAS) Staff Warfare Officer (SWO) ensure that a suitable area for the Task is agreed and will issue the correct safety notifications in the form of a Notice To Airmen (NOTAM), obtain air clearance for the exercise, organise ammunition and weapons and appoint a Range Control Officer (RCO). 156. 815 NAS SWO shall provide the Master of the range Vessel with a written brief (format at Annex A with email contact addresses) and a verbal confirmation detailing the conduct of his intended operations ensuring that the Master of the Towing Vessel understands the nature and scope of the Task before proceeding with the Task. The target shall not be deployed until instructed by the helicopter.

131. The overall safe conduct of the Task is the sole responsibility of the RCO in the Wildcat Helo. The Master of the range / towing Vessel should advise the RCO on sea conditions, tow conditions, surface visibility, local sea traffic levels and may offer an opinion on whether it is safe to continue with the exercise and if he feels it unsuitable may terminate the Task.

132. The responsibilities of the RCO include:

a. Control of the range and the enforcement of range safety procedures.

b. The implementation of Clear Range Procedure (CRP) and Weapon Safety Trace.

c. Advising the Master of the towing Vessel of weapons events planned, the range extremities within which he is to operate and of relevant safety procedures.

d. Ensure familiar with the latest version of the Contractor's Operational Work Instruction and confirming that there is no conflict with this procedure or any significant increase in the level of risk associated with the Task.

133. The aircrew are responsible for:

a. Checking the preparation of the aircraft.

b. Ensuring the MST are fully briefed and updated on all aspects of the mission and safety procedures.

c. Controlling the operation of the firing, in terms of weapon safety and procedures.

134. The responsibilities of the Master of the range/towing Vessel include:

a. Ensure he has received a written brief prior to starting the exercise and has confirmed his acceptance of the plan.

b. Provide the towing Vessel in a seaworthy condition with sufficient fuel for the duration of the planned exercise.

c. Provide and deploy the target in accordance with the brief.

d. Advise the RCO on weather and sea conditions.

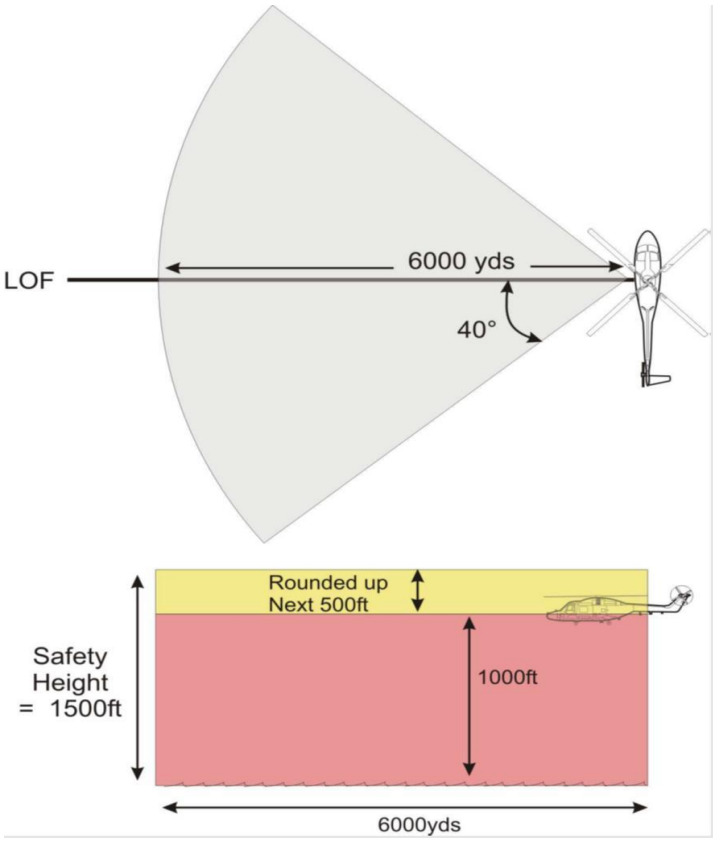
e. Keep the RCO informed of local sea traffic if he considers that there is a potential hazard.

f. Provide the RCO with clearance to engage the target in accordance with the communication procedures detailed below.

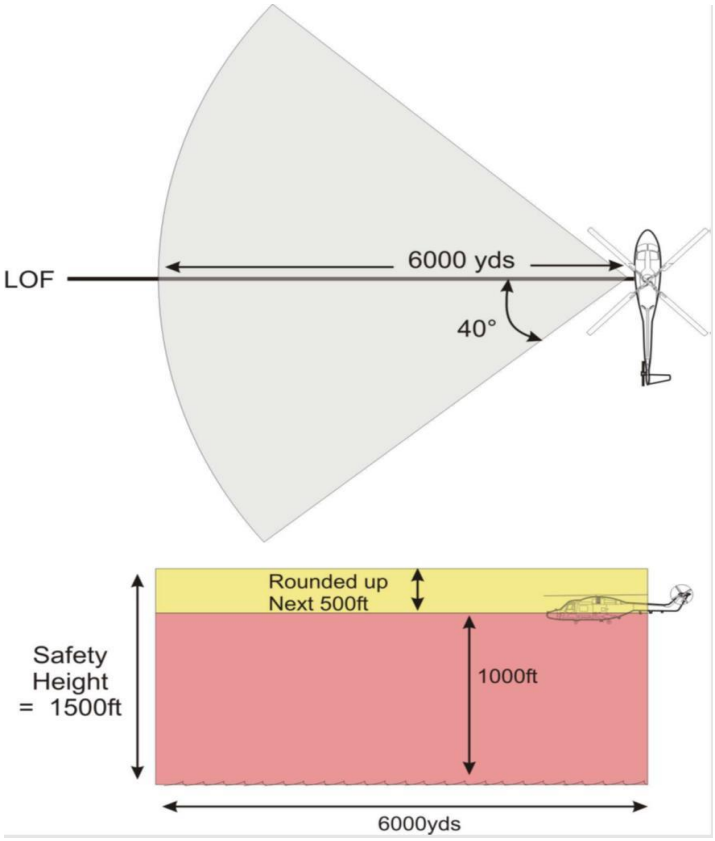
135. The aircraft commander or Air Gunnery Instructor (AGI) will act as the RCO and will be responsible for ensuring that CRP are observed at all times. The RCO is also the Range Safety Officer. The civilian Master of the range /towing Vessel is not qualified to undertake CRP; he can only advise the RCO of shipping fouling the range.

136. Masters of tange / towing Vessels or an RCO have no authority to order any Vessel to clear a sea range and can only request the non-exercise sea traffic to clear the range because of the essential nature of the military training. It is the responsibility of the RCO to ensure the safety trace for the weapon in use (each weapon safety trace below) is clear prior to commencing live firings.

12.7MM SAFETY TRACE OVER THE SEA:



7.62MM SAFETY TRACE OVER THE SEA:



CONDUCT OF THE TASK

137. The RCO is to brief the Master of the range Vessel as to the length of tow appropriate, the minimum is provisionally set at 500 metres for all events.

138. The aircraft will be fitted with the M3M on the port side and AW50 and LT129 from the starboard side. There are 2 sortie outlines which can be used; the first run will be profiles 2 and 3 below (this is solely for the snipers to experience firing the sniper rifles for the first time at a moving target, conducted both day and night) and the second profile will include all 3 (this Task is deemed the validation shoot and is conducted by day only). Tasks are generally divided into 2/3 live firing profiles.

PROFILE 1:

139. Shot Across the Bow (SATB) – Counter-Piracy.

140. The aircraft will position astern the Vessel at approximately 2000 yards, prepare, load and make ready with safety catch applied, the M3M with 100 rounds. The aircraft will contact the Vessel to confirm it is content for “In Dry” or “In Hot”. Once the aircraft has closed to 700 yards it will climb to a position 700 yards on the Vessel’s starboard beam at 700 ft. The M3M will be locked fully forward in azimuth (+55 degrees) which guarantees the towing Vessel will be outside of safety trace. The safety catch will only be put to fire once the towing Vessel is abaft the beam of the helicopter. Three bursts of 10-15 rounds will then be fired in lines ahead of the Vessel. This will be repeated for each sniper in the aircraft, totalling approximately 6 bursts and 100 rounds.

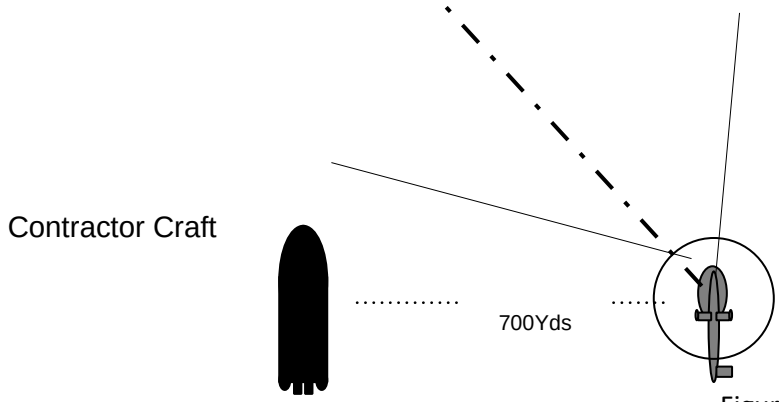


Figure 1: SATB Profile

PROFILE 2:

141. Non-Lethal Non-Disabling Fire (NLNDF) and Precision Anti-Personnel (PAPS) – Counter-Piracy.

142. With the LT129 7.62 mm sniper rifle, the aircraft will conduct an orbit of the towed target at 700 yards and 700' running in from the starboard quarter, ending in a final position 250 yards and 200' on the port side of the abeam the bow of the target. The sniper will fire 20 rounds of 7.62mm at the towed target; the first 6 rounds will be fired at the forward end of the target (fenders) (simulating the bow of the Vessel) and the remaining rounds will be fired at any location within the bounds of the target (simulating anti-personnel fire). The Task will then be repeated for the second sniper.

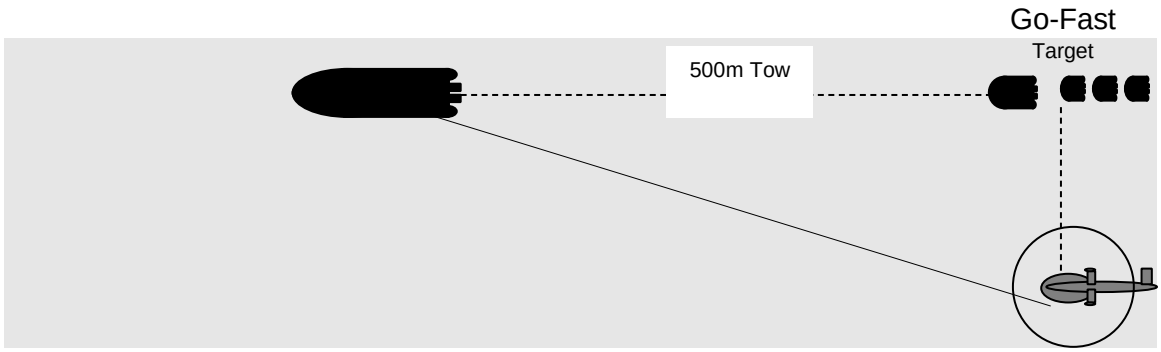


Figure 2: NLNDF/PAPS – Counter Piracy

PROFILE 3:

NON-LETHAL DISABLING FIRE (NLDF) – COUNTER-DRUGS

143. The aircraft will be manoeuvred to a position on the port side with the towed target in the 4 o'clock position. The sniper will then fire controlled shots at the towed target's exercise 'engine housing'.

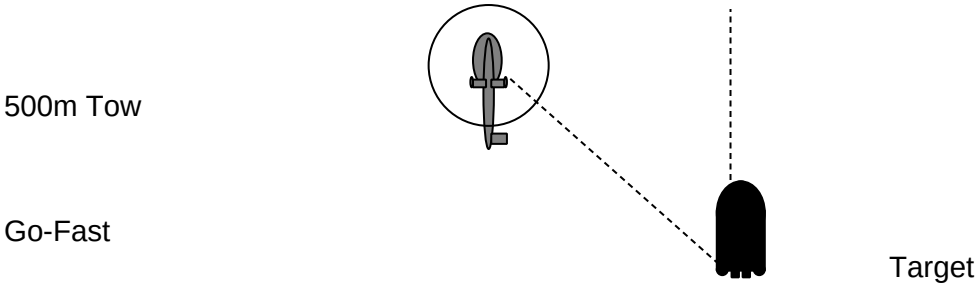


Figure 3: NLDF – Counter Drugs

COMMUNICATION PROCEDURES AND PROTOCOLS

144. On arrival the aircraft will establish comms with the Master of the range / towing Vessel on IMM Channel 71 (or other if detailed at the briefing stage). He will be instructed to stream the target. Whilst the Vessel is streaming, it is possible to continue training by undertaking the SATB profile. The following voice protocols will be adopted as standard for all firing Tasks:

a. Clearance Calls. Only the Master of the Vessel can give permission for the release of ordnance against his target therefore the RCO / Aircrew must request.

'C/S REQUEST CLEAR DRY'

'C/S CONDUCTING PROFILE XX, REQUEST CLEAR HOT'

b. Clearance Response. The Master will respond:

'C/S CLEAR DRY'

'C/S CLEAR HOT'

c. Once the Master has 'CLEARED' an aircraft to attack he is to observe its flight until the attack is complete. Whenever possible the Master should maintain RT silence between clearing an aircraft to engage the target and observing the end of that attack.

d. Having over-flown the target, the Aircraft Commander may call one of the following as appropriate:

'C/S OFF DRY, GUN SAFE'

'C/S OFF HOT, GUN SAFE'

e. Masters issuing clearance for a dry run are to apply the same parameters as for live/hot attacks unless on a pre-briefed event (e.g. Range Recce).

EMERGENCY PROCEDURES

145. If satisfactory 2-way radio contact between the towing Vessel and the RCO cannot be achieved or is lost, the exercise is to be terminated until the link is restored. If this event occurs after the exercise has commenced, the Master of the towing Vessel is to employ the following visual signals:

Flashing Red = 'Cease attack/firing'

Steady Red = 'Cancel the exercise'

146. The Master is to have the Aldiss signalling lamp (with Red shade attached) ready for instant use whenever his Vessel is engaged in Target Towing. Aircraft may signify radio failure by rocking during a fly-past.

147. If the Master perceives a risk to exist, he is to broadcast (on the radio frequency in use) the message 'STOP-STOP-STOP'. On hearing this call, the aircraft commander will immediately break off any attack, make switches safe, climb to a safe height and ascertain the nature of the problem and decide whether to continue with the sortie.

a. In the event of an aircraft accident the Master is to contact the following personnel:

i. 815 Sqn Duty Officer – 01935 453360

ii. 825 Sqn Duty Instructor – 01935 454083

iii. Local Coast Guard Unit.

iv. Yeovilton Air Ops – 01935 455497/8

EXERCISE LIMITATIONS AND CONTROLS

148. The following limitations and controls will apply:

a. All firing with the AW50 and LT129 shall only be conducted when the aircraft is abeam or abaft the beam of the towed target.

i. MST operations will take place in visual meteorological onditions only, within the limitations imposed in BRd 767 and the Weapon Visibility criteria (500 feet, 3 nm).

ii. All firing will be overseen by an RM Validator and an Air Gunnery Instructor from WMF.

iii. MST snipers must be in 2-way communications with the aircraft commander at all times.

iv. The weapon is only to be fired below the horizontal plane, with weapon arcs clearly defined during the briefing process.

v. The starboard cabin door only is to be used for sniping.

PERMITTED WEAPONS AND EVENTS

149. These TGs for Task 2.7.3.2 cover the use of the M3M machine gun, AW50 sniper rifle and LT129 7.62mm Sniper rifle for Maritime Sniper Training Tasks only.

SUMMARY

150. WMF supplies all of the initial training to 42 Cdo RM MST personnel and supports all continuation training prior to flights deploying. Therefore, there is a permanent requirement for these profiles and procedures to be standardised and reviewed on an annual basis to ensure they are kept current in accordance with present teaching.

151. This instruction shall be followed when conducting weapons training (Tasks) involving use of the Contractor towed target thus ensuring that the risk is reduced to As Low As Reasonably Practicable (ALARP) to achieve the aim. It will also ensure that the Master of the Towing Vessel is aware at all times of what evolutions are to be conducted during a live firing Task against a towed target.

PRE-FLIGHT TOWING VESSEL BRIEFING FORM

The following briefing form shall be provided to the Master of the Target Towing Vessel:

DATE OF EXERCISE	
HELICOPTER CALLSIGN	
START POSITION	
TIME ON TASK	
TIME OFF TASK	
INITIAL HEADING	
SPEED	
VHF CHANNEL AND BACKUP	
NUMBER OF SORTIES	
TASK CONTENT (Weapon, No of runs, No of interim landings, Re-positioning Info)	
POINT OF CONTACT DETAILS (Name, Phone No)	
ANY OTHER RELEVANT INFORMATION	

Briefing form to be sent to the Contractor's Operations Superintendent and, the lead Captain at Portland

TERMS AND ACRONYMS (MARINE SNIPER TEAM)

152. Task 2.7.3.2 specific terms and acronyms, Attack (Run or Pass). The profile flown leading to an actual or simulated release of ordnance against the target. An attack is qualified as follows:

a. Hot. A hot attack is one in which Practice Weapons are released either singly, pairs or in sticks of weapons.

b. Dry. A dry attack is one in which no weapon release is intended.

c. Cold. An Air Weapons Range (AWR) is said to be 'cold' when the range is available for training but has no current activity.

d. Event. An event is a single attack classified by both delivery profile and weapon type.

e. HIAT. Hazard Impact Area Trace is an area which contains the target and within which a weapon, the fragmentation pieces of the weapon after explosion or ricochet, or both, should fall, provided the weapon has been correctly aimed at the target and released within the parameters specified for that event. A HIAT is a safety trace of the area for use with range maps.

f. LOF. Line of Fire is a line extending from the barrel out to max effective range of the weapon.

g. No Spot. Term used to report an attack when the impact of a weapon (whose release is presumed) is neither seen nor heard.

h. Off. Having over-flown a target, the aircraft captain may call 'OFF HOT', 'OFF LIVE' or 'OFF DRY' as appropriate.

i. Stoppage. The failure of a gun to fire.

j. Strafe. Strafe is the firing of guns (fixed or free) at a target on land or water.

k. Surface Danger Area (SDA). The land and/or sea area that contains the range impact areas of weapon events permitted on the range.

TASK 2.7.4 - RANGE SAFETY CRAFT - CLEARANCE AND SAFETY DUTIES

153. The following paragraphs apply to Tasks 2.7.4.1 to 2.7.4.9, marine services support to Hythe, Lydd, Air Defence Ranges Manorbier and Penally Training Camp Range, Castlemartin AFTC, Lulworth, Straight Point, St Albans Head and Dodman Point ranges.

TASK REQUIREMENT

154. The primary Task of a range safety craft (RSC) when on station off a Sea Danger Area is to minimise the interference or delays to firing as a result of incursions by other Vessels into the Sea Danger Area. This is to be achieved by:

    a. Warning Vessels of imminent range activity.

    b. Instructing Vessels within the area to move out as quickly as possible.

    c. Intercepting Vessels heading for the area to try to divert them around the area, or if the right of transit is insisted upon, to persuade them to pass through as quickly as possible.

    d. Providing additional radar surveillance.

155. It is imperative that the preceding actions are undertaken in accordance with the extant range byelaws (where applicable) and after consultation with Range Control. Under no circumstances shall force be used.

156. The term Range Safety Craft (RSC) means any Vessel undertaking Range Safety Craft services in support of an Authority range with a Sea Danger Area.

GENERAL STATEMENTS APPLICABLE TO THE RANGE SAFETY TASK

157. Byelaws. Generally, when the Sea Danger Area has been activated no 'Vessel' or 'thing' (as defined in local byelaws) may enter the Area without authority or exemption (as defined in local byelaws). The exemptions generally apply to rescue or public services, but also cover the right of a Vessel to pass through the Sea Danger Area in the ordinary course of navigation and taking no longer than is reasonable for that purpose. This right of transit is liable to cause the majority of disruptions to firing.

158. Range Programmes. The intention to activate Sea Danger Areas will be given in firing programmes issued periodically by the appropriate Range Administration Unit. The programme will show the dates and firing times and, where applicable, the parts of the Sea Danger Area affected. Amendments will be issued as necessary, giving as much notice as possible. Masters of Range Safety Craft (RSC) should also confirm the next day's programme by radio or telephone a day in advance and on those ranges operating more than one Vessel Masters should confirm the number of Vessels required on the day with the Range Administration Unit (see Para 193 below).

159. Range Signals. The fact that a Sea Danger Area has been activated will be indicated by the display of red flags, or red lights in conditions of bad visibility or darkness, from the most appropriate points of land within the area affected. Details of signals shown by specific ranges can be found in the appropriate byelaws.

160. Operational Control. The Range Safety Craft are operated, manned and managed by the Contractor on behalf of the Authority. Functional authority, in respect of range Tasking, is vested in the Range Administration Unit for those contracted operations undertaken in

support of that range. Tasking control is then delegated to Range Control for the range being supported.

161. Maritime Emergency. In the event of an emergency at sea at which the Vessel's presence would be an asset, range duties should be waived in preference to attendance at the scene. Normally clearance from the Range Administration Unit to proceed in an emergency should be sought prior to leaving the range. However, the Master's first priority is to the safety of life at sea and in circumstances where this is a risk the Master should proceed immediately to the scene of the emergency notifying the range at the first opportunity.

162. Onboard Information. Each Master of an RSC must be in possession of:

a. These Instructions and any other specific instructions relating to a particular range they may be Tasked to support.

b. A copy of the byelaws for each range to be supported.

c. A copy of local instructions covering the use of range facilities.

d. An appropriate chart of the locality having marked on it the Sea Danger Area of each range to be supported.

e. A copy of the current firing programme.

163. The instructions at b, c and e above should be obtained from the Range Administration Unit concerned. The information required to mark charts as required by sub-paragraph d is given in the byelaws or can be obtained from the Range Administration Unit.

CONDUCT OF RANGE CLEARANCE / RANGE SAFETY TASKS

164. The Contractor shall ensure that the required RSC is on station in the times specified in the specific Line Items, or as Tasked by the relevant Range Administration Unit, to clear the Sea Danger Area before the notified start of firing. If the sea conditions or visibility are such that the safety of the RSC would be hazarded by putting to sea, then Masters are to notify the respective Range Control by telephone and keep in contact periodically during the day to advise on improving or deteriorating conditions.

165. Before proceeding to the Sea Danger Area, the Master of the Range Safety Craft shall inform the Range Control Officer of any defect which might affect its ability to undertake the range safety Tasking safely and effectively.

166. When on station off a Sea Danger Area, the RSC Master shall pay due regard to the following:

a. Contact by radio must be established with Range Control as early as possible and periodic checks made throughout the time on Task, not only to reaffirm communications and the craft position but also to confirm the safety of the craft and her crew.

b. Prior to firing the RSC is to carry out an inshore patrol to search the foreshore visually and report clear or otherwise to the Range Control. When firing is in progress the RSC is to be positioned outside the Sea Danger Area to cover the most likely approach routes of other Vessels (as advised in local instructions or by the Range Administration Unit). Alternatively, the RSC may be required to patrol the boundary of the Sea Danger Area; the Master is to ascertain the range's preferred method.

c. Throughout the period on station RSC are to maintain a visual and radar watch in order to give early notice of any likely incursions into the Sea Danger Area.

d. Subsequent movements of the RSC must be reported to the Range Control in order that he remains, at all times, aware of her location.

e. The RSC is not to enter the Sea Danger Area unless specifically requested to do so by the Range Control. However, before complying with any such request the RSC is to ask the Range Control to confirm that all firing has ceased on those ranges with a template impinging on the segment of the Sea Danger Area through which it is intended to transit.

i. RSC are not to depart the range unless released by the Range Control (except when responding to a maritime emergency).

ii. Whilst on station the Range Control must be notified without delay in the event of failures or reductions in serviceability to any items of equipment which affect the RSC's operational capabilities. In the event of a total communication failure whereby the RSC has no recourse to any other frequency on VHF, MF, HF or mobile telephone the Master is to proceed to the nearest accessible port (or other point of communication such as another Vessel) to inform the range prior to returning to berth.

167. The RSC is to display the following when on duty:

a. Red flag at the mast head.

b. Signal Flags on the Jackstay to denote NE and No 4.

c. 'RANGE SAFETY', in black letters on a fluorescent orange / red background port and starboard of the wheelhouse.

d. Day-glow orange cabin roof with the craft's Call Sign in black lettering.

e. Appropriate navigation lights at night or in bad visibility.

168. In the event that weather conditions deteriorate or threaten to deteriorate to such an extent that the RSC or crew are likely to be placed at risk, the Master must use his judgement as to when and where to seek a Safe Haven. He must inform the Range Control accordingly.

VESSELS IN SEA DANGER AREA - MITIGATING CIRCUMSTANCES

169. It must be borne in mind that Masters of other Vessels may not be aware of the Sea Danger Area or its purpose, there may also be a language problem, or the Master may be operating under some time / tide constraint or other maritime difficulty.

170. Some Vessels may disclaim knowledge of the byelaws (Para 190) and insist on completing their immediate Task of recovering or laying nets etc., thus extending the time that firing is disrupted.

171. In bad weather conditions or other special circumstances (e.g. an intruder with an unsuitable boat or inexperienced crew) care must be taken not to endanger life by insisting that a Vessel changes course to move out of the Sea Danger Area. If necessary, the assistance of a tow may be offered but it must be made clear that this is at the risk of the Master of the Vessel to whom the tow is offered. Before offering a tow, consult with the Range Control.

CHALLENGES, LOGGING AND REPORTING ENCOUNTERS

172. Procedures for Warning Offenders. Considerable tact and courtesy is required on the part of the Master of the RSC to get his message across without causing offence. Thus it is most important that any offender is warned strictly in accordance with procedures which will be recognised in Court should it be necessary to prosecute him / her, and also that such warning is given in a courteous manner. Any dealings with an offender must be properly logged (in accordance with paragraph 207).

173. Reasons for Logging. The majority of Masters of Vessels encountered in or near the Sea Danger Area will co-operate by moving out of, or transiting through, the Sea Danger Area reasonably quickly but some tend to be regular offenders. It is therefore important that ALL encounters are properly logged in order that:

a. Regular offenders are identified and can be warned by the appropriate Range Control accordingly.

b. Full details can be passed to the Range Control of Vessels refusing to move out of the Sea Danger Area or delaying response to a challenge or when failing to comply with a request to keep clear of the area without good reason.

c. Early warning of the situation can then be given to the Police or other authorities and follow up action taken with regard to taking statements from witnesses etc. In order to assist Masters and Range Control the Report format at Annex A should be used; Masters should expand on this in their log.

174. Information to be Logged. The following information is to be logged and passed to the Range Administration Unit when called for:

a. Name and class/type of Vessel, registration number and port of registry.

b. Name and address of owner / Master or person in charge (if possible; when Vessel refuses to agree or ignores requests to avoid or clear Sea Danger Area).

c. Activity upon which engaged.

d. Position at which intercepted.

e. Time at which intercepted.

NB: IT IS PARTICULARLY IMPORTANT THAT AN ACCURATE POSITION OF THE OFFENDING CRAFT IS ESTABLISHED AND THE MEANS BY WHICH THE POSITION WAS OBTAINED AND AFFIRMED.

175. Standard Challenges. To cater for these circumstances and to avoid any possibility of claims of discourtesy, a set series of challenges has been prepared and is to be used whenever the RSC approaches a Vessel within or about to enter the Sea Danger Area. These challenges are contained in Para 196 below and must be used as appropriate to the circumstances. It is important that records are maintained of the following in addition to that listed above:

a. The person making the challenge and by what means (e.g. radio or loudhailer).

b. The form of challenge.

c. The response to the challenge (verbal, gesture and action to comply or otherwise).

d. Relevant times, to include when the challenge was first made and when the offending Vessel cleared the Sea Danger Area.

e. The position of the Vessel at the time of challenge (within the Sea Danger Area or approaching it).

176. In the event that a Vessel does not comply with a request to clear the Sea Danger Area, steps may be taken by the Range Administration Unit, in accordance with byelaws, to take the offender into custody. In any event Masters of RSC must report each stage in the proceedings to Range Control so that appropriate advice and guidance can be obtained and given.

177. A report of all major incidents whilst on range safety duties should be submitted in writing to the Range Administration Unit using the format in Para 195 below.

178. Secondary Task Requirement. These consist of such other duties as may be required by the Range Control which are included within the SOR and are within the capabilities of the craft.

LIAISON

179. Masters of RSC are to maintain a close liaison with the Range Control and are welcome to visit the Range Administration Unit or a Range Officer of a range being supported at any time by prior arrangement. As a result of daily communication on the radio, relations with the Range Control should be good; any problem in this respect must be reported to the Range Officer concerned or the Range Administration Unit.

REPORT OF FORMAL CHALLENGE

180. The following format shall be used to record and report a formal challenge to a Vessel/Vessels in or approaching the Sea Danger Area. This format permits several incidents to be recorded on the one sheet, or can be used for a single incident as convenient to Masters or Range Control.

Date	Time	RSC	Details of Vessel Challenged	Response by Vessel	Remarks

STANDARD CHALLENGES TO BE USED BY THE MASTER OF A RANGE SAFETY CRAFT

181. The challenges may be preceded by normal courtesies such as 'Good Morning', 'Where are you bound' or comments on the weather etc., but when delivered the appropriate challenge(s) must be given formally and as shown below:

FIRST CHALLENGE

182. **Option A** - Vessel in the Sea Danger Area.

'You are in the Sea Danger Area of the (name of range) Ministry of Defence live firing Range. Under the authority of byelaws I must request that you clear the area immediately by .....' (give appropriate directions to take the Vessel out of the area as quickly as possible).

183. **Option B** - Vessel approaching the Sea Danger Area and able to avoid it.

You are approaching the Sea Danger Area of the (name of range) Ministry of Defence live firing Range. Under the authority of byelaws I must request that you avoid the area by .....' (give appropriate directions to keep the Vessel clear of the area).

184. **Option C** - Vessel approaching the Sea Danger Area when circumstances are such that a transit is the most appropriate course.

You are approaching the Sea Danger Area of the (name of range) Ministry of Defence live firing Range. Under the authority of byelaws I must request that you pass through the area as quickly as possible by .....' (give appropriate directions to ensure the quickest possible transit including use of the Vessel's engine if available).

SECOND OR SUBSEQUENT CHALLENGES

185. These are to be used if the Vessel fails to comply with the first challenge.

"I have already given you a formal request to move out of the Sea Danger Area/avoid the Sea Danger Area/pass through the Sea Danger Area as quickly as possible. The fact that

you have not responded appropriately to my request has been reported to the Range Administration Unit. I must warn you that you are liable to legal proceedings under byelaws, which may result in the confiscation of your Vessel if you do not comply with my instructions which I repeat ....." (here repeat the first challenge).

TASK 7.2.4.6 RANGE SAFETY CRAFT CLEARANCE AND SAFETY DUTIES

RN NAVAL GUNFIRE SUPPORT RANGE, LULWORTH TASK REQUIREMENT

186. A Naval Gunfire Support (NGS) range is established at the eastern end of Lulworth Sea Danger Area, off St Alban's Head. Land targets are represented by an open complex of 3 buoys. A Range Safety Craft is to monitor and patrol the approaches to the NGS range during warship firings. The Vessel is to clear the Sea Danger Area prior to firing, to prevent intrusion into the area when firing is in progress, or, if there has been an intrusion, to clear the Sea Danger Area as quickly as possible to minimise possible interruptions to the firing programmes. This Task is generally undertaken in conjunction with the duties of the Range Safety Craft stationed on the eastern end of Lulworth Range, when Lulworth Range is active.

CONDUCT OF TASK

187. A Vessel is to be allocated by the Contractor and positioned as directed by the Warship or the Range Safety Officer (RSO). The Range Safety Craft will initially clear the range and subsequently endeavour to prevent interruption to firings by patrolling the Sea Danger Area perimeter and intercepting / escorting stray Vessels from the area. Naval regulations require that an impact area of radius 1,000 yards is to be confirmed as clear before a firing run is ordered. The naval gunfire line from which the warship will fire will be situated within Practice and Electronic Device D021.

188. Generally a Range Safety Officer and Spotter are provided by 148 Battery Royal Artillery (RA) and stationed on St Alban's Head. The Range Safety Officer authorises commencement of firing when the range is clear, though ultimate responsibility for safety of the firing rests with the commanding officer of the firing ship.

189. The call sign for the RSO is 'Range Safety' and that for the Range Safety Craft, 'Safety Boat'. Intercommunication between the Range Safety Craft, the RSO and the warship is to be on VHF Channel 10 and firing is not permitted unless clear two-way communication is established between all three parties.

190. The buoys are not to be used for any gunnery other than NGS. A weekly inspection of the buoys is to be undertaken by the Range Safety Craft crews and their condition recorded in a suitable format. In particular any signs of damage likely to have resulted from gunfire is to be recorded and reported immediately to the Authority.

191. Booking details will be passed to the Contractor by the warship or Authority Representative. Any warship turning up without prior notification is to be supported where Range Safety Craft are available and the warship politely prompted about the booking process contained within Fleet Operating Orders (FLOOs). The Contractor is to advise the Authority of any instance of a warship turning up without a prior booking; he in turn will advise the FOST Eastern Area Manager.

192. Details of the booking process and general controls are identified in BRd 9424(2), Fleet Operating Orders (FLOOS) Part 2, Section 2 – Exercise Facilities and Related Instructions para 0122.