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Safety Authority

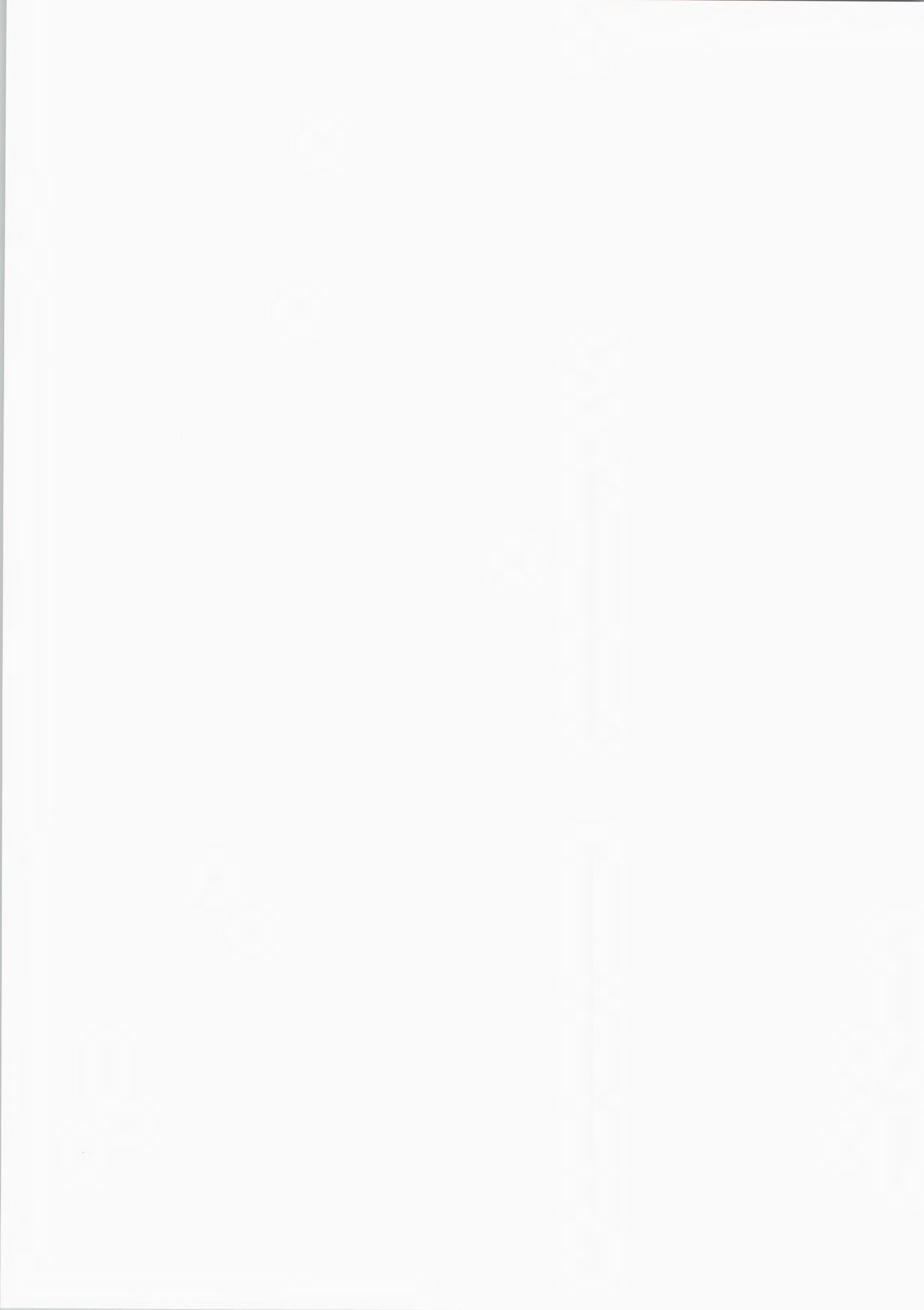


Safety Investigation Report

HORSEA ISLAND BSSC - NSI

18 October 2019

Defence Accident
Investigation Branch



Defence Accident Investigation Branch

Enhancing safety through investigation

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For all enquiries:

DSA Sec Comms

Juniper (Level 0) Wing 1 # 5004

Neighbourhood 5 Abbeywood North

BRISTOL

BS34 8QW

Tel Civ: [REDACTED]

Email: [REDACTED]

| | |
|----------------------|--|
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| Issue: | 1 |
| Date: | 22 Jan 2021 |
| Investigators | Lt Cdr [REDACTED], WO1 [REDACTED] (Assisted by PO [REDACTED]) |
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| Approved by: | DG DSA |

Probability expressions.

The use of probability expressions in this Non-Statutory Inquiry (NSI) follows DAIB SOP 514 “Probabilistic Language” (see Figure 1). The purpose of introducing probability expressions is to facilitate standardised communication of uncertainty in DSA Accident and Incident reporting.

The choice of expression remained a matter of judgement by the Investigation Team and provided an indication of meaning based on common usage and understanding. The terminology should therefore be thought of in terms of relative meaning within the report rather than a precise measurement of probability.

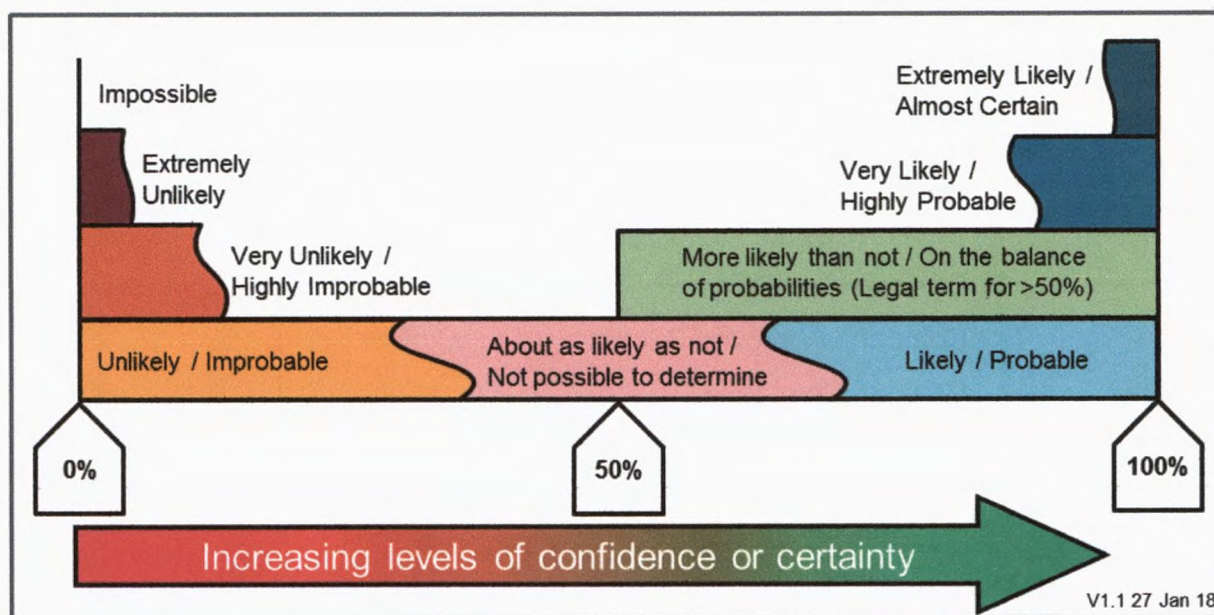


Figure 1: Probability expressions used in this Non-Statutory Inquiry

Glossary

| | |
|------------|---|
| 1PA | 1 st Party Audit |
| 1SL | First Sea Lord |
| 2PA | 2 nd Party Audit |
| 3PA | 3 rd Party Audit |
| ACNS(T) | Assistant Chief of Naval Staff (Training) |
| ACOS AFSUP | Assistant Chief of Staff Afloat Support |
| AD | Approved Doctor |
| ADG | Approved Doctors Guidance |
| ADM | Approved Doctors Manual |
| ALARP | As Low As Reasonably Practicable |
| AoR | Area of Responsibility |
| AP | Accountable Person |
| ASER | Automated Significant Event Reporting |
| BA | Breathing Apparatus |
| BAR | Bi-annual Assurance Reports |
| BMI | Body Mass Index |
| BMT | Babcock Marine Training Ltd |
| BRd | Book of Reference digital |
| BSSC | Basic Sea Safety Course |
| CBRNDC | Chemical Biological Radiological Nuclear and Damage Control |
| CFTN | Coaching for Training Network |
| cm | Centimetres |
| CO | Commanding Officer |
| CoAD | Company Approved Doctor |
| CofC | Chain of Command |
| CPO | Chief Petty Officer |
| CPR | Cardiopulmonary Resuscitation |
| DACOS | Deputy Assistant Chief of Staff |
| DAIB | Defence Accident Investigation Branch |
| DC | Damage Control |
| DDH | Delivery Duty Holder |
| DFRS | Defence Fire and Rescue Service |
| DG DSA | Director General Defence Safety Authority |

| | |
|---------|--|
| DH | Duty Holder |
| DI | Duty Instructor |
| DMICP | Defence Medical Information Capability Programme |
| DMS | Defence Medical Services |
| DMSR | Defence Medical Services Regulator |
| DoB | Date of Birth |
| DP | Deceased Person |
| DRIU | Damage Repair Instructional Unit |
| DSA | Defence Safety Authority |
| DSAT | Defence Systems Approach to Training |
| DTTT | Defence Train the Trainer |
| EEBD | Emergency Escape Breathing Device |
| EFSSC | Embarked Forces Sea Safety Course |
| ENG 1 | Examination Nautical Grade 1 |
| FFM | Firefighting Module |
| FOAP(T) | Fleet Outsourcing Activities Project (Training) |
| FOC | Full Operating Capability |
| FOST | Flag Officer Sea Training |
| FTRS | Full Time Reserve Service |
| GP | General Practitioner |
| GSLJ | General Service Life Jacket |
| HF | Human Factors |
| HMS | Her Majesty's Ship |
| HQ | Headquarters |
| HR | Human Resources |
| H&S | Health and Safety |
| HSE | Health and Safety Executive |
| HSEP | Health, Safety and Environmental Protection |
| IBO | Incident Board Operator |
| ID | Identity |
| IG | Inspector General |
| INM | Institute of Naval Medicine |
| IOC | Initial Operating Capability |
| ISI | Immediate Ships Investigation |
| ISSC | Intermediate Sea Safety Course |

| | |
|----------|---|
| JMES | Joint Medical Employment Standard |
| JPA | Joint Personnel Administration |
| JSP | Joint Service Publication |
| MCA | Maritime and Coastguard Agency |
| MED DIV | Medical Division |
| MED TECH | Medical Technician |
| MFD | Medically Fully Deployable |
| MNTB | Merchant Navy Training Board |
| MO | Medical Officer |
| MOD | Ministry of Defence |
| MSB | Maritime Safety Board |
| MSN | Merchant Shipping Notice |
| MTS | Management of Training System |
| MWS | Maritime Warfare School |
| NAAFI | Navy Army and Air Force Institute |
| NCHQ | Navy Command Headquarters |
| NHS | National Health Service |
| NJM | New Joiners Medical |
| NLIMS | Navy Lessons and Information Management System |
| NoK | Next of Kin |
| NSI | Non-Statutory Inquiry |
| NSOR | Navy Safety Occurrence Report |
| OC WSTG | Officer Commanding Warfare Support Training Group |
| ODH | Operating Duty Holder |
| OFA | Operational Fitness Assessment |
| OH | Occupational Health |
| OHAssist | Optima Health Assist |
| OHS | Occupational Health Standard |
| OiC | Officer in Charge |
| OOSS | Once Only Survival Suit |
| PCSPS | Principal Civil Service Pension Scheme |
| PMA | Principal Medical Advisor |
| PPE | Personal Protective Equipment |
| PTG | Phoenix Training Group |
| QA | Quality Assurance |

| | |
|------|--|
| RFA | Royal Fleet Auxiliary |
| RN | Royal Navy |
| RTC | Respirator Training Centre |
| RtL | Risk to Life |
| ■ | ■ |
| SDH | Senior Duty Holder |
| SG | Surgeon General |
| SO1 | Staff Officer grade 1 |
| SOP | Standard Operating Procedure |
| SofS | Secretary of State |
| SP | Service Person |
| SQEP | Suitably Qualified and Experienced Personnel |
| SSM | Sea Survival Module |
| SST | Sea Safety Training |
| SSTC | Sea Survival Training Centre |
| STCW | Standards of Training Certification and Watchkeeping for Seafarers |
| TEMs | Targeted Employment Modules |
| TQMS | Training Quality Management System |
| TRiM | Trauma Risk Management |
| UK | United Kingdom |
| ■ | ■ |
| USA | Urgent Safety Advice |
| WWL | World Wide Laundry |

1 Executive summary

On 18 October 2019 a fatality occurred during the Sea Survival Module (SSM)¹ phase of a Basic Sea Safety Course (BSSC) at Horsea Island, Portsmouth; the casualty involved in the incident, Mr [REDACTED], was employed as a Steward by the Royal Fleet Auxiliary (RFA). The casualty collapsed adjacent to Horsea Island lake² after attempting Drill 1³ of the SSM and was pronounced dead at the scene. The Defence Accident Investigation Branch (DAIB) was deployed and carried out Triage activity. The Director General of the Defence Safety Authority (DG DSA), upon review of the DAIB Triage Report, decided that the DAIB would carry out a Non-Statutory Inquiry (NSI).

Evidence confirmed that the Deceased Person (DP) was taking medication for an underlying [REDACTED] condition at the time of the incident. It was almost certain that the DP did not disclose his actual date of birth (DoB), his underlying medical conditions, or the prescribed medication he was taking to the RFA or the Maritime and Coastguard Agency (MCA) Approved Doctor (AD) during his last Examination Nautical Grade 1 (ENG 1) medical examination. The DP's DoB was established as 30 April 1947 confirming his age of 72 years; he was the oldest serving member of the RFA at the time of his death. Evidence confirmed that the DP had declared his age as being 59. The DP's death certificate recorded a cause of death as [REDACTED]. On 13 November 2009 a similar fatality also occurred during the BSSC SSM at Horsea Island. The deceased person involved in this earlier incident was also employed as a Steward in the RFA and the subsequent investigation identified only two recommendations, neither of which were safety related.

This NSI did not identify any significant evidence to indicate that any effective safety barriers had been established either by Royal Navy (RN) Command, RFA Command or by the RN Medical Division (MED DIV) to mitigate the risk of civilians undertaking the same training as RN personnel. They had been assessed broadly to the same standards as Regular Service personnel⁴ during the 10 years between these two very similar fatalities. At the time of this latest occurrence, the RFA had no organic Occupational Health (OH) organisation and relied on the Civil Service contract with OHAssist; regulatory and assurance oversight of the medical delivery to RFA employees was also found to be deficient. The scope, and the current periodicities, of the assurance activities pertaining to the delivery of the SSM at Horsea Island were also found to be insufficient.

The RFA was not part of, but supported, the Naval Service; the assumed RN / RFA collegiate relationship gave some mutual benefits due to uniformity with working environments, training requirements, ships, language and institutionalised uniformed roles at sea. However, there were fundamental differences between the RN and RFA primarily in the management of risk, employment standards, fitness standards, employment terms and conditions, OH standards, OH provision, medical standards and upper age limits; these differences were all identified by this NSI. Evidence also indicated that, should an objective measurement of aerobic fitness be employed by the RFA, coupled with the current MCA medical examination (ENG 1), it was very likely that 'at risk RFA employees' would be identified and the appropriate medical and / or OH actions could then be employed to manage and mitigate the risk where necessary.

¹ The SSM was one of five BSSC elements.

² Horsea Island lake was utilised by the Maritime Warfare School to deliver the SSM.

³ The BSSC SSM had two practical elements, Drill 1 and Drill 2.

⁴ Defined as UK military personnel only.

Contents

| | | |
|-------|---|-----|
| 1 | Executive summary | vii |
| 2 | Factual information | 4 |
| 2.1 | Introduction | 4 |
| 2.2 | Narrative of events | 4 |
| 2.2.1 | Pre-incident phase | 5 |
| 2.2.2 | Incident phase | 6 |
| 2.2.3 | Post-incident phase | 11 |
| 2.3 | Previous Basic Sea Safety Course fatality | 13 |
| 2.4 | Previous Intermediate Sea Safety Course near miss | 13 |
| 2.5 | Equipment | 13 |
| 2.5.1 | Sea Survival Module life rafts | 13 |
| 2.5.2 | Intrepid Once-Only Survival Suit | 14 |
| 2.5.3 | Sea Survival Module lifejackets | 14 |
| 2.5.4 | HeartStart FR2+ defibrillator | 16 |
| 2.5.5 | Fazzini CPR face mask | 16 |
| 3 | Analysis | 18 |
| 3.1 | Introduction | 18 |
| 3.1.1 | Available evidence | 18 |
| 3.2 | Methodology | 18 |
| 3.2.1 | Accident factors | 19 |
| 3.2.2 | Main lines of enquiry | 19 |
| 3.3 | Chronology of events | 20 |
| 3.4 | The Deceased Person's Career History | 22 |
| 3.5 | The Royal Fleet Auxiliary Service | 25 |
| 3.5.1 | The Role of the Fleet Auxiliary flotilla | 25 |
| 3.5.2 | Royal Fleet Auxiliary Accountable Person and Duty of Care | 26 |
| 3.6 | Maritime and Coastguard Agency | 29 |
| 3.6.1 | Examination Nautical Grade 1 | 29 |
| 3.7 | Royal Navy and Royal Fleet Auxiliary medical fitness and employment standards | 34 |
| 3.8 | Royal Navy and Royal Fleet Auxiliary surface flotilla Sea Safety Training (SST) | 37 |
| 3.8.1 | Royal Fleet Auxiliary outsourced Sea Safety Training | 38 |
| 3.8.2 | Fleet Outsourcing Activities Project (Training) | 38 |
| 3.9 | Maritime Warfare School | 38 |
| 3.9.1 | Maritime Warfare School Phoenix | 39 |
| 3.9.2 | Maritime Warfare School Triumph | 44 |
| 3.9.3 | Royal Fleet Auxiliary attendance at Maritime Warfare School Phoenix | 45 |
| 3.10 | Deceased person's fitness and health | 47 |

| | | |
|--------|---|----|
| 3.10.1 | Royal Fleet Auxiliary Occupational Health | 52 |
| 3.10.2 | Royal Fleet Auxiliary medical governance and assurance | 54 |
| 3.10.3 | Defence Medical Services Regulator..... | 55 |
| 3.10.4 | RFA FOST Training Standards..... | 58 |
| 3.11 | Pre-incident..... | 59 |
| 3.12 | Incident phase..... | 62 |
| 3.13 | Post-incident | 64 |
| 3.13.1 | Post-incident management..... | 68 |
| 3.14 | Health, safety and environmental aspects | 69 |
| 3.14.1 | Horsea Island lake water quality..... | 71 |
| 3.15 | Previous Royal Fleet Auxiliary incidents during Sea Safety Training | 71 |
| 3.15.1 | Previous fatality during Basic Sea Safety Course..... | 71 |
| 3.15.2 | Previous Royal Fleet Auxiliary near miss during Intermediate Sea Safety Course..... | 72 |
| 3.16 | MWS Phoenix Training Group Sea Safety Training assurance..... | 73 |
| 3.17 | Human Factors..... | 75 |
| 3.18 | Defence Fire and Rescue Service and MOD Police fitness assessment strategies | 76 |
| 4 | Conclusion | 78 |
| 4.1 | NSI Conclusion | 78 |
| 5 | Summary of findings and recommendations..... | 80 |
| 5.1 | Findings | 80 |
| 5.1.1 | Causal factors | 80 |
| 5.1.2 | Contributory factors | 80 |
| 5.1.3 | Aggravating factors | 80 |
| 5.1.4 | Other factors | 81 |
| 5.1.5 | Observations..... | 82 |
| 5.2 | NSI Safety Recommendations | 84 |
| 5.2.1 | Organisation..... | 84 |
| 5.2.2 | Assurance | 85 |
| 5.2.3 | Risk management | 86 |
| 5.2.4 | Training and supervision | 86 |
| 5.2.5 | Medical..... | 86 |
| 5.2.6 | Communication | 87 |
| 6 | References..... | 88 |
| 7 | Distribution | 89 |
| 7.1 | Action: | 89 |
| 7.2 | Copy to:..... | 89 |

Figures

Figure 1: Probability expressions used in this Non-Statutory Inquiryii

Figure 2: SSM PPE with inflated GSLJ 9

Figure 3: Incident phase of SSM Drill 1 9

Figure 4: SSTC slipway..... 11

Figure 5: 8-man life raft..... 14

Figure 6: 25-man life raft..... 14

Figure 7: Once Only Survival Suit 14

Figure 8: Full body thermal layer..... 14

Figure 9: GSLJ..... 15

Figure 10: Cosalt Premier life preserver..... 15

Figure 11: GSLJ pouch 15

Figure 12: HeartStart FR2+ defibrillator..... 16

Figure 13: HeartStart FR2+ front panel 16

Figure 14: Fazzini CPR face mask..... 17

Figure 15: MWS and HMS EXCELLENT structure of SST 39

Figure 16: Firefighting PPE 41

Figure 17: Personal sea survival equipment..... 41

Figure 18: BSSC timetable..... 42

Figure 19: SST Serials conducted at Horsea Island 44

Figure 20: MWS PTG Medical Self-Declaration form with DP’s responses..... 48

Figure 21: MWS and HMS EXCELLENT structure of SST (repeated)..... 70

Figure 22: Summary of factors 84

Tables

Table 1: Chronology of events 21

Table 2: SSTC defibrillator log 66

2 Factual information

2.1 Introduction

Throughout this report all times are LOCAL (BST) unless stated. The following information was established from witness statements and physical evidence gathered during the investigation.

On 18 October 2019 a fatality occurred during the Sea Survival Module (SSM)⁵ of a Basic Sea Safety Course (BSSC)⁶ at Horsea Island, Portsmouth; the casualty was a Royal Fleet Auxiliary (RFA) employee. The casualty successfully exited the water and then collapsed adjacent to Horsea Island lake⁷ after attempting Drill 1⁸ of the SSM. The casualty was initially tended to by BSSC staff, then by ambulance paramedics and an air ambulance doctor, and was pronounced dead at the scene. The casualty involved in this incident was identified as Steward [REDACTED], and will be referred to as the Deceased Person (DP) from this point onwards.

The Defence Accident Investigation Branch (DAIB) was notified on the morning of 21 October 2019 of a fatality that had occurred during the delivery of the SSM. The DAIB deployed three investigators to carry out Triage activity. They reviewed the organisational aspects relevant to the Command and Control of the BSSC in order to identify any urgent safety issues. The Triage Investigating Officer did not identify any practices which posed a significant or enduring Risk to Life (RtL) and, as such, there was no recommended Urgent Safety Advice (USA). The Director General of the Defence Safety Authority (DG DSA), upon review of the Triage Report⁹, decided that the DAIB would investigate the occurrence through the conduct of a Non-Statutory Inquiry (NSI).

2.2 Narrative of events

All RFA employees were mandated to complete both the BSSC¹⁰ and the Intermediate Sea Safety Course (ISSC) which were delivered by the Maritime Warfare School (MWS)¹¹. The DP was enrolled on to a BSSC at MWS Phoenix in Portsmouth by the RFA Human Resources (HR) and Training Office; the BSSC commenced on 14 October 2019. The DP had previously attended and completed BSSCs at MWS Phoenix in November 2009¹² and October 2014¹³. The DP was witness to a very similar incident which also led to a fatality of an RFA employee on the November 2009 course.

⁵ The Sea Survival module (SSM) was one of five BSSC elements.

⁶ BSSC was a 5 day course.

⁷ Horsea Island lake was utilised by MWS to deliver the SSM.

⁸ The SSM had two practical elements; Drill 1 and Drill 2.

⁹ Evidence reference - DAIB/19/018/2189.

¹⁰ Evidence reference - DAIB/19/018/2215.

¹¹ MWS Mission Statement: To inculcate specialist Warfare, Weapon Engineering and CBRNDC skills to its trainees to enable them to contribute effectively to the delivery of UK Maritime Power.

¹² Evidence reference - DAIB/19/018/6008.

¹³ Evidence reference - DAIB/19/018/2028.

2.2.1 Pre-incident phase

The following personnel were witness to the pre-incident phase.

- a. **MWS Phoenix Training Group (PTG) staff member – RFA 1.** RFA 1 was an RFA employee appointed as an MWS Phoenix Instructor. RFA 1 was the nominated Line Manager¹⁴ for all RFA employees attending BSSC and ISSC at MWS Phoenix. RFA 1 had been employed as an MWS Phoenix Instructor for 6 years.
- b. **Sea Survival Training Centre (SSTC) Chief Instructor (CI) – RN 1.** RN 1 was a serving Royal Navy (RN) Senior Rate who was employed as the MWS Phoenix SSTC CI.
- c. **MWS PTG Fire Fighting Module (FFM) staff member – RN 2.** RN 2 was a serving RN Senior Rate who was employed as an MWS Phoenix Firefighting Training Unit Instructor.

The DP arrived¹⁵ at MWS Phoenix at approximately 08:00 on 14 October 2019; all RFA employees attending the BSSC were met by RFA 1. RFA employees attending the BSSC and ISSC were required to complete an MWS PTG Medical Self-declaration form¹⁶ on arrival at MWS Phoenix; RFA employees were additionally required to hold an in-date Examination Nautical Grade 1 (ENG 1) medical fitness certificate. Possession of an in-date ENG 1 medical fitness certificate was required to be declared by RFA employees on their individual MWS PTG Medical Self-declaration forms.

The DP submitted his MWS PTG Medical Self-declaration form¹⁷ to RFA 1. The DP had raised initial anxiety concerns regarding undertaking the BSSC SSM to RFA 1 during an MWS First Aid course between 16 to 17 September 2019 and again¹⁸ during the MWS Phoenix BSSC induction phase. RFA 1 had communicated the DP's anxiety concerns to RN 1 on 15 October 2019 during the MWS Phoenix weekly management meeting¹⁹.

The DP was assigned to a group of students designated as BSSC 2²⁰. MWS PTG staff allocated to the BSSC 2 group directed the students to a briefing shed before commencement of the BSSC FFM. After receiving an FFM Health and Safety (H&S) brief BSSC 2 students were instructed to collect individual FFM Personal Protective Equipment (PPE).

Between 14 and 16 October 2019 the DP conducted the BSSC FFM under the instruction of RN 2. Prior to the practical element of the FFM all students were instructed by MWS PTG staff on how to use all the firefighting equipment. Each BSSC student had to demonstrate that they were competent in carrying out designated roles as a first aid firefighter, a member of a Breathing Apparatus (BA) Attack Party and non-BA Party and to

¹⁴ Evidence reference - DAIB/19/018/6009.

¹⁵ DP was accommodated in a local hotel for the duration of the BSSC.

¹⁶ MWS Phoenix Maritime School of Survivability Self declaration of fitness/ health for attending mandatory training form. - Evidence reference - DAIB/19/018/2005.

¹⁷ Evidence reference - DAIB/19/018/2009.

¹⁸ Evidence reference - DAIB/19/018/6008.

¹⁹ Evidence reference - DAIB/19/018/6008 & 6004.

²⁰ MWS could deliver a maximum of four BSSC per week; see Figure 18.

act as a member of a Support Party²¹ commensurate with the MWS PTG pass / fail criteria of the BSSC FFM²². Additionally, all students were required to use an Emergency Escape Breathing Device (EEBD) and escape from a darkened compartment.

On successful completion of the BSSC FFM the DP conducted the BSSC Damage Control (DC) / Incident Board Operator (IBO) module²³ and participated in the practical element in the Damage Repair Instructional Unit (DRIU)²⁴. After the DRIU module the DP completed the Respirator Training Centre (RTC) module. BSSC students were assessed on their ability to carry out a General Service Respirator cannister change in a CS-gas²⁵ environment.

On the morning of 18 October 2019 the DP was transported to the MWS Phoenix SSTC at Horsea Island to undertake the BSSC SSM. The SSM students were instructed to carry out the abandon ship and life raft drills under the direction and supervision of SSTC staff. Prior to carrying out the practical phase of the SSM, students were instructed how to use all the relevant equipment associated with this phase of the BSSC. The SSM was made up of a theory element followed by two practical elements, SSM Drill 1 and SSM Drill 2²⁶.

2.2.2 Incident phase

The following personnel were witness to either the incident and / or the post-incident phases. Some of the personnel were also actively involved in tending to the DP during the incident and some delivered first aid to the DP prior to the arrival of the ambulance paramedics and the air ambulance doctor.

a. SSTC CI – RN 1. RN1 was a serving RN Senior Rate who had been employed as the MWS Phoenix SSTC CI since May 2017. RN 1 was designated as the lead instructor for BSSC 1 and 2 on 18 October 2019 during the SSM. RN 1 delivered both the SSM induction safety lesson and some of the SSM theory lessons for BSSC 1 and 2 prior to students undertaking the SSM practical drills. RN 1 had conducted, and was in date for, the RN Open Water Safety Swimmer course, Water Safety Equipment Maintenance and Supervisors course and Sea Survival Instructor course. RN 1 had previously undertaken First Aid Level 2 training, but his 3-yearly currency had lapsed prior to the incident. RN 1 had attended defibrillator continuation training in September 2018.

b. SSTC instructor – RN 3. RN3 was a serving RN Senior Rate who had been employed as an MWS Phoenix SSTC Instructor since January 2019. RN 3 was not designated to instruct during the SSM practical phase on 18 October 2019 and had been informed by RN 1 that he could leave the SSTC early; RN 3 elected to remain on site at Horsea Island. RN 3 had conducted, and was in date for, RN Open Water Safety Swimmer course, Water Safety Equipment Maintenance and Supervisors course, Sea Survival Instructor course, annual sea survival competency check and First Aid Level 2 training at the time of incident. RN 3 had attended defibrillator continuation training in September 2018.

²¹ Attack Party Non-BA, Attack Party BA and Support Party were RN Firefighting teams as detailed in BRd 2170(1) Chapter 20 dated February 2016.

²² Evidence reference - DAIB/19/018/2164.

²³ Students learnt to familiarise themselves with ship deck plans and location markings whilst under instruction.

²⁴ Students had to enter a flooded compartment under direction of the training staff and participated in a practical DC scenario.

²⁵ Temporary incapacitant spray 2-chlorobenzylidene malononitrile - MOD.GOV.UK.

²⁶ Drill 2 was cancelled on 18 October 2019.

c. **SSTC instructor – BMT 1.** BMT 1 was a Babcock Marine Training Ltd (BMT) employee and had been an MWS Phoenix SSTC Instructor for over 14 years. BMT 1 was one of the two nominated "life raft re-right" SSTC instructors tasked with assessing BSSC students during Drill 1 of the SSM. BMT 1 had conducted, and was in date for, Sea Survival Rescue Swimmer training²⁷, Sea Survival Equipment Maintenance and Supervisors course, Personal Survival Techniques Instructor course and annual sea survival competency check. BMT 1 had previously undertaken First Aid Level 2 training but his 3-yearly currency had lapsed prior to the incident. BMT 1 had attended defibrillator continuation training in September 2018.

d. **SSTC instructor – BMT 2.** BMT 2 was a BMT employee and had been an MWS Phoenix SSTC Instructor for 3 years. BMT 2 was nominated as one of the two SSTC safety swimmers during Drill 1 of the SSM. BMT 2 had conducted, and was in date for, Sea Survival Rescue Swimmer training, Sea Survival Equipment Maintenance and Supervisors course, Sea Survival Instructor course, annual sea survival competency check and First Aid Level 2 training. BMT 2 had attended defibrillator continuation training in September 2018.

e. **SSTC instructor – BMT 3.** BMT 3 was a BMT employee and normally worked within the MWS Phoenix main building; BMT 3 was not a permanent SSTC member of staff. BMT 3 had previously been an MWS Phoenix SSTC Instructor for 11 years and occasionally supported SSTC staff when required. BMT 3 was nominated as one of the two SSTC safety swimmers during Drill 1 of the SSM. BMT 3 had conducted, and was in date for, Survival Equipment Safety Swimmers course, Sea Survival Equipment Maintenance course, Personal Survival Techniques Instructors course and First Aid Level 2 training.

f. **SSTC instructor – BMT 4.** BMT 4 was a BMT employee and had been an MWS Phoenix SSTC Instructor for 8 years. BMT 4 was nominated as the 25-man life raft SSTC staff member tasked with assessing BSSC students entering the 25-man life raft during Drill 1 of the SSM. BMT 4 had conducted, and was in date for, Sea Survival Rescue Swimmer training, Sea Survival Equipment Maintenance and Supervisors course, Sea Survival Instructor course, annual sea survival competency check and First Aid Level 2 training at the time of the incident. BMT 4 had attended defibrillator continuation training in September 2018.

g. **SSTC instructor – BMT 5.** BMT 5 was a BMT employee and had been an MWS Phoenix SSTC Instructor for 1 month. BMT 5 was nominated as one of the two "life raft re-right" SSTC staff members tasked with assessing BSSC students during Drill 1 of the SSM. BMT 5 had conducted, and was in date for, Sea Survival Rescue Swimmer training, Water Safety Equipment Maintenance and Supervisors course and First Aid Level 2 training at time of incident.

On the morning of 18 October 2019 RN 1 delivered a pre-SSM brief²⁸ to SSTC staff and informed them that the DP had indicated to RFA 1²⁹ that he was anxious about undertaking the SSM phase of the BSSC. RN 1 decided at this point to change his planned SSM instructor's role to that of lead SSM instructor and also decided to conduct

²⁷ BMT SSTC staff did not undertake the RN Open Water Safety Swimmer course however they did complete the BMT Sea Survival Rescue Swimmer training.

²⁸ Evidence reference - DAIB/19/018/6004.

²⁹ RN 1 was aware of DP's anxiety concerns as communicated by RFA 1 on 15 October.

the initial SSTC introductory briefs to enable the DP to indicate to RN 1 should he still be anxious.

BSSC 1 and BSSC 2 students were transported to the MWS Phoenix SSTC to undertake the SSM at Horsea Island; the transport arrived at approximately 08:30. All students were assembled in the SSTC briefing room where RN 1 delivered an SSTC introduction safety brief which outlined the course scope and the MWS PTG pass / fail criteria of the SSM.

As part of the SSM introduction brief an opportunity was provided for all BSSC students to make themselves known to SSTC staff specifically if individual students had any concerns or medical issues that may affect their training³⁰. The DP approached RN 1 and reiterated his anxieties regarding conducting the SSM. RN 1 agreed³¹ at that point to allow the DP to jump from the lower pontoon (0.5 m) during Drill 1 of the SSM but informed the DP that he must jump from the 3 m platform during Drill 2 of the SSM. No personal medical details or prescribed medication requirements were given to RN 1 by the DP at that point³². The DP did however request a paracetamol from RN 3 at approximately 12:00 during the lunchbreak; this request was denied³³.

The remainder of the morning SSM theory lessons consisted of the rationale for undertaking Sea Safety Training (SST), the sea survival equipment currently in use within the RN and RFA along with swimming and life raft boarding techniques. An SSM first aid lesson was also delivered along with a practical lesson demonstrating to the students where essential survival equipment was located within a life raft. At approximately 12:30 BSSC students received their final SSM theory lesson. This consisted of a video of the SSM Drill 1 from entering the water from the 3 m high platform to exiting Horsea Island lake at the slipway adjacent to the SSTC. On completion of the theory lesson all BSSC students were instructed to get changed³⁴ ready to undertake Drill 1 of the SSM.

At approximately 13:30 the SSM dressing drill commenced³⁵. All BSSC students were required to don a Once Only Survival Suit (OOSS) over a full body thermal layer³⁶ and then fit and inflate a General Service Life Jacket (GSLJ) (see Figure 2). The DP required some additional assistance from SSTC staff to fasten his OOSS.

³⁰ Evidence reference - DAIB/19/018/2183.

³¹ Evidence reference - DAIB/19/018/6004.

³² Evidence reference - DAIB/19/018/6004.

³³ Evidence reference - DAIB/19/018/2200 - SSTC staff were not authorised to dispense medication.

³⁴ Evidence reference - DAIB/19/018/2022 - Due to water temperature below 15°C an additional full body thermal layer was to be worn over swimwear.

³⁵ Not a formally assessed SSM evolution however BSSC students were set a challenge by SSTC staff to complete dressing drills within 2.5 minutes.

³⁶ Also known as a Woolly Bear suit.

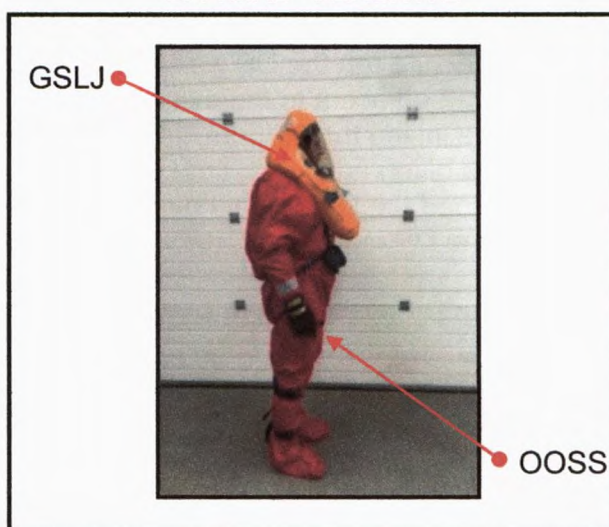


Figure 2: SSM PPE with inflated GSLJ

At approximately 13:45 Drill 1 of the SSM commenced with an amalgamated group of BSSC 1 and BSSC 2 students jumping in pairs from the 3 m platform into Horsea Island lake (see Figure 3). Students were first required to demonstrate the "Lock off position"³⁷ before being allowed by RN 1 to sequentially enter Horsea Island lake; the DP was the last student to enter the water and did so from a height of approximately 0.5 m³⁸ (see Figure 3).

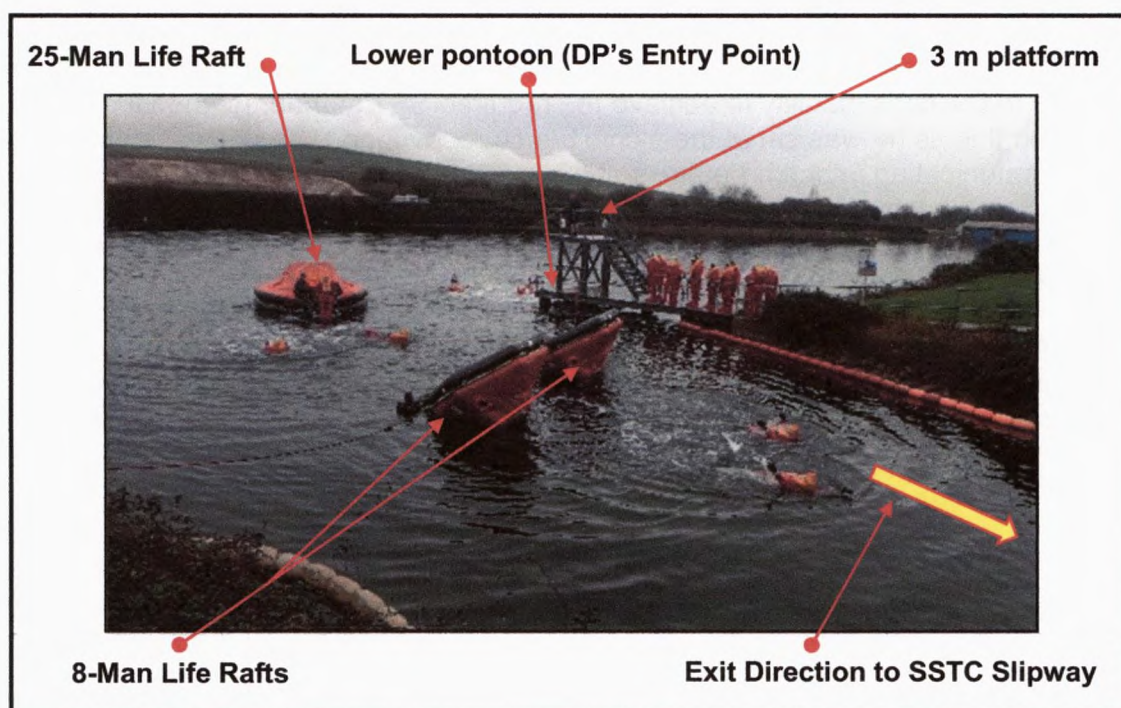


Figure 3: Incident phase of SSM Drill 1

Once the initial part of Drill 1 was completed the DP attempted to swim (approximately 15 m) to the 25-man life raft (see Figure 3) under his own power but needed some

³⁷ One arm protecting airway by pinching nose and covering mouth, other arm comes across the lifejacket and grasps the elbow / fore arm of the first arm; looking straight ahead.

³⁸ The DP was allowed to enter the water from a height of approximately 0.5 m during SSM Drill 1 due to his anxiety.

assistance. On arrival at the 25-man life raft the DP was seen by BMT 4, who was positioned inside the 25-man life raft adjacent to the exit doorway; the DP had difficulties³⁹ boarding the 25-man life raft. Once inside the 25-man life raft the DP was observed by BMT 4 to be out of breath and was given additional time to rest before commencing the next phase of Drill 1. BMT 4 loosened the DP's GSLJ by releasing a small amount of air from the inflatable stole to make the DP more comfortable.

After exiting the 25-man life raft the DP attempted to swim (approximately 10 m) to the 8-man life raft re-right phase of Drill 1. The DP was seen by BMT 1 to be struggling; already in the water, BMT 1 swam toward the DP. The DP was met by BMT 1 approximately 5 m into the transit to the 8-man life raft (see Figure 3); BMT 4 informed BMT 1 that the DP had also struggled to complete the previous phase of Drill 1. The DP attempted to complete the 8-man life raft re-righting phase of Drill 1 several times without success and kept rocking off to the side⁴⁰ of the upturned life rafts' boarding ramp. RN 1 had been monitoring the DP's progress from the edge of the lake and issued a verbal warning stating that the DP had one last attempt left at the 8-man life raft re-right. With further assistance the DP completed the re-righting of the life raft before he was physically towed by BMT 1 (approximately 5 m) to the SSTC slipway (see Figure 4). BMT 1 then provided some assistance to the DP to walk up the slipway and removed the DP's GSLJ from around the DP's head (the lifejacket remained attached around the DP's waist); the DP was seen to be coughing and spluttering at this point.

The DP was handed over to RN 1 who guided the DP to a picnic bench adjacent to the SSTC (see Figure 4). The DP was able to walk to the bench without further assistance and informed RN 1 at that point that he had swallowed some water whilst conducting the 8-man re-righting phase of Drill 1. RN 1 informed the DP that he was being removed from the SSM due to the DP's inability to achieve the required SST standards, the DP acknowledged this as he was sat at the picnic bench recovering. The DP was seen to be alert and communicating, albeit breathless at this point. Once RN 1 was content that the DP had sufficiently recovered, he instructed the DP to remain on the bench to further recover and additionally instructed the DP to get showered and changed whilst the remainder of the BSSC students prepared to conduct Drill 2 of the SSM.

At around 14:15 (approximately 3 minutes after exiting water) RN 3 witnessed the DP slump forward whilst sitting at the picnic bench. RN 3 went to the aid of the DP and identified that the DP's condition had worsened; RN 3 shouted for urgent assistance.

³⁹ Evidence reference - DAIB/19/018/6015.

⁴⁰ Evidence reference - DAIB/19/018/6003.



Figure 4: SSTC slipway

2.2.3 Post-incident phase

BMT 1 and BMT 5 both responded to the call for assistance from RN 3 and aided RN 3 in lowering the DP to the ground, placing him in the recovery position. RN 3 stated⁴¹ that the DP was breathing at that point and was mumbling incoherently. Shortly after that the DP's condition deteriorated, as he had stopped breathing. Cardiopulmonary Resuscitation (CPR) was commenced by BMT 1 and an emergency defibrillator was retrieved from the SSTC by RN 3. On returning to the scene RN 3 commenced giving the DP rescue breaths. RN 1 had responded to the calls for assistance and upon seeing the CPR activity called the emergency services at 14:16 utilising his personal mobile phone⁴². Once in contact with the 999 emergency call centre staff RN 1's mobile phone was placed next the picnic bench and put on loud speaker to enable the emergency call centre staff to listen to the activity and relay instructions to RN 3 and BMT 1.

The SSTC defibrillator was attached to the DP by BMT 2 and BMT 5; once the defibrillator confirmed its "ready status" CPR chest compressions were stopped and the defibrillator automatically conducted the pre-set vitals check. The defibrillator displayed "NO SHOCK, CONTINUE"⁴³, BMT 4 took over from BMT 1 and re-commenced CPR chest compressions. Due to the time delay of the self-test initialisation of the defibrillator some doubts were reported as to whether the defibrillator pads were correctly positioned and therefore the defibrillator pads were removed from the DP at this point and repositioned.

⁴¹ Evidence reference - DAIB/19/018/6001.

⁴² Call duration approximately 8 minutes.

⁴³ Evidence reference - DAIB/19/018/2185 - Heartstart FR2+ automatically analysed the patient's heart rhythm and advised whether or not the rhythm was shockable.

RN 3 had difficulty achieving effective rescue breaths whilst utilising the CPR face mask⁴⁴ and discarded it. Rescue breaths were continued without the CPR face mask until the emergency call centre staff instructed RN 3 to cease rescue breaths and further instructed BMT 4 to concentrate on chest compressions only. RN 3 then took over chest compressions from BMT 4.

At approximately 14:30 RN 1 informed the Horsea Island gate staff of the incident; concurrently a call from an air ambulance at 14:32 informed Horsea Island gate staff of their intention to land on the helipad adjacent to the SSTC. RN 1 contacted the Duty Instructor (DI) at MWS Phoenix and informed them of the incident.

At approximately 14:35 a civilian ambulance arrived and civilian paramedics took over CPR activity from RN 3, fitting their own defibrillator which also displayed "NO SHOCK". BMT 2 cut through the DP's OOSS leg material to allow the civilian paramedics to administer emergency medication to the DP who was then transferred to a stretcher and taken into the back of the civilian ambulance.

At approximately 14:40 the civilian police and air ambulance⁴⁵ both arrived on site. The DP continued to be treated in the rear of the ambulance by civilian paramedics and the air ambulance doctor for a further 30 to 40 minutes before being declared dead. RN 1 again contacted the MWS Phoenix DI and informed them that the incident had led to a fatality. The MWS Phoenix DI attempted to contact the Officer in Charge (OIC) MWS Phoenix by phone to inform them of the situation but the number detailed within the MWS Phoenix DI pack was that of a former OIC MWS Phoenix.

RN 1 cancelled the remainder of the SSM and the students were instructed to shower and get changed and were then transported back to Her Majesty's Ship (HMS) EXCELLENT. The DP's personal effects were taken to a local hospital via civilian ambulance at approximately 15:25. At approximately 16:05 OIC MWS Phoenix arrived at the SSTC to get an update and to communicate to all of the RN and BMT staff involved that Trauma Risk Management (TRiM) assistance and support was available. BMT 1 attempted to contact BMT management staff but was unable to establish contact. BMT management contacted BMT 1 at approximately 18:05.

The DAIB was informed of the incident on 21 October 2019 and deployed a triage team to the MWS Phoenix SSTC at Horsea Island.

Following a post mortem, the DP's death certificate⁴⁶ recorded the cause of death as

⁴⁴ Evidence reference - DAIB/19/018/6001.

⁴⁵ The air ambulance had a qualified doctor embarked along with a paramedic.

⁴⁶ Evidence reference - DAIB/19/018/2122.

2.3 Previous Basic Sea Safety Course fatality

On 13 November 2009 a fatality occurred during the BSSC SSM at Horsea Island, the deceased person involved in this earlier incident was also employed as a Steward in the RFA. An Immediate Ships Investigation (ISI) was conducted⁴⁷ at the time the aim of which was to establish the circumstances leading up to the incident and included subsequent actions taken by SSTC Staff. The ISI team was also directed to make recommendations to prevent any reoccurrence of a similar nature and / or improve Standard Operating Procedures (SOPs) when dealing with such incidents.

There was no recorded analysis detailed within this earlier ISI report. Only two recommendations were raised by the ISI team as detailed below:

1. That the SSTC Chief Petty Officer (CPO) Instructor be commended for their prompt and appropriate actions throughout the incident.
2. Counselling should be offered to personnel who had witnessed or been directly involved in the aftermath of a serious or fatal incident.

2.4 Previous Intermediate Sea Safety Course near miss

On 03 November 2014 a Navy Lessons and Information Management System (NLIMS⁴⁸) report⁴⁹ was raised for an incident involving an RFA employee who had suffered a shortness of breath and a general feeling of being unwell during the FFM of an ISSC delivered at MWS Phoenix. The individual involved in that incident was removed from training and taken to the medical centre at HMS EXCELLENT for medical examination. The casualty was later taken to hospital for further checks; it was confirmed that the casualty had suffered a [REDACTED] brought on by an [REDACTED] during the ISSC FFM.

2.5 Equipment

The equipment used by the MWS PTG during the SSM was current in-service (RN and RFA) sea survival equipment. SSTC first aid equipment included the HeartStart FR2+ Defibrillator and the Fazzini CPR Face Mask; these items were utilised by the SSTC staff during the post-incident phase.

2.5.1 Sea Survival Module life rafts

There were two different types of in-service life rafts used during SSM Drills⁵⁰:

- a. An 8-man multi-seat life raft (see Figure 5) - two of these life rafts were used for the SSM life raft re-right phase of Drill 1.
- b. A 25-man multi-seat life raft (see Figure 6) - one of these life rafts was used for the SSM unassisted boarding phase of Drill 1.

⁴⁷ Evidence reference - DAIB/19/018/2012.

⁴⁸ NLIMS was a tool developed to record and enabled learning from safety and environmental incidents across Navy Command. It was a Navy Command tool to support lessons and information management for the Duty Holder construct.

⁴⁹ Evidence reference - DAIB/19/018/2026.

⁵⁰ There were other types of in-service multi-seat life rafts in use within the UK military and the RFA.



Figure 5: 8-man life raft



Figure 6: 25-man life raft

2.5.2 Intrepid Once-Only Survival Suit

An Intrepid OOSS (see Figure 7) was worn by BSSC students during all practical SSM elements. Students were mandated to wear a full body thermal layer⁵¹ (see Figure 8) under the OOSS should the Horsea Island lake water temperature drop below 15°C⁵².



Figure 7: Once Only Survival Suit



Figure 8: Full body thermal layer

2.5.3 Sea Survival Module lifejackets

There were two different types of lifejackets used during MWS PTG SSM Drills:

- a. The GSLJ (see Figure 9) was worn by all BSSC students during Drill 1 of the SSM.
- b. The Cosalt Premier Life Preserver (see Figure 10) was worn by RFA students (and / or students who were embarking in RFA vessels) during Drill 2 of the SSM.

⁵¹ This thermal layer was a woollen one-piece suit used by UK military during cold weather.

⁵² Evidence reference - DAIB/19/018/2022.



Figure 9: GSLJ



Figure 10: Cosalt Premier life preserver

2.5.3.1 The General Service Lifejacket

The GSLJ was employed throughout the RN Fleet as a standard lifejacket⁵³ and consisted of an inflatable stole with head aperture and a face visor. The GSLJ was compactly housed in a fabric pouch supported by a strong webbing waist belt which could be moved around a person's waist such that the pouch was in a position most convenient to the wearer (see Figure 11).



Figure 11: GSLJ pouch

Should the GSLJ be required in an emergency, the stole was easily removed from the waist pouch and slipped over the head; the GSLJ was then orally inflated by the wearer. The face visor was primarily designed to protect the wearer from sea spray and provided some insulation from the elements.

2.5.3.2 Cosalt Premier life preserver

During SSM Drill 2 students who would be embarking on RFA vessels would be given a Cosalt Premier life preserver (see Figure 10) which was employed on RFA vessels and

⁵³ RFA vessels carried the GSLJ for use during military operations as it allows an individual to carry a lifejacket with them, when CBRNDC state dictates, without impeding movement around the vessel.

was Maritime and Coastguard Agency (MCA) approved and SOLAS compliant⁵⁴. The Cosalt Premier Life Preserver was filled with solid foam and was fitted with thigh straps⁵⁵ and could be used on Marine Evacuation System equipped⁵⁶ RFA vessels if the GSLJ was unavailable.

2.5.4 HeartStart FR2+ defibrillator

The defibrillator located at the SSTC at the time of the incident was the HeartStart FR2+ unit (see Figure 12). It was a compact, lightweight, portable battery powered automated external defibrillator designed for use by trained responders to treat ventricular fibrillation⁵⁷. The HeartStart FR2+ had a Status Indicator that was always active and indicated to any user that it had passed its last internal self-test. The HeartStart FR2+ front panel had an On / Off button at the top and a Shock button at the bottom. A display screen in the centre of the panel provided text prompts and incident information (see Figure 13).

Voice prompts were provided through a speaker located at the base of the unit. The HeartStart FR2+ was intended to be used with disposable defibrillator pads which were applied to a casualty who was exhibiting symptoms of sudden cardiac arrest or was unresponsive. When connected to a casualty's bare chest the HeartStart FR2+ automatically analysed the patient's heart rhythm and advised whether or not the rhythm was shockable. If no shock was advised voice and text prompts provided guidance to the user to continue with CPR⁵⁸.



Figure 12: HeartStart FR2+ defibrillator



Figure 13: HeartStart FR2+ front panel

2.5.5 Fazzini CPR face mask

The Fazzini CPR face mask available for SSTC staff to use at the time of the incident was a pocket resuscitator made by Fazzini-Italy (see Figure 14). The CPR face mask was equipped with a replaceable protective filter and a one-way valve which was designed to minimise the possibility of cross-contamination when used to deliver rescue breaths to a casualty during first aid. The CPR face mask was ergonomically shaped with a soft-air

⁵⁴ Safety Of Life At Sea was an international maritime treaty which set minimum safety standards in the construction, equipment and operation of merchant ships.

⁵⁵ Evidence reference - DAIB/19/018/2190.

⁵⁶ A lifesaving device found on many modern merchant ships consisting of an inflatable slide or escape chute.

⁵⁷ Ventricular fibrillation was a heart rhythm problem that occurs when the heart beats with rapid, erratic electrical pulses. This caused pumping chambers in the heart (the ventricles) to quiver uselessly, instead of pumping blood around the body. It most commonly occurred during an acute heart attack or shortly thereafter and was considered the most serious cardiac rhythm disturbance.

⁵⁸ Evidence reference - DAIB/19/018/2185.

cushion to ensure leak free performance. The CPR face mask was supplied with an elastic strap to keep the mask in place when fitted to a casualty; the face mask was stored in a compact splash-resistant plastic clam shell storage case when not in use.



Figure 14: Fazzini CPR face mask

3 Analysis

3.1 Introduction

The following section of this report details the analysis of the evidence available to the DAIB.

3.1.1 Available evidence

The NSI Panel visited the incident site at Horsea Island and the MWS PTG centres at HMS EXCELLENT and HMS RALEIGH. The NSI Panel conducted witness interviews or corresponded with:

- Fleet Commander⁵⁹;
- Navy Safety Director;
- Commodore RFA – Assistant Chief of Staff Afloat Support (ACOS AFSUP);
- Defence Medical Services Regulator (DMSR);
- [REDACTED];
- RFA Deputy Assistant Chief of Staff Afloat Support (DACOS AFSUP);
- DACOS RFA Personnel (DACOS RFA PERS OPS);
- DACOS Medical Personnel and Policy (RN);
- RFA Staff Officer grade 1 (SO1) Assurance;
- Institute of Naval Medicine (INM) Surgeon Commander;
- Flag Officer Sea Training (FOST) Senior Weapons Engineering Officer;
- MWS OiC Phoenix;
- RFA Appointed Padre (RN);
- RFA HR and Training staff;
- MWS BSSC Staff (Phoenix);
- MWS BSSC Staff (Triumph);
- MCA Chief Medical Advisor;
- MCA Assurance Advisor;
- Former RFA Occupational Health (OH) staff;
- INM Human Factors (HF) staff;
- DP's Next of Kin (NoK);
- Director People and Training assurance staff;
- BMT Quality Assurance (QA) staff.

3.2 Methodology

The DAIB Triage investigation⁶⁰ did not identify any Urgent Safety Advice (USA) and a structured approach was taken by the NSI Panel utilising several investigation analysis models developed by Professor James Reason⁶¹ and the Australian Transport Safety Bureau⁶² to establish the five levels of safety factors. Occurrence events, individual

⁵⁹ Via DG DSA engagement, no NSI interview undertaken.

⁶⁰ Evidence reference - DAIB/19/018/2189.

⁶¹ DAIB Standard Operating Procedure 507 (June 2019).

⁶² www.atsb.gov.au

actions, local conditions, risk controls and organisational influences involved in this incident were the main lines of enquiry.

3.2.1 Accident factors

3.2.1.1 Causal factors

Causal factors were defined as factors which, in isolation or in combination with other factors and contextual details, led directly to the accident.

3.2.1.2 Contributory factors

Contributory factors were defined as factors which made the accident more likely.

3.2.1.3 Aggravating factors

Aggravating factors were defined as factors which made the accident outcome worse.

3.2.1.4 Other factors

Other factors were defined as factors which were none of the above but were noteworthy in that it may cause or contribute to future accidents.

3.2.1.5 Observations

Observations were defined as factors that were not relevant to the accident but worthy of consideration to promote better working practices.

3.2.2 Main lines of enquiry

The DP's NoK and the RFA were consulted concerning the DP's employment and medical history. RN and RFA Command were consulted regarding RN and RFA employment standards. OH, medical cover and assurance by the RN for RFA employees were also areas analysed by this investigation. Director People and Training assurance staff, MWS and BMT were consulted regarding BSSC training processes, procedures, risk management, supervision, assurance, personnel safety, H&S and organisational management. The MCA was consulted regarding the ENG 1 medical examination process for seafarers and the MCA accreditation and 3rd Party Assurance (3PA) of MWS Phoenix and MWS Triumph⁶³. The INM was also consulted as a DAIB accredited representative⁶⁴ and tasked by the DAIB to provide HF and medical evidence to support the analysis of the NSI.

⁶³ MWS Triumph was also part of PTG located at HMS RALEIGH, Torpoint Cornwall.

⁶⁴ A person or organisation designated on the basis of their qualifications for the purpose of participating in an investigation.

3.3 Chronology of events

The chronology illustrates the timeline of key events from the DP attending a First Aid Level 2 course at MWS Phoenix to the DAIB triage team's arrival.

* All times approximate

| Date (a) | Time (b) | Event (c) | Remarks (d) |
|--------------------------|-------------|--|--|
| 16 Sep 19 - 17 Sep 19 | 08:00 | DP attended First Aid Level 2 course at MWS Phoenix. | DP discussed anxiety about attending BSSC with RFA 1. |
| 14 Oct 19 | 08:00 | DP arrived at MWS Phoenix to undertake BSSC. | DP completed MWS PTG medical self-declaration form; DP's form handed to RFA 1 and filed. |
| 14 Oct 19 - 16 Oct 19 | 08:00 | DP conducted BSSC FFM. | DP completed FFM with no known issues. |
| 15 Oct 19 | Unknown | RFA 1 interaction with RN 1. | MWS Management Meeting. |
| 16 Oct 19 - 17 Oct 19 | All day | DP conducted DC / IBO module and DRIU. | No known issues highlighted. |
| 17 Oct 19 | All day | DP carried out RTC Module. | No known issues highlighted. |
| 14 / 17 Oct 19 | Unknown | DP signed his SSM completion certificate. | DP's SSM certificate subsequently found in his RFA HR file post incident. |
| 18 Oct 19 | 08:00 | DP boarded transport to the SSTC at Horsea Island. | RN 1 briefed SSTC team of DP's anxiety. |
| 18 Oct 19 | 08:30 | BSSC 1 & 2 students arrived at SSTC. Introduction brief delivered by RN 1. | RN 1 changed his role to closely monitor DP. |
| 18 Oct 19 | 08:45 | SSM theory lessons delivered. Opportunity for BSSC students to make themselves known to SSTC staff if they had any concerns / medical issues that may affect training. | DP approached RN 1 and reiterated his anxieties but did not mention any medical concerns. RN 1 agreed DP could jump from lower pontoon during Drill 1 of SSM and informed him he must jump from 3 m platform during Drill 2. |
| 18 Oct 19 | 12:00 | SSM Lunch period – DP requested paracetamol from RN 3. | Request denied by RN 3. |
| 18 Oct 19 | 12:30 | Final theory lesson (pre-SSM drill video). | Video is an end to end video of SSM Drill 1 activity. |
| 18 Oct 19 | 13:15 | Short break. | Students sent to get changed. |
| 18 Oct 19 | 13:30 | SSM Dressing drill commenced. | Not assessed but challenge set by SSTC staff for students to complete drill in 2.5 minutes. |
| 18 Oct 19 | 13:45 | SSM Drill 1 commenced. | DP was detailed by RN 1 to be the last student to enter the water. The DP stepped |

| Date (a) | Time (b) | Event (c) | Remarks (d) |
|---------------------------|---------------------------|---|--|
| | | | into the water from a height of approximately 0.5 m. |
| 18 Oct 19 | 14:10 | DP completed SSM Drill 1. | |
| 18 Oct 19 | 14:12 | DP exited the water. | DP met on slipway and handed over to RN 1. DP escorted to picnic bench. DP informed he would be withdrawn from SSM. DP remained alone on the bench to recover. |
| 18 Oct 19 | 14:15 | DP seen to slump forward by RN 3. | RN 3 attended to the DP and conducted initial first aid; RN 3 shouted for assistance. |
| 18 Oct 19 | 14:16 | 999 call made by RN 1 (duration from phone call log approximately 8 minutes). | Mobile phone placed next to bench to allow emergency services call centre staff to listen to activities and relay instructions. |
| 18 Oct 19 | 14:30 | Call made to Horsea Island gate staff informing of incident. | Call entered in gate daily occurrence log. |
| 18 Oct 19 | 14:35 | Ambulance arrived on site. | Ambulance staff took over CPR activity from SSTC staff and fitted own defibrillator; DP placed on stretcher and taken to ambulance. |
| 18 Oct 19 | 14:40 | Civilian police and air ambulance arrived on site. | DP treated in rear of ambulance by air ambulance doctor and paramedics for a further 30 to 40 minutes. DP declared dead by air ambulance doctor. |
| 18 Oct 19 | 16:25 | Civilian ambulance departed site. | DP's body taken to local hospital. |
| 21 Oct 19 | 10:45 | DAIB informed of incident and triage team deployed. | |
| 21 Oct 19 | 14:15 | DAIB triage team arrived at Horsea Island SSTC | |

Table 1: Chronology of events

3.4 The Deceased Person's Career History

The DP was a civilian seafarer previously employed as a steward by P&O Ferries from July 2001 to October 2003, he applied to join the RFA⁶⁵ in May 2004. The DP had used his Seaman's Discharge Book⁶⁶, that specified his Date of Birth (DoB) as being 06 June 1960, and a P45⁶⁷ to support his application to join the RFA. The DP was not required by the RFA to provide any other form of identity to support his application. His passport⁶⁸ recorded an actual DoB of 30 April 1947.

Seaman's Discharge Book

The DP's Seaman's Discharge Book⁶⁹ additionally recorded that the DP had served with the RFA between October 2003 and May 2004. Evidence indicated that it was probable that the DP's previous RFA service was based on a Running Agreement⁷⁰, it was very likely that the DP was not employed as a full-time member of the RFA at that time.

The DP's Seaman's Discharge Book was issued in July 2003 by the Southampton Marine Office⁷¹ and contained the DP's photograph, DoB, National Insurance number, place of birth, height and colour of eyes. The Panel established that the DP's DoB was entered incorrectly in his Seaman's Discharge Book which indicated that he was 44 years of age (the DP's actual age at that time was 57). The Panel assessed that the DP entered an incorrect DoB to mitigate against the RFA recruitment⁷² and retirement⁷³ age policies that were extant at the time of his RFA application.

RFA application

The DP did not indicate on his May 2004 RFA application form that he had previously served with the RFA; the Panel further assessed that it was likely that the DP chose not to confirm his previous RFA employment to reduce the risk of his actual age being revealed. RFA HR records for the DP did not contain a photocopy of the DP's passport. The DP's RFA application was sifted in March 2005 whilst he was already deployed on RFA WAVE KNIGHT and was subsequently approved⁷⁴. The DP applied to join the Principal Civil Service Pension Scheme (PCSPS) in October 2006.

DP's date of birth change

On 04 December 2013 an RFA Medical Technician⁷⁵ (MED TECH) serving with the DP whilst embarked in RFA FORT AUSTIN formally requested⁷⁶ that the DP's Magellan HR⁷⁷ and Defence Medical Information Capability Programme (DMICP) records be amended to

⁶⁵ Evidence reference - DAIB/19/018/2045.

⁶⁶ A Seaman's Discharge Book was a full record of a Seaman's career, experience and certification.

⁶⁷ Evidence reference - DAIB/19/018/2045.

⁶⁸ Evidence reference - DAIB/19/018/2086.

⁶⁹ Evidence reference - DAIB/19/018/7070.

⁷⁰ A seafaring term used to describe a short term contract used to employ seafarers for a limited time only. Evidence reference - DAIB/19/018/6019.

⁷¹ A seaman's discharge book is a full record of a seaman's career experience and certification. A seaman can apply for a discharge book by applying on the gov.uk website or by visiting a local MCA Marine Office.

⁷² Evidence reference - DAIB/19/018/2103.

⁷³ Evidence reference - DAIB/19/018/2202.

⁷⁴ Evidence reference - DAIB/19/018/2058.

⁷⁵ Qualification standard: Nursing and Midwifery Council Registered Nurse or Health Professions Council Registered Paramedic or ex-military medic as Leading Medical Assistant or above (or tri-Service equivalent).

⁷⁶ Evidence reference - DAIB/19/018/2044.

⁷⁷ Magellan HR was introduced in 2004 as a new RFA HR computerised management system.

show the DP's DoB as 06 June 1960. The Panel assessed that it was almost certain that the RFA MED TECH had been informed by the DP that both of these records indicated an incorrect DoB. It was also very likely that the DP chose this DoB as the 06 June 1960 as it was extremely easy to remember (6-6-60).

The Panel established that it was almost certain that both the RFA Magellan HR system and the DP's DMICP records, in use at that time, were correct and identified the DP's actual DoB as 30 April 1947. It was almost certain that the DP's actual DoB was captured during the DP's previous employment with the RFA between October 2003 and May 2004. The Panel considered that it was very likely that the request from the RFA MED TECH to amend the DP's DoB was based on the DP's desire to ensure his recorded DoB was changed on his RFA Magellan HR and DMICP records. The Panel determined that there were no effective methods employed by the RFA to assure employee HR records. The DP's DoB was subsequently changed to reflect his incorrect DoB with no verification checks having been conducted. The Panel assessed that it was very likely that RFA Magellan HR electronic system at the time of the incident contained inaccurate information about other RFA employees. The Panel further determined that there were no effective methods employed by the RN MED DIV to assure RFA employee medical records held on DMICP.

DP's application for an identity card and [REDACTED]

In December 2006 the DP applied for an RFA identity (ID) card and specified a DoB of 06 June 1961 on the application form⁷⁸. The Panel noted that the DP provided his DoB as 06 June 1960 to support an application for a replacement Seaman's Discharge Book in July 2019⁷⁹. The only source document that was found in the DP's RFA HR personnel file which referred to the DP's actual DoB was a correspondence letter from the DP's National Health Service (NHS) General Practitioner (GP)⁸⁰.

[REDACTED]

A photocopy of the DP's birth certificate⁸², death certificate⁸³ and passport⁸⁴ were provided by the DP's NoK. All of these documents had a corresponding DoB for the DP stating 30 April 1947 and confirmed that the DP was 72 years of age at the time of the incident.

Conclusion

The NSI Panel concluded that the DP almost certainly provided an incorrect DoB when applying for his Seaman's Discharge Book in July 2003. The Panel further concluded the

⁷⁸ Evidence reference - DAIB/19/018/2046.
⁷⁹ Evidence reference - DAIB/19/018/2037.
⁸⁰ Evidence reference - DAIB/19/018/2042.
⁸¹ Evidence reference - DAIB/19/018/2038.
⁸² Evidence reference - DAIB/19/018/2087.
⁸³ Evidence reference - DAIB/19/018/2122.
⁸⁴ Evidence reference - DAIB/19/018/2086.

RFA had correctly recorded the DP's DoB as 30 April 1947, on DMICP and Magellan HR records during the DP's earlier RFA employment between October 2003 and May 2004⁸⁵.

The Panel further concluded that it was almost certain that the DP also provided an incorrect DoB on his formal application to join the RFA in March 2004. The DP provided the RFA with his Seaman's Discharge Book as proof of ID, but no passport details were recorded in the DP's HR personnel file. The NSI Panel was unable to identify any records within the DP's current RFA HR personnel file pertaining to the DP's employment with the RFA between October 2003 and May 2004. It was almost certain that the DP had requested that an RFA MED TECH apply for his DoB to be changed on DMICP and Magellan as a consequence of his actual DoB being discovered during a routine medical assurance appointment.

Evidence indicated⁸⁶ that some of the DP's personal information contained within Magellan was incorrect; it was also almost certain that other RFA employee's information contained within Magellan had also not been appropriately assured.

The panel also concluded it was almost certain the DP had falsified his DoB to mitigate against the RFA recruitment⁸⁷ and retirement⁸⁸ age policies that were extant at the time of his RFA application. [REDACTED]

The Panel finds that the process for issuing Seaman's Discharge Books not being appropriately assured was an **Other factor**.

The Panel finds that the RFA HR information contained within Magellan not being appropriately assured was an **Other factor**.

Recommendation – The Maritime and Coastguard Agency Chief Executive should assure the procedures for compiling and issuing a Seaman's Discharge Book in order to ensure that the applicants identification details are correct.

⁸⁵ Evidence reference - DAIB/19/018/7063.

⁸⁶ Evidence reference - DAIB/19/018/6020,6032.

⁸⁷ Evidence reference - DAIB/19/018/2103.

⁸⁸ Evidence reference - DAIB/19/018/2202.

Recommendation – Commodore Royal Fleet Auxiliary should assure the process and procedures for recording Royal Fleet Auxiliary (RFA) Human Resources information in order to ensure that all electronic and hardcopy RFA Human Resources information is accurate.

3.5 The Royal Fleet Auxiliary Service

The RFA Service⁸⁹ referred to the organisation which encompassed the RFA flotilla. Commodore RFA was nominated as the Head of the RFA Service and was entrusted with the management of the RFA for the Ministry of Defence (MOD). Commodore RFA was accountable to the Secretary of State (SofS) for Defence through the Fleet Commander for the following⁹⁰:

1. Ensuring that the RFA met all of its statutory obligations⁹¹.
2. Granting deviations from such legislation for sound and justified operational reasons.
3. Directing the RFA Headquarters (HQ) and ensuring its management complied with the International Safety Management Code⁹².
4. Undertaking the entire range of personnel management from recruitment to retirement.

The SofS for Defence was deemed to be the managing owner of every RFA vessel. The MOD, or an appointed representative, was deemed to be the company (Principal) or person that had the authority to entrust the management of an MOD ship to the Fleet Commander / Commodore RFA⁹³.

3.5.1 The Role of the Fleet Auxiliary flotilla

The Naval Service⁹⁴ was supported by a range of organisations including the RFA. The RFA supported the five fighting arms⁹⁵ of the RN and was a uniformed civilian Merchant Marine Service⁹⁶ accountable to the Admiralty Board through the Fleet Commander⁹⁷. The First Sea Lord (1SL), as Chief of the Naval Staff, was responsible and accountable⁹⁸ for the fighting effectiveness, efficiency and morale of the RFA.

The RFA flotilla was a unique organisation of auxiliary vessels manned by civilians, owned by the MOD, which was engaged on non-commercial service delivering Maritime Operational support to Her Majesty's Forces. The primary roles of the RFA were to directly support and supply RN warships at sea with food, fuel, stores and ammunition. The RFA also provided aviation support for the RN, amphibious lift and humanitarian and disaster

⁸⁹ BRd 875 September 2018 Ver 1.

⁹⁰ Evidence reference - DAIB/19/018/2213 - Responsibility for para (1) and para (2) was delegated to DACOS AFSUP and para (4) delegated to DACOS RFA PERS OPS.

⁹¹ Where those obligations did not arise out of a contract, but were imposed by law.

⁹² International Standard for the safe operation of ships and for pollution prevention.

⁹³ BRd 875 September 2018 Ver 1.

⁹⁴ The Naval Service comprised of the Royal Navy, Royal Marines, the Reserve Naval and Marine forces and the Naval Careers Service – BRd 2 Chapter 1 Para 0101 April 2017 Ver 4.

⁹⁵ Surface Fleet, Submarine Service, Fleet Air Arm, Royal Marines and Maritime Reserves – BRd 2 Chapter 3 Para 0394 April 2017 Ver 4.

⁹⁶ RFA personnel were designated as civilian Seafarers, Evidence reference - DAIB/19/018/2092.

⁹⁷ Evidence reference - DAIB/19/018/2100.

⁹⁸ BRd 2 Chapter 2 para 0204, April 2017 Ver 4.

relief support⁹⁹. RFA employees were designated as Seafarers¹⁰⁰, Sponsored Reservists¹⁰¹ and Civil Servants¹⁰²; their employment at sea was regulated in the United Kingdom (UK) by the MCA.

Prior to 2010 RFA employees were employed under the terms and conditions of the Civil Service which were extant at the time and most RFA employees were members of the PCSPS. Thereafter, changes to the PCSPS enabled the standard pensionable age for its members to be extended from 60 years of age to 65. Those changes also removed the compulsory retirement age as specified within the PCSPS¹⁰³ and therefore there was no upper age limit for RFA employees.

The Panel ascertained that the RFA had been consistently used as a force multiplier, with all RFA vessels being fitted with weapon systems and secure communications. RFA civilian crews had been required to meet the RN requirement, with RN training mandated that enabled RFA employees to be deployed to maintain an RN operational deployment capability. The Panel also identified that although the RFA had differing physical, medical and age-related employment standards to that of the RN, they were being employed to conduct Defence-directed tasking to meet the Navy Command Plan¹⁰⁴, sometimes as singleton units.

Based on witness interviews, the Panel noted that some senior RFA employees expressed that complexities existed in the delineation of RN / RFA boundaries; additionally it was unclear how the RFA had transitioned from its traditional auxiliary supporting role to that of directly delivering Defence-directed RN tasking.

3.5.2 Royal Fleet Auxiliary Accountable Person and Duty of Care

The 1SL was the Senior Duty Holder (SDH) for Navy Command¹⁰⁵ activity that gave rise to a RtL requiring enhanced safety management arrangements. The Fleet Commander exercised Full Command¹⁰⁶ (delegated by the 1SL) of the RFA, with the aim of ensuring the generation of RN units for tasking in accordance with the Navy Command Plan, and for the operational effectiveness and efficiency of the RN and the RFA¹⁰⁷. The RFA flotilla was managed by the Commodore RFA as Assistant Chief of Staff Afloat Support (ACOS AFSUP) on behalf of the Fleet Commander; ACOS AFSUP stated that as Commodore RFA he was responsible to the SofS for Defence¹⁰⁸, through the 1SL, as RFA Head of Service and RFA Company Head.

Book of Reference digital (BRd) 10 gave direction on the Duty Holder (DH) construct within the RN. It did not contain any reference to the RFA within the laid down DH construct. BRd 10 stated that a 2-Star¹⁰⁹ Accountable Person (AP)¹¹⁰ was authorised to

⁹⁹ BRd 875 September 2018 Ver 1.

¹⁰⁰ Any person who was employed in any capacity on board a ship.

¹⁰¹ Sponsored Reservists could be trained and called out to undertake a contracted task as a member of the Armed Forces.

¹⁰² Members of the RFA were MOD Civil Servants, their terms and conditions, including pay and pensions were subject to civilian rules for the wider public sector.

¹⁰³ Evidence reference - DAIB/19/018/2204.

¹⁰⁴ Navy Command Plan detailed what the RN would deliver and the resources it had to achieve this.

¹⁰⁵ The term Navy Command in BRd 10 includes RN, RM, RFA, Reserves and all other parties employed directly by Navy Command.

¹⁰⁶ The authority vested in an individual of the Armed Forces for the direction, co-ordination and control of military forces.

¹⁰⁷ Evidence reference - DAIB/19/018/2182.

¹⁰⁸ Evidence reference - DAIB/19/018/2234.

¹⁰⁹ A Senior Commander within the UK Armed Forces, equating to a Rear Admiral for the RN.

¹¹⁰ An Accountable Person is a named and formally appointed individual with explicit responsibility for the HSEP of activity with their AoR, which cannot take place without the AP's authority.

appoint subordinate APs at the OF5 / 1- Star level¹¹¹ within their CofC, where deemed necessary to manage specific areas of Health Safety and Environmental Protection (HSEP). ACOS AFSUP, as a 1-Star, was nominated as the RFA appointed¹¹² AP with explicit responsibility for the HSEP activity within his Area of Responsibility (AoR).

ACOS AFSUP was deemed accountable¹¹³ for identifying and managing any issue or risk concerning RFA employment standards. ACOS AFSUP was ultimately accountable to the SofS for Defence for carrying out his RFA responsibilities via his Chain of Command (CofC), which was through Director Force Generation to the Fleet Commander and then to the 1SL. Any safety risk pertaining to the RFA was required to be reviewed by the RN at the Navy Command hosted Maritime Safety Board (MSB); ACOS AFSUP was a member of this Board.

Prior to December 2018 ACOS AFSUP had been nominated as the RFA Delivery Duty Holder (DDH) within the 1SL's nominated DH construct. However, post discussions between the Fleet Commander, Navy Safety Director and ACNS Ships it was decided that the DH construct did not fit the regulatory framework for the RFA. At an MSB on 4 December 2018¹¹⁴ and following recommendations from the MCA and Defence Maritime Regulator, the DH construct for the RFA was removed with ACOS AFSUP no longer being appointed as the DDH. ACOS AFSUP continued to enact his safety responsibilities under the Duty of Care construct only.

At the time of the incident BRd 875 Version 1 still contained a DH construct detailing the 1SL as being the RFA SDH and ACOS AFSUP as the Operating Duty Holder (ODH) for the RFA. In November 2019 BRd 875 Version 2¹¹⁵ was published which amended and removed reference to the RFA ODH position, although still incorrectly made reference to 1SL as the RFA SDH, despite the decision for the RFA to have no DH construct as agreed at the MSB meeting in December 2018.

The panel also examined other extant documentation¹¹⁶ in reference to SST referring to an RFA DH construct, for managing RtL. The RN and RFA SST policy extant at the time of the incident, 2019DIN07-078¹¹⁷, stated that ACNS (Ships), ACNS (Aircraft & Carriers) and ACOS AFSUP were the nominated ODHs for Surface Ships as part of the Navy Command DH construct. 2019DIN07-078 stated that each ODH was responsible for ensuring that MOD-managed ships were manned and operated by a requisite number of Suitably Qualified and Experienced Personnel (SQEP) while the DDH was to ensure that RtL was managed to be Tolerable and As Low As Reasonably Practicable (ALARP). On incorporation into BRd 2170(1) March 2020 Version 1 reference to ACOS AFSUP as an ODH was removed. Policy now directed¹¹⁸ that Director Force Generation was the nominated ODH for ensuring MOD managed ships were manned and operated by the requisite SQEP. There was no separate reference to where RFA RtL management now lay. Concessions for SST waivers for RN personnel and RFA employees were also a responsibility of the ODH¹¹⁹, however the RFA did not fall under any DH construct.

¹¹¹ OF5 equates to RN Captain. 1-Star to Commodore.

¹¹² Evidence reference - DAIB/19/018/2237.

¹¹³ Evidence reference - DAIB/19/018/2234.

¹¹⁴ Evidence reference - DAIB/19/018/2248.

¹¹⁵ Evidence reference - DAIB/19/018/2166.

¹¹⁶ Evidence reference - DAIB/19/018/2004, 2249.

¹¹⁷ Evidence reference - DAIB/19/018/2004.

¹¹⁸ BRd 2170(1) Para 0123 March 2020 Version 1

¹¹⁹ BRd 2170(1) para 2705 Version 1 March 2020

The Panel found the lack of reference, when referring to DH construct and RtL, to the RFA created confusion in understanding where the risk was managed for RFA vessels in relation to SQEP for Defence-directed tasking¹²⁰. As an AP ACOS AFSUP managed the Duty of Care to his flotilla under MCA and IMO Code policy. The Panel confirmed that¹²¹ RN training and assessment standards for CBRNDC, explosive safety, weapons drills and aviation activity were essentially the same for the RFA. Evidence further indicated that the principles for these activities were seen by the RN as having Fleet-wide¹²² applicability. The requirement for this parity was due to the RFA being tasked in the same geographical proximity¹²³ to RN tasking and also undertaking Defence-directed tasking as singleton units. Therefore the exposure to the same operational risks, as that of RN units, could increase above that associated with MCA and ISM Code expectations. The Panel found that it was unclear where the RFA sat with respect to this operating risk.

With the RFA being a support organisation to the Naval Service the Panel determined that there was an assumed relationship as being part of the RN. When reading policy it was not clear when information included the RFA Service and its employees and when it did not.

Conclusion

The Panel concluded that with the 1SL as the SDH for Navy Command, the Fleet Commander having delegated Full Command authority of directing RFA tasking and ACOS AFSUP being accountable for Duty of Care, through the 1SL but sitting outside the DH construct, it was unclear who definitively held the operating risk of deployed RFA civilian employees undertaking Defence-directed RN tasking.

Director Force Generation was the ODH responsible for MOD-managed ships, but the RFA sat outside of the Navy Command DH chain. With medium and low-level documents that incorrectly referenced RFA DH construct the Panel opined that there was a lack of clarity for risk ownership of the mandatory requirement for RFA vessels to be manned and operated by CBRNDC SQEP, above the civilian mandate of Sea Survival Training and Basic Firefighting.

The Panel further concluded that some senior RFA employees understood that a tangled¹²⁴ relationship existed with the RN, stating that the RN / RFA boundaries were undefined as the RFA had transitioned from its traditional auxiliary supporting role to that of delivering Defence-directed RN tasking.

The Panel finds that the lack of clarity over the RN and RFA relationship and associated boundaries of roles and responsibilities, employment, training, assessment and tasking of RFA civilian crews manning MOD vessels whilst delivering Defence-directed RN tasking was an **Other factor**.

The Panel finds that the decision not to include the RFA within the Navy Command Duty Holder construct was an **Other factor**.

¹²⁰ DSA 01.2 Military activity quote

¹²¹ Evidence reference - DAIB/19/018/2234.

¹²² Evidence reference - DAIB/19/018/2234.

¹²³ Evidence reference - DAIB/19/018/2234.

¹²⁴ Evidence reference - DAIB/19/018/6020,6032.

The Panel finds that reference to RFA DH construct in medium and low-level documentation, in contradiction to BRd 10, was an **Observation**.

Recommendation – The Secretary of State for Defence should direct a review of the management structure of the Royal Fleet Auxiliary (RFA) in order to clarify and define the Royal Navy (RN) and RFA relationship, determining clear boundaries of roles and responsibilities for RFA civilian crews manning Ministry Of Defence vessels delivering Defence-directed tasking.

Recommendation – The First Sea Lord should direct a review of Duty Holding requirements within the Royal Fleet Auxiliary against the criteria in DSA 01.2 Chapter 3 when delivering Defence-directed tasking.

3.6 Maritime and Coastguard Agency

The MCA was an executive agency sponsored by the Department for Transport. The MCA produced legislation and guidance on maritime matters and regulated medical and safety standards for seafarers embarked on UK flagged vessels¹²⁵.

The MCA provided accreditation to military and civilian commercial SST centres which enabled them to deliver International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) approved sea safety and basic firefighting training for UK seafarers. Once issued, an MCA training accreditation certificate was valid for 5 years; MWS PTG had a valid accreditation certificate¹²⁶ to deliver MCA approved training at the time of the DP's incident.

The MCA required seafarers to provide their personal medical information to fulfil their duties as stated in the Merchant Shipping Regulations 2010¹²⁷ and the STCW which both required any seafarer to hold an ENG 1 medical fitness certificate¹²⁸.

3.6.1 Examination Nautical Grade 1

The Merchant Shipping (Maritime Labour Convention) (Medical Certification) Regulations 2010¹²⁹ required any seafarer on a ship to hold a medical fitness certificate, referred to as the ENG 1 medical examination. The level of medical fitness required was set by the SofS for Transport and was published by the MCA¹³⁰ together with a list of Approved Doctors (ADs) who were appointed and trained by the MCA to undertake the ENG 1 medical examination. Although that was not a legal requirement for RFA seafarers¹³¹, there was an understanding and expectance that the RFA would comply with the legislation as if it had applied to them¹³². However, RFA Seafarers are required to hold a valid ENG1 to comply with other statutory requirements such as the revalidation of Certificates of

¹²⁵ Under MSA 95 Regulation 1, RFA vessels were British ships.

¹²⁶ Evidence reference - DAIB/19/018/2225.

¹²⁷ Implement the UK's international obligations under Maritime Labour Convention, 2006. - Evidence reference - DAIB/19/018/2187.

¹²⁸ MLC 2006 regulation 1.2 - Evidence reference - DAIB/19/018/2186.

¹²⁹ These Regulations implement the UK's international obligations under Maritime Labour Convention (2006) and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW).

¹³⁰ Merchant Shipping Notice 1886 (M+F) Annex A, which replaces Merchant Shipping Notice 1839(M) referred to in the 2010 Regulations.

¹³¹ Regulation 5(2)(c) of the 2010 Regulations provides an exemption from those Regulations for warships or naval auxiliaries.

¹³² Merchant Shipping Notice 1886 (M+F), BRd 875 September 2018 Version 2 at 3-14 para 0319(c)

Competency. Gaining an ENG 1 medical fitness certificate from an AD would have enabled RFA employees to attend the BSSC and / or ISSC and subsequently to go to sea in RFA vessels.

The statutory standards for an ENG 1 medical examination were laid out in Merchant Shipping Notice (MSN) 1886 (M+F)¹³³, which ADs must use as the primary reference point. The Approved Doctor's Manual (ADM)¹³⁴, sponsored by the MCA, provided guidance on the procedures to be followed to ensure medical assessments of seafarers serving on UK ships were carried out to the standards required by the MCA in terms of compliance with statutory requirements, good medical practice and accountability. Should the AD have required additional medical checks or assessments to be done, based on an individual's medical condition, the ADM had further guidance contained within its Approved Doctor's Guidance (ADG)¹³⁵ subsections. The guidance within the ADM, in consultation with MSN 1886 (M+F), was used to assess the medical fitness standard required for all UK seafarers, including those employed by the RFA, NAAFI and WWL¹³⁶.

The ADs collected and retained a seafarer's personal information on the Medical Examination of Seafarers Report Form (ENG 2)¹³⁷, the Seafarer Medical Examination Notice of Failure / Restriction Form (ENG 3)¹³⁸, and the Certificate of Medical Fitness (ENG 1)¹³⁹.

The ENG 1 medical fitness certificate had four categories as detailed in the ADM:

- Cat 1 – Fit for Sea service, with no restrictions.
- Cat 2 – Fit for Sea service, but with restrictions.
- Cat 3 – Temporarily unfit for Sea service.
- Cat 4 – Permanently unfit for Sea service.

The STCW regulations¹⁴⁰ mandated that the MCA AD should satisfy themselves that during each seafarer medical, no disease or defect was present which would either be aggravated by working at sea or represented an unacceptable risk to the health of the candidate, the health or safety of other crew members or the safety of the ship. The AD was also mandated to consider the occupational circumstances which applied at sea in particular the potential need for crew members to play a role in an emergency or emergency drill, that could have involved strenuous activity in adverse conditions¹⁴¹. Seafarers were assessed during the ENG 1 medical examination in terms of their medical and eyesight standards; ADs classified whether an individual was fit for sea service in line with MSN 1886 (M+F) standards. Should the AD have considered a seafarer fit to perform the duties that they were required to carry out and met the medical and eyesight standard, the AD would have issued them with an ENG 1 medical fitness certificate under Cat 1 or 2. The DP was issued with a Cat 1 ENG 1 medical fitness certificate in July 2018; this was the DP's extant ENG 1 medical fitness certificate at the time of the incident which was valid for 2 years from the date of issue.

¹³³ DAIB/19/018/2106 - Merchant Shipping Notice 1886 (M+F) - Appointment of Approved Doctors and Medical and Eyesight Standards

¹³⁴ Evidence reference - DAIB/19/018/2094.

¹³⁵ ADM Chapter 4, July 2019.

¹³⁶ Seafarers employed in RN warships contracted to undertake laundry activities.

¹³⁷ MSF 4105 controlled/issued by MCA in hardcopy only.

¹³⁸ MSF 4106 controlled/issued by MCA in hardcopy only.

¹³⁹ Evidence reference - DAIB/19/018/2036.

¹⁴⁰ Evidence reference - DAIB/19/018/2066.

¹⁴¹ Evidence reference - DAIB/19/018/2066.

As part of the ADM Introduction to Seafarers notes¹⁴² various Merchant vessel types were explained, however there was no guidance within the ADM with respect to RFA vessels or with respect to RFA seafarers having to undertake and meet UK military training standards. The physical capability requirements for work at sea vary widely and had to take account of both normal and emergency duties as well as the requirement for training and refresher training.

The functions that may have required assessment by the AD during an ENG 1 medical examination included an individual's:

- Strength.
- Stamina.
- Flexibility.
- Balance and co-ordination.
- Size – compatible with entry into confined spaces.
- Exercise capacity – heart and respiratory reserve.
- Fitness for specific tasks – wearing BA.

In addition to the above, exercise may have been used as a stimulus for assessing other medical risk factors. Physical capability assessment may have been applied by an AD to all seafarers or it may have been used selectively where there were indications that there was an increased probability of an individual's medical or physical limitations.

A seafarer should have been informed by the AD that they were required to bring the following items to their ENG 1 medical examination appointment and warned that they would not be examined unless they did so:

- A Seaman's Discharge Book, passport or other certified photographic proof of ID.
- Their last ENG 1 or equivalent overseas medical fitness certificate (unless it was a first appointment).
- Spectacles or contact lenses, if worn, plus spares.
- Any medication, recent letters, discharge notes etc, which related to medical treatment since their last ENG 1 medical examination.

The DP attended his most recent ENG 1 medical examination on 26 July 2018 and provided the AD with his Seaman's Discharge Book¹⁴³ as proof of ID. The DP's Seaman's Discharge book indicated that the DP's DoB was 06 June 1960 signifying to the AD that the DP was 58 years of age¹⁴⁴. The AD who conducted the DP's ENG 1 medical examination was authorised and approved¹⁴⁵ by the MCA to conduct ENG 1 medical examinations.

MSN 1886 (M+F) stated that the majority of MCA ADs were permitted to conduct an ENG 1 medical examination for any seafarer on payment of the statutory fee. These were known as "General List" ADs. MSN 1886 (M+F) also provided options for company arrangements to establish a Company Approved Doctor (CoAD)¹⁴⁶. A company employing

¹⁴² Evidence reference - DAIB/19/018/2094.

¹⁴³ Evidence reference - DAIB/19/018/7058.

¹⁴⁴ DP's actual age at this time was 71.

¹⁴⁵ Evidence reference - DAIB/19/018/2192.

¹⁴⁶ Evidence reference - DAIB/19/018/2066.

larger numbers of employees could have considered it preferable to employ their own CoAD to conduct medicals for their employees only. There were important advantages in using the same CoAD on a regular basis; CoADs would have become familiar with the particular type of business (such as the RFA) and any special health risks that may have arisen such as:

- The CoAD would have previous medical records available.
- The CoAD would have provided consistent follow-up for seafarers with health conditions.
- The CoAD would have assisted with return to work after illness.
- The likelihood of non-disclosure of illness and fraud would have been reduced.

From evidence the Panel assessed that it was very likely that the AD who conducted the DP's ENG 1 medical examination in July 2018 did so in line with MSN 1886 (M+F) and guidance in the ADM. It was also very likely that the AD based his medical assessment on the medical information provided by the DP. It was almost certain that the AD was not informed by the DP that he had an underlying medical condition (including a [REDACTED] in 2010) and that he was taking prescribed medication at the time of the incident. It was almost certain that the AD did not have any medical reason to request that the DP provide his consent to enable the AD to contact the DP's NHS GP.

The Panel was able to ascertain that the AD who conducted the DP's ENG 1 medical examination in July 2018 had not been subject to any previous disciplinary action or had his MCA AD status either removed or suspended. There was no evidence that the AD used any of the additional guidance detailed in the ADM ADG 17¹⁴⁷ to assess the DP. The Panel assessed¹⁴⁸ that this would not have been unusual if an AD had not considered an individual to be a risk, based on disclosed age and medical related information.

The Panel determined that it was almost certain that the AD would have conducted their medical risk factor analysis¹⁴⁹ during the DP's ENG 1 medical examination based on information provided by the DP. The AD's analysis and conclusions would have been based on an inaccurate DoB and, given the 13 years difference, were likely to have been incorrect. It was very likely that the DP did not provide the AD with the RFA physical and functional training requirements that he would have been expected to undertake, which included undertaking military delivered training and assessment¹⁵⁰. It was also very likely that the DP was assessed by the AD against generic seafaring tasks articulated in the ADM.

It was almost certain that the DP had not informed any MCA AD of a [REDACTED] that occurred in 2010 as at this time the AD would have been required to issue the DP with, at best, a restricted ENG 1 medical fitness certificate valid for a maximum of 3 months only. This would have further required the DP to be seen by an AD for a follow up medical examination. If assessed as medically fit at that stage the DP could then have received a Cat 1 ENG 1 medical fitness certificate valid initially for a maximum of 6 months only and been required to undertake an ENG 1 medical examination annually thereafter as detailed

¹⁴⁷ Assessment of physical capabilities - Evidence reference - DAIB/19/018/2094.

¹⁴⁸ Evidence reference - DAIB/19/018/2228.

¹⁴⁹ Analysis was based on several risk factors including age, lifestyle, weight and family history; the AD analysis would have indicated the level of risk a person had in developing cardiovascular disease.

¹⁵⁰ Evidence reference - DAIB/19/018/2005.

in the ADM ADG 9¹⁵¹; there was no evidence that indicated that this stepped process had been imposed on the DP in 2010.

The Panel was informed by the MCA that they were aware that some seafarers (including RFA employees) may not have disclosed all pertinent medical information to an AD during an ENG 1 medical examination¹⁵². Other evidence supported the Panel's assessment that this was almost certain to be the case. The Panel opined that it was very likely that certain ADs were seen by some RFA employees as being more lenient and conducted a less thorough ENG 1 medical examination and provided some RFA employees with a more expedient route of obtaining a Cat 1 ENG 1 medical fitness certificate¹⁵³. The Panel also ascertained that if the MCA had a concern regarding the ethical or medical conduct of an MCA AD then the MCA would have conducted an investigation and, if any doubt existed, the MCA approval would have been removed from an AD¹⁵⁴.

There was no guidance within the ADM¹⁵⁵ regarding seafarers embarking in RN warships or RFA vessels having to meet UK military training standards. To ensure the ENG 1 medical examination process was robust the AD was wholly reliant on the patient's integrity in disclosing their personal medical history¹⁵⁶ and their physical and functional employment standard. The AD had no access to the DP's NHS GP medical records at the time of the DP's ENG 1 medical examination.

Conclusion

The Panel concluded that it was almost certain that¹⁵⁷ the DP did not disclose changes in his medical history to the AD during the July 2018 ENG 1 medical examination, nor did the DP disclose his extant medical condition, or his actual age. It was also almost certain that the DP had not disclosed the medication that he had been prescribed by his consultant and NHS GP pertaining to his underlying medical condition.

The Panel also concluded that it was likely that the extant ENG 1 medical examination would have provided a comprehensive medical assessment for seafarers if the statutory standards in MSN 1886 (M+F), along with guidance provided in the ADM, was consistently followed by ADs and that seafarers had provided accurate and up to date personal and medical information along with their physical and functional employment requirements.

The Panel additionally concluded that RFA seafarers were employed in unique conditions unlike those of generic seafarers. The ADM contained no guidance pertaining to seafarers who were required to be trained to embark and deploy in RN warships and RFA vessels. This meant that ADs were unable to take into account the unique conditions of RFA service. The Panel further concluded that the assurance by the RFA of the provision of an RFA employee's physical and functional employment requirements to an AD was lacking.

¹⁵¹ Cardiac Events - Evidence reference - DAIB/19/018/2094.

¹⁵² Evidence reference - DAIB/19/018/2229.

¹⁵³ Evidence reference - DAIB/19/018/2229,6008,6009,6019,6018,6031.

¹⁵⁴ Evidence reference - DAIB/19/018/6026.

¹⁵⁵ Evidence reference - DAIB/19/018/2094.

¹⁵⁶ The requirement was stated on the ENG 1 medical certificate; the patient signed the certificate to indicate they understood their responsibilities in disclosing medical information.

¹⁵⁷ Evidence reference - DAIB/19/018/2228.

The Panel also concluded that the Seaman's Discharge Book did not provide adequate assurance of the DP's actual DoB when attending the ENG 1 medical examination.

The Panel finds that the lack of coverage in the ADM of seafarers who were required to be trained to embark and deploy in RN warships and RFA vessels was a **Contributory factor**.

The Panel finds that the lack of assurance of the provision of the RFAs physical and functional employment requirements to an MCA AD was a **Contributory factor**.

The Panel finds that the lack of assurance of the proof of identification process for seafarers when attending the ENG 1 medical examination was a **Contributory factor**.

Recommendation – The Maritime and Coastguard Agency (MCA) Chief Medical Advisor should amend the MCA Approved Doctors Manual in order to ensure that it adequately covers seafarers who are required to be Royal Navy trained, and to embark in Royal Navy warships and Royal Fleet Auxiliary vessels.

Recommendation – Commodore Royal Fleet Auxiliary should implement a process to provide Approved Doctors (AD) with the Royal Fleet Auxiliary's physical and functional employment standards requirements in order to ensure that ADs carry out appropriate medical assessments.

Recommendation – Commodore Royal Fleet Auxiliary should implement a process to provide Approved Doctors with appropriate documentation in order to assure the identity of all Royal Fleet Auxiliary employees when attending the ENG 1 medical examination.

Recommendation – The Maritime and Coastguard Agency (MCA) Chief Medical Advisor should improve the guidance in the Approved Doctors Manual in order to ensure that it adequately assures the identification of seafarers when attending the ENG 1 medical examination.

3.7 Royal Navy and Royal Fleet Auxiliary medical fitness and employment standards

All RFA employees were required to have a valid ENG 1 medical fitness certificate to go to sea in RFA vessels. An in-date ENG 1 medical fitness certificate also enabled RFA employees to undertake the RN delivered SST. RFA employees were not mandated to undertake an annual fitness test.

Service personnel¹⁵⁸ were administered medically, physically and, from an OH perspective, by the Defence Medical Services (DMS)¹⁵⁹. They would usually be seen by a

¹⁵⁸ Defined as UK military personnel only.

¹⁵⁹ DMS was made up of RN, Army and RAF medical services under DG Joint Medical Group.

Medical Officer (MO) for medical and OH appointments and also for the administration of prescribed medication. An MO would have access to the full medical history of a Service Person (SP) within DMICP, this personal medical information would enable an MO to determine an SP's Joint Medical Employment Standard (JMES) code. DMICP was owned by the Joint Medical Group and was utilised by Defence Primary Healthcare to record tri-Service electronic Primary Healthcare Records.

JMES described¹⁶⁰ whether an SP could be deployed (medical deployment standard), how an SP could be employed (medical employment standard) and whether there were any limitations in terms of the employment environment or the SP's medical requirements (medical limitations). The JMES code was recorded both on an SP's DMICP record and within their Joint Personnel Administration (JPA) medical history section.

When an SP was deployed outside of the UK the DMICP system could usually be accessed and utilised by any MO or Medical Assistant in order to ensure an SP's medical history could be accessed to enable an informed decision regarding an individual's medical and OH fitness. Service personnel were mandated to undertake a formalised fitness test annually, or in some cases biennially, by undertaking the relevant Single Service Fitness Test¹⁶¹.

Should an SP's JMES Medically Fully Deployable (MFD) standard not have been met then their individual JMES code was re-assessed to record a reduced JMES code on DMICP and JPA. At the time of the incident there was no RFA OH or RN Medical Division (RN MED DIV) oversight of this activity for RFA employees during the 2 years between an RFA employee's ENG 1 medical examination. It was likely, therefore, that some RFA employees were not at the required RFA employment standard on joining an RFA vessel even though they would almost certainly have held an in-date Cat 1 ENG 1 medical fitness certificate.

The RFA was the largest employer of British merchant seaman in the world. A majority of RFA employees were UK civilians and, as such, would almost certainly be registered with an NHS GP¹⁶². During the mandated RFA employment standard medical examination (ENG 1), MCA ADs conducted medical fitness assessments of RFA employees by adhering to the guidance material mandated in the ADM along with any other key medical or fitness information provided by the RFA employee. It was almost certain that an AD would not have access to the same documented medical history for an RFA employee that would be available to the RFA employee's GP.

Information contained within Magellan included an RFA employee's contact details, DoB, NoK and emergency contact details, passport details, a record of vessel appointments, RFA training records, records of mandatory competencies attained and annual leave records. Magellan also included a record of an RFA employee's extant ENG 1 medical examination category with its associated expiry date.

It was mandated in BRd 875 that when an RFA employee was appointed to an RFA vessel an RFA MED TECH should conduct a New Joiners Medical (NJM)¹⁶³, within 14 days of embarkation¹⁶⁴, as part of the RFA employee's induction. The NJM included a

¹⁶⁰ Evidence reference - DAIB/19/018/2227.

¹⁶¹ JSP 898 Pt 1 Chap 2 para 2.8, November 2014 Ver 1.1.

¹⁶² A minority of RFA employees were not British nationals and may not have been registered with an NHS GP.

¹⁶³ Evidence reference - DAIB/19/018/2166.

¹⁶⁴ BRd 1991 Chapter 2 paragraph 0225.

measure of an RFA employee's height, weight, blood pressure, pulse, Body Mass Index (BMI), waist circumference and urinalysis. The Panel assessed that it was almost certain that some RFA MED TECHs were not undertaking RFA NJMs in a standardised manner.

An RFA employee was additionally mandated¹⁶⁵ to complete an RFA medical questionnaire¹⁶⁶, which was utilised to enable the embarked MED TECH and / or MO to understand an RFA employee's medical history and to inform of any medication that was being brought onboard. The medical information gathered during the NJM and provided on the mandated medical questionnaire should then be used to update DMICP records. The Panel assessed that any medical information uploaded by an MO or RFA MED TECH was used to establish a medical history baseline¹⁶⁷. There was no transfer of medical information from an RFA employee's GP medical record to an RFA employee's DMICP record¹⁶⁸.

The DP was registered with an NHS GP and had attended several medical appointments regarding his underlying medical condition. It was also almost certain that the DP did not provide the AD, the RFA or MWS PTG with accurate medical information despite this being mandated in policy. The Panel assessed that it was almost certain that RFA employees were more likely to engage with their GP rather than re-visit the AD who had conducted their ENG 1 medical examination¹⁶⁹.

The Panel assessed that an SP's DMICP record should ensure that a thorough and assured medical history could be referred to, to enable an accurate medical assessment of the SP to be conducted. An SP's JMES code could be continuously re-categorised as required to reflect the SP's deployability standard dependent on any changes to an SP's medical status. The ENG 1 medical examination however, was valid for 2 years unless the RFA employee decided to re-engage with the AD and inform them of any changes to their medical status.

Conclusion

The Panel concluded that it was very likely that medical information contained within DMICP was primarily based on the medical information provided solely by RFA employees. It was almost certain that DMICP was not updated to ensure that it accurately reflected GP sourced medical history for a particular RFA employee. As such it would not provide a thorough and accurate medical history to enable an assured medical assessment of an RFA employee to be carried out. The DP's medical history, as identified by the Panel, had not been incorporated into DMICP.

The Panel also concluded¹⁷⁰ that it was likely that some RFA MED TECHs were not conducting the NJM to the standard as mandated in BRd 875. It was also almost certain that RN MED DIV had not adequately assured this activity for embarked RFA employees; this is further covered in paragraph 3.10.3.

¹⁶⁵ Evidence reference - DAIB/19/018/2166.

¹⁶⁶ BRd 875 September 2018 Ver 1.

¹⁶⁷ Evidence reference - DAIB/19/018/6031.

¹⁶⁸ Evidence reference - DAIB/19/018/2207.

¹⁶⁹ Evidence reference - DAIB/19/018/6009,6019,6020,6025,6026,6028.

¹⁷⁰ Evidence reference - DAIB/19/018/2207.

The Panel further concluded¹⁷¹ that it was almost certain that RFA employees would not re-engage with an AD but were more likely to visit their GP. There was no automatic exchange of medical information between an RFA employee's GP and the AD that had conducted their ENG 1 medical examination.

The Panel finds that not incorporating the DP's NHS GP medical history in DMICP was a **Contributory factor**.

The Panel finds that DMICP not being updated accurately or providing a thorough and accurate medical history for RFA employees to enable an assured medical assessment to be carried out was an **Other factor**.

The Panel finds that not undertaking RFA NJMs in a standardised manner as mandated in BRd 875 was an **Other factor**.

Recommendation – Assistant Chief Of Staff Medical should further investigate how the associated risk of not incorporating General Practitioner medical records for Royal Fleet Auxiliary (RFA) employees could be mitigated in order to provide a more complete and accurate RFA employee medical summary.

Recommendation – The Head of the Defence Medical Services Regulator should assure the process by which the Defence Medical Information Capability Programme is updated by Royal Fleet Auxiliary (RFA) Medical Technicians and employed by embarked Medical Officers in order to ensure medical records are maintained with timely and accurate medical information for RFA employees when embarked in RFA vessels.

Recommendation – Assistant Chief Of Staff Medical should standardise the conduct of Royal Fleet Auxiliary New Joiner Medicals in order to provide assurance that consistent medical scrutiny is applied.

3.8 Royal Navy and Royal Fleet Auxiliary surface flotilla Sea Safety Training (SST)

Navy Command Headquarters (NCHQ) DHs¹⁷² oversaw the activities of Surface Ship Flotillas and were responsible for ensuring that MOD-managed ships¹⁷³ were manned and operated by a requisite number of SQEP. DHs were additionally responsible for ensuring that all RtL were managed to be Tolerable and ALARP. To fulfil these DH responsibilities it was mandatory for any person going to sea in RN ships and RFA vessels to be in date for the appropriate SST. As previously discussed in para 3.5.2 the RFA was removed from the Navy Command DH construct in December 2018.

¹⁷¹ Evidence reference - DAIB/19/018/6009,6019,6020,6025,6026,6028.

¹⁷² Evidence reference - DAIB/19/018/2004.

¹⁷³ RFA vessels were owned by the MOD.

3.8.1 Royal Fleet Auxiliary outsourced Sea Safety Training

The minimum requirement for seafarer SST was to attend an MCA accredited training course. The RFA mandated in BRd 875 that this was to be achieved by attendance at the BSSC or ISSC delivered by MWS PTG. The RFA had previously outsourced their SST requirements to several commercial MCA accredited providers¹⁷⁴ when MWS PTG had been unable to meet the requirement due to a change in MCA regulation. This change stipulated that documentary evidence must be held by seafarers to show that they had achieved a Proficiency in Personal Survival Techniques and a Proficiency in Fire Prevention and Firefighting within the previous 5 years¹⁷⁵. The outsourced MCA SST was by exception only and any outsourced SST must have been approved through the RFA HR Training Cell. The non-MCA accredited modules¹⁷⁶ of a BSSC and / or an ISSC would not be able to be outsourced as these were UK military specific modules delivered by MWS PTG.

3.8.2 Fleet Outsourcing Activities Project (Training)

Navy Command had progressively outsourced elements of RN training delivery and training support services to industry. The primary arrangement was the Fleet Outsourcing Activities Project (Training) (FOAP(T)) contract that commenced in January 2012 and was subject to an annual change process as training requirements changed and evolved. The FOAP(T) contractor that provided the training delivery service at MWS Phoenix was BMT. BMT was responsible for managing all aspects of training support, resource allocation and assurance. The FOAP(T) was a predominately output-based service delivery contract and provided a range of services which included:

- Contractor delivered and managed training (known as Type A).
- Contractor delivered, RN managed training (known as Type B).
- Entirely RN delivered and managed training (known as Type C).
- Training Support Services¹⁷⁷, QA, Facilitation and Education¹⁷⁸.

SST delivered at MWS Phoenix was categorised as Type B training¹⁷⁹.

3.9 Maritime Warfare School

The MWS was part of the FOST organisation and delivered Warfare Training on five sites: HMS COLLINGWOOD, HMS EXCELLENT (including Horsea Island), HMS RALEIGH, HMS TEMERAIRE and HMNB Clyde. The aim of the MWS was to train personnel to enable them to contribute effectively to the delivery of UK Maritime Power. The AP for the delivery of MWS training was the [REDACTED]

The MWS PTG provided realistic survivability training delivered by the MWS Chemical, Biological, Radiological, Nuclear, and Damage Control (CBRNDC) teams at HMS EXCELLENT and HMS RALEIGH. Management of the delivery of the training was led by

¹⁷⁴ Stream Marine Training, Warsash Maritime Academy, Red Ensign Maritime Training- the outsourced training was at cost to the RFA- DAIB/19/018/6019.

¹⁷⁵ Evidence reference - DAIB/19/018/6008, 6027.

¹⁷⁶ Only two of the five BSSC/ISSC modules were MCA accredited.

¹⁷⁷ This included Training Design and Training Planning.

¹⁷⁸ This included Life Long learning and resettlement.

¹⁷⁹ Evidence reference - DAIB/19/018/2222.

the Officer Commanding Warfare Support Training Group (OC WSTG) at MWS, HMS COLLINGWOOD. PTG was primarily located in HMS EXCELLENT; SST delivery was overseen by the OiC MWS Phoenix (see Figure 15). MWS Phoenix was located as a lodger unit at HMS EXCELLENT; MWS Triumph was located as a lodger unit at HMS RALEIGH. Horsea Island¹⁸⁰ was an extension of the MWS Phoenix site and delivered the SSM of the BSSC and ISSC from the Sea Survival Training Centre (SSTC).

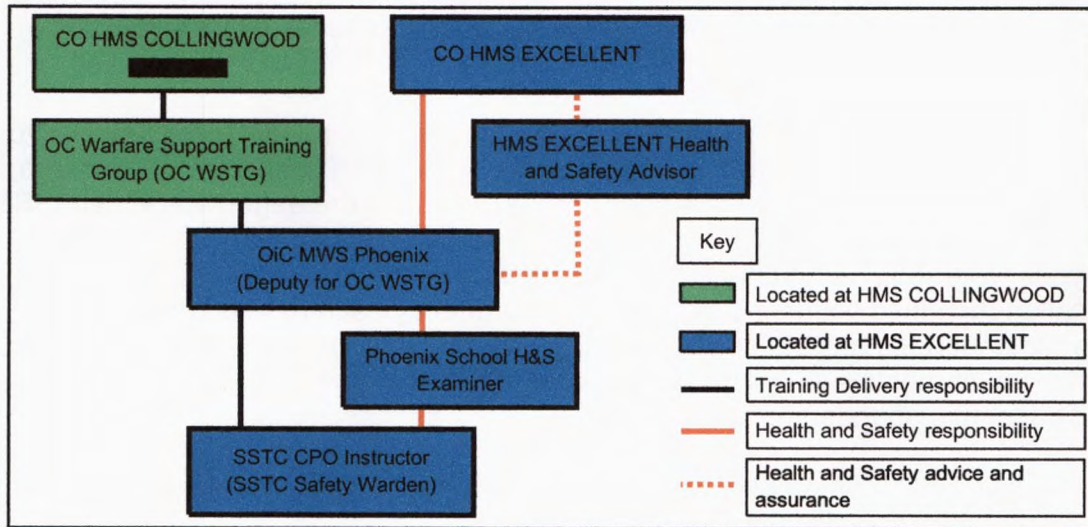


Figure 15: MWS and HMS EXCELLENT structure of SST

3.9.1 Maritime Warfare School Phoenix

MWS Phoenix was the lead school on all matters of CBRNDC and firefighting in surface ships. It delivered training to the standards approved by FOST and advised FOST on CBRNDC, firefighting and SST, so that common standards were achieved across the RN and RFA.

The OiC MWS Phoenix, via OC WSTG, was responsible to [redacted] for ensuring training standards in CBRNDC, firefighting, sea safety and First Aid were achieved as approved by FOST; courses delivered by MWS Phoenix included the BSSC, ISSC and EFSSC.

3.9.1.1 Embarked Forces Sea Safety Course

The EFSSC was a 2-day course designed to train designated personnel who would not be required¹⁸¹ to contribute towards a ship's or vessel's DC and firefighting organisation but could be called upon to assist if an emergency occurred. Designated personnel would only be trained to conduct first aid actions to protect themselves and / or the ship / vessel in an emergency. The EFSSC included first aid firefighting, escape from a smoke-filled environment, first aid DC, ship CBRNDC organisation and sea survival; the EFSSC was valid for 4 years. Civilian seafarers (WWL and NAAFI), and other civilian contractors attended MWS Triumph and MWS Phoenix to undertake the EFSSC. Military personnel embarked in ships generally undertook the BSSC, ISSC and / or the EFSSC.

¹⁸⁰ Horsea Island was located approximately 5 miles to the North of HMS EXCELLENT by road.

¹⁸¹ Evidence reference - DAIB/19/018/2167.

3.9.1.2 Basic Sea Safety Course

The BSSC was mandatory for all RN personnel and RFA employees before proceeding to sea for the first time¹⁸². All RN personnel and RFA employees were only required to complete the BSSC once; they were mandated to return to MWS PTG and complete an ISSC once their BSSC validity had expired¹⁸³. An MCA Certificate¹⁸⁴ in 'Personal Survival Techniques' and 'Fire Prevention and Firefighting' was presented to each RFA employee on successful completion of the BSSC and ISSC; both courses were designed to be realistic and stressful.

RN personnel assigned to a complement position in a sea going unit were required to undertake a BSSC no more than 6 months before proceeding to sea for the first time; the initial qualification had a validity of 4 years. Re-qualification thereafter was via an ISSC which was then valid for 4 years for RN personnel. The RFA mandated¹⁸⁵ that their employees were required to undertake the BSSC on first joining the RFA. The qualification remained valid for 5 years and subsequently each RFA employee was required to undertake an ISSC that also had a validity of 5 years. The BSSC and ISSC also provided students with the basic techniques in sea survival in the event of marine casualty and ship abandonment¹⁸⁶.

Whilst on the BSSC RFA employees would have been expected to carry out several physically demanding activities such as:

- Repeated ascent and descent of vertical ladders and stairs in full firefighting PPE, including BA (see Figure 16).
- Climbing unaided into a life raft, re-righting an upturned life raft and assisting other individuals into the life raft whilst wearing personal sea survival equipment (see Figure 17).

¹⁸² Evidence reference - DAIB/19/018/2215.

¹⁸³ Evidence reference - DAIB/19/018/2215.

¹⁸⁴ A BSSC/ISSC JPA competency was issued for military personnel.

¹⁸⁵ BRd 875 Chapter 12 paragraph 1213 September 2018 Ver 1 and Evidence reference - DAIB/19/018/6020.

¹⁸⁶ Evidence reference - DAIB/19/018/2165.



Figure 16: Firefighting PPE



Figure 17: Personal sea survival equipment

The five BSSC modules¹⁸⁷ were delivered at MWS Phoenix from Monday to Friday with a maximum of four BSSCs running concurrently per week as detailed at Figure 18. The BSSC included the following modules:

1. FFM – Firefighting organisation, equipment and techniques (1 day) and practical firefighting (1½ days).
2. SSM – Sea survival theory and practical Drills 1 and 2 (1 day).
3. DC / Incident Board Operator (IBO) Module – CBRNDC theory, organisation, communications, states and conditions, and incident board marking (½ day).
4. RTC Module – CBRNDC hazards and protection, individual protective equipment and CBRN cleansing procedures¹⁸⁸ (½ day).
5. DRIU Module – Practical DC DRIU (½ day).

Each of the BSSC modules were MWS PTG staff-led with BSSC students undertaking specified roles during each module. The ISSC required previous BSSC trained students to lead a majority of the ISSC modules under the supervision of MWS PTG staff. The ISSC timetable did not include the DC / IBO Module.

¹⁸⁷ Evidence reference - DAIB/19/018/2164 - all BSSC module details.

¹⁸⁸ Included practical drills in CBRN in a CS gas environment.

| | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|--------|---------------------|--------------|---------------------|---------------------|------------------------------------|
| BSSC 1 | 10 RTC | 8 DC/IBO | 24 FIRE FIGHTING | | 1245 DRIU 23 SEA SURVIVAL |
| BSSC 2 | 16 FIRE FIGHTING | | | 8 DC/IBO DRIU | 10 RTC 23 SEA SURVIVAL |
| BSSC 3 | DRIU | 10 RTC | 23 SEA SURVIVAL | 8 DC/IBO | 24 FIRE FIGHTING |
| BSSC 4 | 8 DC/IBO | 1245 DRIU | 23 SEA SURVIVAL | 10 RTC | 17 FIRE FIGHTING |

Figure 18: BSSC timetable

3.9.1.3 Assurance of the Basic Sea Safety Course

The MCA had certified¹⁸⁹ MWS PTG as an Approved Training Provider for the delivery of Personal Survival Techniques and Basic Fire Prevention and Firefighting training modules. The MCA audited and granted approval against the prescribed criteria mandated by the Merchant Navy Training Board¹⁹⁰ (MNTB). Approved training providers were those which had been found by the MCA to have met the requirements of the MNTB Criteria as per Annex F of MSN 1865¹⁹¹.

Following the DP's incident the MCA suspended the Personal Survival Techniques accreditation certificate for MWS PTG pending a post-incident MCA assurance visit. Furthermore the RFA mandated that RFA employees would not undertake the SSM at MWS Phoenix until the findings of this NSI had been published. HMS RALEIGH continued to have an extant MCA Personal Survival Techniques accreditation certificate¹⁹². MWS Triumph continued to deliver ISSC and the Embarked Forces Sea Safety Course (EFSSC) for Service personnel; World Wide Laundry (WWL) and Navy Army and Air Force Institute (NAAFI) employees continued to undertake the EFSSC.

The MCA audit process comprised of an initial audit, mid-term audit as appropriate, and renewal audit at the end of the approval period; the maximum approval period was 5 years. Additional audits could be required by the MCA in the event of complaints regarding approved training providers or concerns regarding the conduct of training¹⁹³. All MWS PTG practical training activities were required to be risk assessed; the risk assessments were required to be approved by OiC MWS Phoenix¹⁹⁴. MWS Phoenix and MWS Triumph 1st Party Audits (1PA) were conducted by BMT auditors biennially under the FOAP(T) contract internal audit process.

The scope of the BMT audit was to assure MWS PTG outputs complied with the FOAP(T) Training Quality Management System (TQMS) procedures and the Defence Systems Approach to Training¹⁹⁵ (DSAT) QMS Management of Training System (MTS)

¹⁸⁹ Evidence reference - DAIB/19/018/2168.

¹⁹⁰ MNTB set Standards of Training, Certification and Watchkeeping for Seafarers (STCW) qualifications - Evidence reference - DAIB/19/018/2128.

¹⁹¹ Evidence reference - DAIB/19/018/2067.

¹⁹² Evidence reference - DAIB/19/018/2099.

¹⁹³ Annex F of MSN1865 - Evidence reference - DAIB/19/018/2067.

¹⁹⁴ Firefighting Training Unit Risk Assessments were approved by the Firefighting Training Unit Manager.

¹⁹⁵ JSP 822 June 2019 Ver 3.2.

requirements¹⁹⁶; this was conducted in accordance with Joint Service Publication (JSP) 822. MWS 2nd Party Audits (2PA) were conducted biennially by an Assistant Chief of Naval Staff (Training) (ACNS(T)) assurance team¹⁹⁷ who were supported by BMT auditors.

The scope of the 2PA was to review the FOAP(T) MTS in order to assure that the intent of the FOAP(T) TQMS complied with policy, as laid down in the FOAP(T) MTS and its associated training procedures¹⁹⁸. MWS PTG instructors were trained and assessed under the Coaching for Training Network (CfTN), the network provided Defence Train the Trainer (DTTT) training, coaching, mentoring and assurance services within the FOAP(T) contract. Experienced MWS PTG personnel within each department were additionally trained as Defence Trainer Supervisors and monitored the continuing performance of MWS PTG instructors on a 6-monthly cycle.

3.9.1.4 Maritime Warfare School Phoenix, Sea Survival Training Centre

The MWS Phoenix SSTC was located at Horsea Island and conducted the BSSC and ISSC practical SSM which included ship abandonment and life raft drills. All RN and BMT SSTC staff were required to be qualified SSM instructors who were additionally required to have completed the RN Open Water Safety Swimmer course and be qualified in Sea Survival Equipment Maintenance (or recognised equivalents). SSTC staff should have held an in-date First Aid Level 2 qualification¹⁹⁹. Students attending the BSSC were required to complete SSM Drills 1 and 2. SSM Drill 1 required the BSSC student to don an OOSS and a GSLJ and jump unaided into Horsea Island lake from a 3 m platform. Upon entering the water the students were required to fit the GSLJ visor and purge excess air from their OOSS. Students were then required to swim unaided to a 25-man multi-seat life raft where they should board the life raft unaided.

After boarding the life raft students were briefed on the correct exit drill and should then re-enter the water under control. The students were then required to swim unaided to an upturned 8-man multi-seat life raft. The students were further required to demonstrate, without assistance, the correct technique to re-right the upturned life raft before being required to swim unaided to a slipway ramp adjacent to the SSTC and exit the water.

The following SSM pass / fail criteria was mandated by MWS PTG²⁰⁰ (serials depicted within Figure 19).

- A.** Step off a 3 m platform into cold water whilst wearing a survival suit and lifejacket.
- B.** Floating and controlling own movement in water over a distance of up to 75 m, whilst wearing a survival suit and lifejacket.
- C.** (1) Board an in-service multi-seat life raft unaided.
(2) Re-right an in-service multi-seat life raft unaided.
- D.** Act as a team member onboard an in-service multi-seat life raft and answer the instructor's test questions.

¹⁹⁶ Evidence reference - DAIB/19/018/2224.

¹⁹⁷ Evidence reference - DAIB/19/018/2242.

¹⁹⁸ Evidence reference - DAIB/19/018/2224.

¹⁹⁹ A minimum of two first aid trained personnel should be present at each SSM drill.

²⁰⁰ Pass or Fail criteria were set by MWS and were driven by the Training Requirements Authority to comply with MCA standards - Evidence reference - DAIB/19/018/2184, 2250.

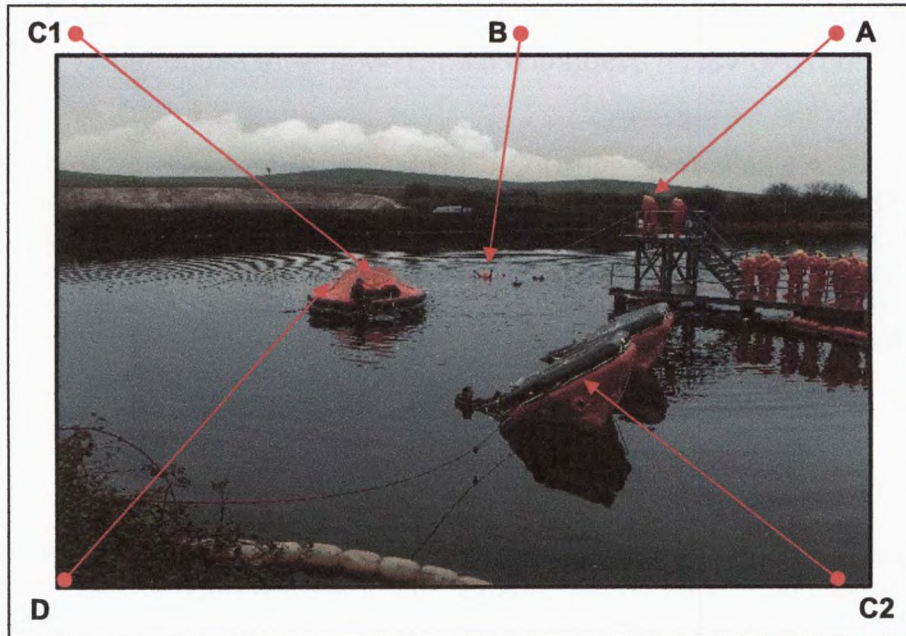


Figure 19: SST Serials conducted at Horsea Island

3.9.2 Maritime Warfare School Triumph

MWS Triumph was located within HMS RALEIGH and also delivered CBRNDC, firefighting, sea survival training and first aid; the BSSC was not delivered at MWS Triumph. MWS Triumph was staffed by 14 RN personnel and 33 BMT employees under the FOAP(T) contract; MWS Triumph had been certified by the MCA as an Approved Training Provider for the delivery of Personal Survival Techniques and Basic Fire Prevention and Firefighting²⁰¹.

Courses delivered at MWS Triumph consisted of:

- ISSC (delivered three times per term).
- EFSSC (run weekly except on those weeks when an ISSC was being delivered).

The theory element of the ISSC delivered at MWS Triumph was identical to that of MWS Phoenix; practical elements of the FFM and the DRIU were also of the same design and specification to that of MWS Phoenix. ISSC SST at MWS Triumph differed from that of MWS Phoenix as the practical SSM was delivered in an indoor swimming pool as opposed to a salt water lake. The SSM drills conducted within the indoor swimming pool were delivered to the same standards as those delivered at Horsea Island and met the same MWS PTG pass / fail criteria, albeit delivered in a different order conducive within the available space. Although not excluded from doing so, RFA employees were not allocated places at MWS Triumph to undertake SST.

²⁰¹ Evidence reference - DAIB/19/018/2099.

3.9.3 Royal Fleet Auxiliary attendance at Maritime Warfare School Phoenix

The Panel assessed that it was almost certain that there were specific CBRNDC areas where efficiency standards for RFA employees were expected to be equivalent to those of RN personnel. The requirement for this parity was due to the exposure to potential risks due to geographical proximity²⁰²; the Panel interpreted this to be the exposure of RFA employees to the same potential risks as RN personnel, which was driven by the operational output required of RFA vessels in support of Defence-directed tasking.

The term Ships Company²⁰³ covered all RN personnel and RFA employees assigned to a complement position in an RN ship or RFA vessel, where personnel would reasonably be expected to form part of the Standing Sea Emergency Party, a Harbour Fire and Emergency Party or an RFA Duty Watch²⁰⁴. All Ships Company personnel were mandated to undertake a BSSC no more than 6 months before proceeding to sea for the first time. Re-qualification of the Ships Company CBRNDC skills to meet the mandated SQEP requirement was via an ISSC. SST courses were mandated in order to maintain SQEP at sea and should be booked by RN Career Managers and RFA Appointers via a Central Booking Cell.

The purpose of the BSSC was to develop basic skills in firefighting, DC, and the CBRNDC Immediate Action drills required for students to become competent members of CBRNDC teams at sea and when vessels are berthed alongside. The purpose of the ISSC was to ensure that RN ships and RFA vessels were manned and operated by a requisite number of CBRNDC SQEP. The Panel identified that a majority of RFA employees were routinely loaded onto the BSSC rather than the mandated requirement to subsequently undertake an ISSC after an initial BSSC as detailed in BRd 875. Evidence further indicated that the BSSC was seen by the RFA as an easier SST course for RFA employees to attend and successfully complete. There was no evidence to indicate any concession had been granted for this deviation to policy or how the risk had been recorded and mitigated.

The five BSSC modules²⁰⁵ are delivered at MWS Phoenix from Monday to Friday; the practical SSM Drills for BSSC 1 and BSSC 2 students are delivered on a Friday afternoon. It was almost certain that RFA employees were loaded onto the BSSC 2 syndicate as a consequence of legacy and / or normalised course loading and differing RFA equipment issuing requirements during the MWS Phoenix induction phase. The Panel assessed that minimal support was available to SSTC staff from HMS EXCELLENT and BMT management on a Friday afternoon. The BSSC timetable scheduled an end to SSM training by 14:45 on a Friday vice 15:45 on a Monday through to a Thursday²⁰⁶. The Panel determined that compressing training on a Friday increased the likelihood of a safety related incident.

RFA employees were supervised by MWS PTG military and civilian staff whilst attending the BSSC. An RFA CPO was assigned to MWS Phoenix with the primary task of developing and enhancing the flexibility of CBRNDC training provided to RFA employees, both ashore and afloat. The RFA CPO was directly accountable to the RFA CBRNDC Training Officer whilst undertaking his duties²⁰⁷.

²⁰² Evidence reference - DAIB/19/018/2234.

²⁰³ Evidence reference - DAIB/19/018/2004.

²⁰⁴ Nominated members of a ships company who were responsible for responding to emergency CBRNDC and firefighting incidents.

²⁰⁵ Evidence reference - DAIB/19/018/2164 - all BSSC module details.

²⁰⁶ Evidence reference - DAIB/19/018/2021.

²⁰⁷ Evidence reference - DAIB/19/018/2027.

A majority of the witnesses²⁰⁸ involved in the delivery of SSM expressed concerns that following the incident in 2009 they believed there was a high risk of another fatality occurring. Analysis of this evidence indicated that this was based on the SSTC staff's perception of a significant percentage of RFA student's lack of physical fitness, their individual ability due to size and weight and an individual's drive and commitment to meet the course pass criteria. Many of the more experienced SSTC staff indicated that there was concern every Friday when RFA employees were programmed to undertake the SSM and could identify those individuals, as they disembarked from the MWS transport, who in their experience, were likely to struggle on the SSM.

Conclusion

The requirement for a requisite number of ISSC trained RFA employees was to ensure that RFA vessels were manned and operated by CBRNDC SQEP; evidence indicated that the RFA was only training a minority of its employees to the ISSC standard. The Panel established that RFA Senior Officers were aware of this normalised deviation from policy. The Panel concluded that the BSSC was viewed by the RFA as an easier course to complete than the ISSC as the BSSC was instructor-led and was delivered by the RN as an introduction to the basic skills required to become competent members of a CBRNDC team.

The Panel further concluded that it was more likely than not that conducting a BSSC heavily loaded with RFA employees on a Friday at the end of a physically demanding week, when the day's programme was delivered in a compressed timeline, combined with a working lunch break, increased the risk of having a safety related incident.

The Panel observed that on a Friday afternoon the SSTC staff were provided with minimal support from HMS EXCELLENT and BMT management which extended the incident reporting timeline.

The Panel finds that the low levels of RFA employees booked onto an ISSC was an **Other factor**.

The Panel finds that the BSSC timetable that programmed SSM training for the majority of RFA employees on a Friday was an **Other factor**.

The Panel finds that the available support from HMS EXCELLENT and BMT management on a Friday afternoon was an **Observation**.

Recommendation – Commodore Royal Fleet Auxiliary should assure the process for Royal Fleet Auxiliary (RFA) employees to conduct an Intermediate Sea Safety Course on expiry of an initial Basic Sea Safety Course in order ensure that RFA vessels are manned and operated by Suitably Qualified and Experienced Personnel.

²⁰⁸ Evidence reference - DAIB/19/018/6003,6012,6013,6017.

Recommendation – ██████████ should conduct a review of the Sea Safety Training timetables in order to mitigate any identified risks with delivering the Sea Survival Module phase of Sea Safety Training at Horsea Island.

3.10 Deceased person's fitness and health

The Panel considered that it was very likely that the DP's previous BSSC experiences led him to inform the RFA of his anxiousness about carrying out the SSM phase of the BSSC at Horsea Island prior to this incident. The Panel ascertained that the DP had informed the RFA of his concerns regarding attending the SSM on at least three separate occasions²⁰⁹ and had requested that he be allowed to attend a Sea Survival course delivered by an MCA approved commercial training provider. The RFA had previously utilised MCA approved commercial training providers when MWS Phoenix had been unable to deliver SST²¹⁰. The DP's final request to undertake alternative commercial SST was during his attendance on a First Aid Level 2 course delivered by MWS Phoenix on 16 September 2019; the DP's requests were all denied by the RFA²¹¹.

The DP had independently attended²¹², and successfully completed, a Sea Survival course delivered by an MCA approved commercial training provider²¹³ in March 2019 and gained a Certificate of Proficiency in Personal Survival Techniques; this certificate of proficiency was found to be within the DP's RFA HR Personnel file. The Panel considered that it was very likely that the DP's concerns with regard to carrying out the SSM phase of the BSSC were also exacerbated by discussions with other RFA seafarers²¹⁴ regarding their own experiences whilst undertaking the BSSC.

The DP's request to undertake SST utilising an MCA approved commercial training provider was almost certainly due to his anxiety. It was almost certain that the DP had independently booked himself onto a Sea Survival course delivered by an MCA approved commercial training provider²¹⁵ to avoid undertaking the BSSC SSM. The Panel established²¹⁶ that it was likely that the DP believed that if he did not pass the BSSC his continued employment with the RFA would be at risk. The Panel assessed that it was almost certain that the DP was aware that he was unlikely to meet the required pass criteria for the BSSC and was equally aware that an MCA approved commercial SST course was likely to be delivered at a more leisurely pace and be more environmentally controlled.

On arrival at MWS Phoenix on 14 October 2019 the DP was met by RFA 1 and instructed to complete an MWS PTG Medical Self-declaration form²¹⁷. The DP only partially completed the MWS PTG Medical Self-declaration form²¹⁸ (see example at Figure 21) and handed his form to RFA 1 on the morning of the 14 October 2019. The DP was not asked

²⁰⁹ Evidence reference - DAIB/19/018/6008.

²¹⁰ Evidence reference - DAIB/19/018/6008.

²¹¹ Evidence reference - DAIB/19/018/6008.

²¹² The DP self-funded the activity independently from RFA HR and Training.

²¹³ Falmouth Training Solutions, Evidence reference - DAIB/19/018/2049.

²¹⁴ Evidence reference - DAIB/19/018/6008.

²¹⁵ Falmouth Training Solutions, Evidence reference - DAIB/19/018/2049.

²¹⁶ Evidence reference - DAIB/19/018/6008.

²¹⁷ MWS Phoenix Maritime School of Survivability Self declaration of fitness/ health for attending mandatory training form. - Evidence reference - DAIB/19/018/2005.

²¹⁸ Evidence reference - DAIB/19/018/2009 - The DP did not indicate his RFA staff number, waist circumference size or expansion of details for long-term medication being taken.

to prove that he was in possession of an in-date ENG 1 medical fitness certificate; the DP did however confirm on his MWS PTG Medical Self-declaration form that he was in possession of an in-date ENG 1 medical fitness certificate. The Panel established that this was valid from 26 July 2018 for 2 years. The DP had not positively indicated within the designated box that he had any reason to doubt his own ability to safely participate in the SST course.

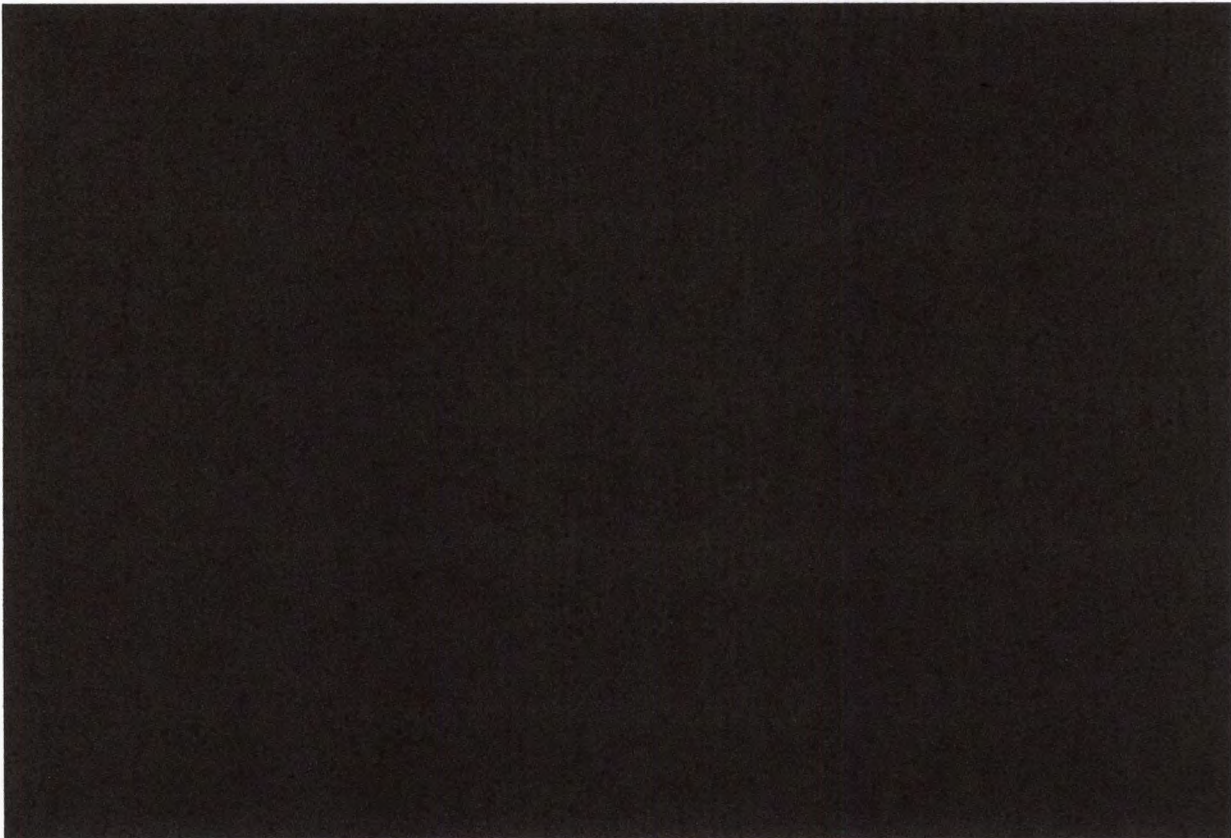


Figure 20: MWS PTG Medical Self-Declaration form with DP's responses

The DP positively indicated on his MWS PTG Medical Self-declaration form that he was [REDACTED]. The DP also indicated on this form that [REDACTED].

[REDACTED] The DP did not provide any further expansion to the certified sections of his MWS PTG Medical Self-declaration form within the designated "other / details of above" box.

The DP further positively indicated on his MWS PTG Medical Self-declaration form that he [REDACTED]; the Panel confirmed that the DP had [REDACTED] in 2010²¹⁹.

The DP had also not filled in a waist circumference measurement; the MWS PTG Medical Self-declaration form stated a value of 122 centimetres (cm) for the maximum measurement allowed for undertaking MWS PTG SST. The Panel opined that the DP's actual waist circumference may have been greater than the maximum permitted measurement allowed for training and therefore the DP chose not to complete this section

²¹⁹ Evidence reference - DAIB/19/018/2109.

of the form. The DP had stated on the MWS PTG Medical Self-declaration form that his weight was ■ Kilograms, the Panel assessed that it is likely that the DP's disclosed weight was incorrect.

The DP's MWS PTG Medical Self-declaration form was then placed within an MWS Phoenix file²²⁰ on the morning of the 14 October 2019 by MWS PTG staff²²¹ without any further assessment or consideration regarding the DP's declared medical statements. The Panel determined²²² that there was no formalised process or procedure for MWS PTG staff to follow with regards to assessing a student's MWS PTG Medical Self-declaration form during the MWS Phoenix induction phase. The Panel confirmed that it was not uncommon to find MWS PTG Medical Self-declaration forms with two or three medical conditions ticked "yes" with no further remedial actions taken by MWS Phoenix staff.

The medication the DP had been prescribed at the time of the incident is detailed below²²³:



The Panel was informed²²⁴ that the DP had visited his NHS GP and attended hospital appointments between July 2018 and the date of the incident. It was very likely that the DP had been prescribed additional medication to manage his underlying medical condition and there was no evidence to confirm that he had informed his AD of these changes in medical conditions as detailed on the reverse of the ENG 1 medical fitness certificate.

Analysis by the INM²²⁵ confirmed that ■ are all prescribed as a matter of routine for virtually any patient who has had a ■²²⁶. This medication was also used (with the exception of ■) to treat ■, which could lead to ■. ■ was used to reduce ■. ■ was used following a ■ to reduce the risk of further events; it was also used for ■, however, ■ was generally used where an underlying disease was more significant.

Additional analysis by INM²²⁷ indicated that the medication prescribed to the DP were typically for ■ and to reduce the risk of a ■. Evidence from INM also confirmed that the drugs prescribed to the DP, if disclosed to a medical professional, would have almost certainly indicated that the DP had a form of ■.

²²⁰ Evidence reference - DAIB/19/018/6009.

²²¹ MWS Medical Self-declaration forms were normally kept for one month and then destroyed at the end of each term.

²²² Evidence reference - DAIB/19/018/6008.

²²³ Evidence reference - DAIB/19/018/2015.

²²⁴ Evidence reference - DAIB/19/018/2109.

²²⁵ Evidence reference - DAIB/19/018/2181.

²²⁶ ■.

²²⁷ Evidence reference - DAIB/19/018/2181.

The Panel established²²⁸ that the medication the DP had been prescribed would not automatically prevent a seafarer from going to sea. It was very likely that a person taking this type of medication would normally be awarded an ENG 1 medical fitness certificate which would have been limited to 1 year. A patient with an underlying [REDACTED] should have been considered as having their condition under control by an MCA AD before potentially endorsing a Cat 1 ENG 1 medical fitness certificate. Prescribing the same type of medication, as given to the DP, would almost certainly be part of ensuring that the underlying [REDACTED] was under control. The DP had declared his age as 58 in July 2018 when he attended his last ENG 1 medical examination; the DP's actual age at that time was confirmed by the Panel as 71.

Evidence further indicated that the MWS Phoenix Joining Instructions extant at the time of the incident were inadequate in providing clear medical and physical fitness standards. Furthermore, the process for suitability screening all students prior to and upon their arrival at MWS Phoenix was also found to be insufficient. The Panel determined that RFA employees had a differing medical and physical fitness standard to that of RN personnel. The RFA policy extant at the time of the incident mandated that RFA employees must undertake MWS PTG SST.

The Panel determined that the DP was taking medication for a [REDACTED]²²⁹ at the time of the incident; the DP had been under the care of a [REDACTED] throughout 2019. There was also evidence that indicated that it was almost certain that the DP did not disclose his actual age, underlying medical conditions, or the prescribed medication he was taking, to the MCA AD during his last ENG 1 medical examination in July 2018.

The Panel determined that the RFA had mandated within BRd 875 that their employees must initially attend a BSSC²³⁰ and subsequently attend an ISSC. Both of these courses met the required stipulated MCA standards for seafaring however RFA employees had a differing medical and physical fitness standard to that of RN personnel.

The Panel also determined that the RFA had previously utilised MCA approved commercial training providers when MWS Phoenix had been unable to deliver SST²³¹ due to a change in MCA regulation; this was covered in paragraph 3.8.1.

Conclusion

The Panel concluded that the MWS Phoenix staff did not refer the medical declarations made by the DP on the MWS PTG Medical Self-declaration form to a higher authority to enable a further medical assessment to be made by a medical professional to determine whether the DP was medically fit to undertake MWS PTG SST. It was almost certain that there was no formalised or assured MWS PTG medical screening process, or procedure, for MWS Phoenix staff to follow during the induction of the DP on 14 October 2019.

The Panel further concluded that the additional medical information supplied on the MWS PTG Medical Self-declaration form by the DP indicated that it was very likely²³² that the DP had been prescribed additional medication to manage his underlying medical condition

²²⁸ Evidence reference - DAIB/19/018/2181.

²²⁹ Evidence reference - DAIB/19/018/2181.

²³⁰ Evidence reference - DAIB/19/018/2215.

²³¹ Evidence reference - DAIB/19/018/6008.

²³² Evidence reference - DAIB/19/018/2109.

after his last ENG 1 medical examination assessment in July 2018. The DP's prescribed medication almost certainly indicated that he had an underlying [REDACTED]; if an AD was aware of this condition during an ENG 1 medical examination careful consideration would have been needed when assessing the DP's fitness for seafaring. The DP's prescribed medications, if the details were provided, would almost certainly have alerted an AD that there was an underlying [REDACTED]²³³.

The Panel also concluded that the DP had suffered a [REDACTED] in 2010 and had an underlying [REDACTED] medical condition; it was almost certain that the DP did not divulge this change in his medical condition when completing the MWS PTG Medical Self-declaration form nor did he inform the AD during, or after, his July 2018 ENG 1 medical examination. The Panel additionally concluded that it was almost certain that MWS Phoenix Joining Instructions extant at the time of the incident were inadequate in providing clear medical and physical fitness standards for UK Service personnel, civilian personnel and International students arriving at MWS Phoenix to conduct PTG SST.

The Panel finds that the DP's underlying medical condition coupled with his declared age was the **Causal factor**.

The Panel finds that the ineffective medical and physical fitness suitability screening processes and procedures employed during the MWS PTG induction phase, including the MWS PTG Medical Self-declaration form, for all RFA employees undertaking training was a **Contributory factor**.

The Panel finds that the ineffective medical and physical fitness suitability screening processes and procedures employed during the MWS PTG induction phase for all UK Service personnel, civilian personnel and International students undertaking training was an **Other factor**.

The Panel finds that the absence of clear medical and fitness standards on the joining instructions for all personnel attending MWS courses at PTG was an **Other factor**.

The Panel finds that the RFA policy that mandated that RFA employees must undertake MWS PTG SST with a differing medical and physical fitness standard to RN personnel was an **Other factor**.

The Panel finds that the lack of formalised and assured MWS PTG student induction processes and procedures was an **Observation**.

Recommendation – [REDACTED] should implement assured medical and physical fitness suitability screening processes for all personnel undertaking Sea Safety Training courses in order to ensure that all personnel meet the minimum medical and physical fitness standards.

Recommendation – [REDACTED] should enhance the joining instructions for all personnel attending MWS courses at Phoenix Training Group in order to assure the medical and physical fitness standards of all students who are assigned to undertake Sea Safety Training.

²³³ Evidence reference - DAIB/19/018/2181.

Recommendation – Commodore Royal Fleet Auxiliary should clarify the rationale for Royal Fleet Auxiliary (RFA) personnel being mandated to undertake Royal Navy (RN) Sea Safety Training with differing medical and physical fitness entry standards to RN personnel in order to establish the occasions when outsourced Commercial Training could be used by RFA employees.

3.10.1 Royal Fleet Auxiliary Occupational Health

At the time of the incident the RFA had no organic Occupational Health (OH) organisation and relied on the Civil Service contract with OH Assist²³⁴. The OH Standard (OHS) for RFA employees was the MCA's ENG 1 medical examination. All RFA employees were required to have an in-date ENG 1 medical fitness certificate.

RFA employees were classified and administered as Civil Servants and, as such, they should have been covered by, and had access to, the Civil Service OH contract provider. At the time of the incident the Civil Service OH contract provision had been outsourced to Optima Health Assist (OHAssist)²³⁵, who could not be fully utilised by the RFA due to an oversight by the Civil Service²³⁶ on the establishment of the initial Civil Service OH outsourcing contract.

BRd 875 detailed that the RFA had an established Principal Medical Advisor (PMA). At the time of the incident the RFA PMA position was vacant and had been since 2004 (some 15 years). Prior to 2004 the RFA employed a uniformed OH Consultant in the role of a dedicated RFA PMA. The RFA PMA had been supported by a dedicated RFA OH team consisting of an OH Nursing Advisor, two medical assistants and two administration assistants.

The RFA PMA left the RFA in 2004 and took up a Full Time Reserve Service (FTRS) post with the RN in an OH Consultant role and was still able to support the RFA²³⁷, however in a limited capacity only. By 2018 the dedicated RFA OH team had been phased out completely with only one RFA MED TECH position remaining which was subsumed into the RN MED DIV. The Panel identified an SO1 OH Medicine and Policy position within the RN MED DIV that was mandated to perform the duty of the named Company Doctor for the RFA²³⁸ and satisfied MCA regulation. NSI witness interviews with key RN and RFA stakeholders did not mention this post or how this role was being utilised by the RN to provide OH support to the RFA.

The RFA OH Service historically provided an OH service to RFA employees specifically for those RFA employees who needed dedicated OH support following a period of sickness, injury or Cat 1 ENG 1 medical examination failure. One of the key outputs of the internal RFA OH service was to provide OH guidance on ill-health retirement cases and OH reviews where RFA employees had received either a Cat 2, Cat 3 or Cat 4 ENG 1 restriction. The RFA OH team were able to contact an RFA employee's GP in order to

²³⁴ Evidence reference - DAIB/19/018/6028.

²³⁵ MOD's commercial OH provider OHAssist (Optima Health). Services included absence management, fitness for task assessments, health surveillance, vocational rehabilitation and wellness programmes. - Evidence reference - DAIB/19/018/2201.

²³⁶ Evidence reference - DAIB/19/018/6020 and DAIB/19/018/6034.

²³⁷ FTRS position holder retired in 2010.

²³⁸ Evidence reference - DAIB/19/018/2208.

access an individual's personal medical history to evaluate a more accurate medical assessment and enable a more informed and expedient OH outcome.

Since 2004 the RFA relied wholly on the RN MED DIV for medical advice and guidance regarding the health care of their employees when embarked on RFA vessels; health care for RFA employees ashore remained the responsibility of the NHS and the individual's GP. INM studies²³⁹ conducted on behalf of the RFA between 2009 and 2012 highlighted an issue with BMI and fitness levels in a significant portion of the RFA workforce and recommended 'fitness for task' health initiatives and reviews of medical health record keeping to help manage the issue.

The Panel identified that an agreement between the RFA and the RN MED DIV was established during the RFA OH Service drawdown to provide OH support for RFA employees through the RN MED DIV. The Panel was unable to positively determine the date when this agreement occurred or whether it was ever formalised.

The Panel noted that some RN MOs were based at Portsmouth, Plymouth and Helensburgh prior to 2004 and were approved by the MCA as CoADs²⁴⁰ for the RFA; these CoADs conducted ENG 1 medical examinations for RFA employees. With the gradual demise of the dedicated RFA OH team, the support by the RN to maintain these CoAD positions also declined. The Panel was unable to positively determine when this service ceased, however, at the time of the DP's incident the RN did not provide a CoAD service to the RFA. The Panel assessed that there were important advantages in using a CoAD as they would become familiar with RFA employees and any special health risks that may have arisen relating to the RFA employment standard. The Panel further assessed that the removal of the CoADs had a detrimental effect on the ability of the RN MED DIV to provide sufficient guidance, support and assurance of RFA employment medical and OH fitness standards.

Conclusion

The Panel concluded that the RFA did not have full access to OH Assist at the time of the incident. The RFA used to have an established OH team delivering an OH Service to its employees; the RFA OH Service did not exist. The Panel concluded that the previous RFA OH team used to provide OH support to RFA employees who were unable to attain a Cat 1 ENG 1 medical fitness certificate and would have administered and managed individual RFA employee recovery programmes.

The Panel further concluded that there were important advantages in using a CoAD; they could provide medical and OH support whilst conducting ENG 1 medical examinations for RFA employees and would become familiar with the RFA and any special health risks that might have arisen. The Panel concluded that the removal of the CoADs had had a detrimental effect on the ability of the RN MED DIV to provide sufficient guidance, support and assurance of RFA employment medical and OH fitness standards.

The Panel also concluded that it was very unlikely that any of the recommendations from the 2009-2012 INM reports²⁴¹ were adequately addressed; the INM reports were

²³⁹ Evidence reference - DAIB/19/018/2102,2103,2104.

²⁴⁰ Evidence reference - DAIB/19/018/2066.

²⁴¹ Evidence reference - DAIB/19/018/2102.

completed during the same time period when RN CoAD support was removed and the RFA OH Service drawn down.

The Panel finds that the lack of access to adequate OH support for the RFA was an **Other factor**.

The Panel finds that the lack of MCA CoADs to conduct ENG 1 Medical Examinations for RFA employees was an **Other factor**.

The Panel finds that the gapping of the RFA PMA post since 2004 was an **Other factor**.

Recommendation – Commodore Royal Fleet Auxiliary should conduct a review of Royal Fleet Auxiliary (RFA) Occupational Health requirements in order to ensure that a suitably assured Occupational Health Service is provided for RFA employees.

Recommendation – Commodore Royal Fleet Auxiliary should determine the requirement for Maritime and Coastguard Agency Company Approved Doctors to be established to conduct ENG 1 Medical Examinations for the Royal Fleet Auxiliary (RFA) in order to provide additional assurance of medical and fitness employment standard for RFA employees.

Recommendation – Assistant Chief Of Staff Medical should reinvigorate the role of the Principal Medical Advisor for the Royal Fleet Auxiliary (RFA) in order to ensure that focused medical advice and guidance is provided to the RFA.

3.10.2 Royal Fleet Auxiliary medical governance and assurance

The RN MED DIV was responsible for providing medical governance, guidance and medical assurance of the health care delivered to RFA employees only when they were embarked in RFA vessels²⁴². There were no doctors employed within the RFA, however RFA MED TECHs were employed and were mainly deployed in RFA vessels at sea.

The RN MED DIV had not provided any assurance of the OHS of RFA employees, however, an SO1 OH Medicine and Policy position had been established by the RN MED DIV. The SO1 OH Medicine and Policy was mandated as being the RN PMA on OH policy and was also the focal point for OH within NCHQ. The SO1 OH Medicine and Policy provided the assessment of OH requirements and identified and implemented training needs; the position holder also performed the duties of the named Company Doctor for the RFA²⁴³.

²⁴² Evidence reference - DAIB/19/018/6031.

²⁴³ Required to meet MCA regulations - Evidence reference - DAIB/19/018/2208 - DACOS Health DefNet team site.

RN doctors were deployed in some RFA vessels as mandated by the MCA once a certain threshold had been exceeded²⁴⁴. The RN MED DIV conducted Tier 4²⁴⁵ level assurance visits of the clinical activity conducted on RFA vessels. Witness testimony indicated that the RN MED DIV was required to send their completed Tier 4 assurance reports to the DMSR²⁴⁶; the Panel was unable to identify any clear mandate for that requirement. The Panel confirmed that the DMSR had only received one Tier 4 assurance report²⁴⁷ from the RN MED DIV; that report was not relevant to this NSI.

The DMSR was an independent regulator within Defence who held a personal letter of delegation from the DG DSA which defined their authority and responsibilities. The DG DSA letter of delegation directed the DMSR to regulate healthcare activities across Defence in accordance with the SofS's policy statement and to maintain a regulatory regime. The DMS Common Assurance Framework²⁴⁸ was a tool used to assess facilities and make recommendations for improvement during an assurance visit; DMSR would also undertake assurance visits based on identified areas of concern.

Conclusion

The Panel concluded that the RN MED DIV had only submitted one Tier 4 assurance report to the DMSR pertaining to the RFA and finds this an **Observation**.

3.10.3 Defence Medical Services Regulator

Prior to the formation of the DMSR, the Inspector General (IG) provided the Surgeon General (SG) with assurance over the healthcare area of responsibility that the IG was responsible for; the IG's requirement to report to the SG was part of the MOD's internal medical assurance process. On formation of the DMSR direction contained within JSP 950 was re-issued by the Head DMSR to cover DMS Governance and Assurance²⁴⁹. The re-issue had been intended as an interim publication for the immediate use across the DMS following the move from the SG's HQ to the DSA. A condition for attaining Full Operating Capability (FOC) was that the DMSR would have published Healthcare regulations for the DMS. The Panel established that the direction contained in JSP 950 remained extant. The Panel ascertained that the DMSR remained at Initial Operating Capability (IOC) since its formation in December 2017 and had been mandated to sustain assurance activity for the Joint Medical Group in addition to its DSA responsibilities.

Until 2019, the only evidence used to inform the IG's assurance was by conducting Bi-annual Assurance Reports (BAR). The DMSR had since developed a number of new methods to correlate the information presented in the BAR, drawing on evidence identified from the Automated Significant Event Reporting (ASER) system²⁵⁰.

Evidence provided²⁵¹ by the DMSR indicated that an audit had identified that 36% of an RFA crew had not received an NJM. The Panel identified that if this was reflective across the RFA workforce there was a risk that RFA medical staff would be unaware of significant

²⁴⁴ Certain number of Pax or deployment length. In accordance with MCA Maritime Guidance Notice 482(M) - medical practitioner must be carried on any ship carrying 100 or more persons on an international voyage of 72 hours duration or longer.

²⁴⁵ This was a Second Party audit.

²⁴⁶ Evidence reference - DAIB/19/018/6031.

²⁴⁷ Evidence reference - DAIB/19/018/2206.

²⁴⁸ Defence Net - DSA site.

²⁴⁹ Evidence reference - DAIB/19/018/2241.

²⁵⁰ Primary means by which RN medical units reported significant events.

²⁵¹ Evidence reference - DAIB/19/018/2207.

pre-existing health concerns of RFA employees²⁵². A proposed OH work strand²⁵³ was also identified by NCHQ to determine if NHS GP records could be imported into any future DMS Information System. There was no clear evidence to indicate that any action had been taken by the RN MED DIV to progress that initiative. The Panel noted that the DMSR was unclear whether any mitigation had been put in place, either by the RFA or RN MED DIV, to address that risk. It was also identified²⁵⁴ that there had been documented issues with RFA adherence to vaccination protocols²⁵⁵. Some RFA employees had been vaccinated when a requirement was not indicated. The procedure of interviewing the individual and recording their Medical Force Protection status was also not being followed correctly.

The Panel further identified issues with RFA MED TECH training²⁵⁶. It was confirmed that a BAR raised in 2017²⁵⁷ stated that an investigation was carried out and concluded that the training for RFA MED TECHs was insufficient to prepare employees for their role.

The following issues were identified during BAR conducted on RFA vessels since January 2016²⁵⁸:

- Medical SOPs not relevant to vessel, SOPs out of date and not certified.
- Storage inadequate, contents lists required and issues to be put on platforms' risk register.
- Custodians not completed Targeted Employment Modules (TEMs). Not highlighted on risk register.
- No nominated leads identified for particular medical roles.
- No major medical incident or outbreak plan.
- Healthcare Governance meetings not carried out.
- Medical risk and issues not being reviewed.
- Inadequate time set aside for First Aid training with less than 5% Ships Company First Aid Level 3 trained.
- Patient feedback not sought.
- Infection control practices and monthly reviews not carried out.
- High number of ships company out of date for immunisations.
- Controlled Drugs / Accountable Drugs not proportionately held in split locations.
- Dormant capability had little input into Healthcare Governance or a designated lead.
- Uncompleted TEMs vital for the role.
- Medical Standing Orders out of date; lead responsibilities identified and highlighted.
- MED TECH had no login or password for the ASER system.
- Databases not reflecting medical stores.
- All documentation with patient details not following Caldicott principles²⁵⁹.
- No medical audit programme implemented.

Automated Significant Event Reports

²⁵² Evidence reference - DAIB/19/018/2207.

²⁵³ Evidence reference - DAIB/19/018/2207.

²⁵⁴ Evidence reference - DAIB/19/018/2207.

²⁵⁵ This issue had been reported in three separate ASERs.

²⁵⁶ Evidence reference - DAIB/19/018/2207.

²⁵⁷ Evidence reference - DAIB/19/018/2207.

²⁵⁸ Evidence reference - DAIB/19/018/2207.

²⁵⁹ Principles employed to assure the identity of a patient was protected.

A total of 17 RFA vessels were registered on the ASER system. No ASERs were reported from 10 of the 17 RFA vessels during April 2018 to April 2020²⁶⁰. Analysis indicated²⁶¹ that ASER submission by the RFA was historically low; the vessels that had submitted ASERs were noted as following the required process. A total of 25 ASERs were identified in relation to the RFA for the period April 2018 to April 2020; seven of these ASERS²⁶² are subcategorised below:

Incorrect procedures followed by RFA medical staff (ashore or afloat).

- June 2019 – Drugs not accounted for and not secured correctly.
- July 2019 – Drugs issued without MO authorisation.
- March 2020 – Patient prescribed two different types of anti-inflammatory drugs, with no medical guidance documented on the requirement to stop taking one of them.
- March 2020 – On joining the vessel, MO found a large number FMed 296 (prescription pads) at the back of a drawer in their cabin, left by the previous MO.
- March 2020 – Controlled Drugs not accounted for correctly.

ENG 1 medical examination related.

- May 2019 – An RFA employee was identified as not being medically fit²⁶³ during the NJM. The RFA employee had been landed from the same RFA vessel 5 weeks previously. The RFA Appointer was unaware of the issue; the RFA employee had not engaged with an AD and there was no evidence of a change to the RFA employee's ENG 1 medical status.
- January 2020 – Individual joined new RFA vessel requiring injectable medication; this was not possible due to having no MO established on the vessel. The Panel assessed²⁶⁴ that there was some doubt as to whether the AD of the RFA employee had been notified and whether the RFA employee's ENG 1 medical examination category should have been reassessed to reflect that medical requirement.

The Panel determined that the DMSR did not have the capacity to regulate and assure the totality of healthcare across the DMS and had focused on their key role of providing 3PA²⁶⁵. The Panel confirmed that the DMSR was not tracking any substantive evidence from the RN MED DIV in relation to the RFA at the time of the DP's incident. Due to the assumed continued oversight and assurance by the RN MED DIV pertaining to the delivery of medical services to the RFA the DMSR had not considered RFA healthcare to be a high priority.

Following the request for information from the DMSR pertaining to the DP's incident, the Panel determined that the DMSR was more aware of the RFA and it was very likely that

²⁶⁰ The operational status of these 10 vessels was unknown, some may have been in refit and therefore would not have had an active medical facility.

²⁶¹ Evidence reference - DAIB/19/018/2207.

²⁶² Evidence reference - DAIB/19/018/2207.

²⁶³ Evidence reference - DAIB/19/018/2207.

²⁶⁴ Evidence reference - DAIB/19/018/2207.

²⁶⁵ Evidence reference - DAIB/19/018/2207.

the DMSR would focus on regulating the RN MED DIV in assuring and governing RFA medical process and procedures going forward.

Conclusion

The Panel concluded that the DMSR remained at IOC. It was certain that the DMSR did not have the capacity to assure the totality of healthcare across the DMS. The Panel further concluded that the DMSR had not considered RFA healthcare to have been a high priority due to the assumed continued oversight and assurance from the RN MED DIV and therefore had not conducted any 3PA of RFA healthcare. The DMSR had not been tracking any substantive evidence from the RN MED DIV in relation to the RFA.

The Panel finds that the absence of 3PA assurance undertaken by the DMSR on RN MED DIV and the RFA was an **Other factor**.

Recommendation – The Head of the Defence Medical Services Regulator should conduct an appropriate level of assurance of the Royal Fleet Auxiliary (RFA) and Royal Navy Medical Division in order to ensure that a suitable level of medical services are provided to the RFA and its employees.

3.10.4 RFA FOST Training Standards

The RFA had a significantly different employment standard to that of the RN, however, at the time of the incident RFA Officers wore the same uniform as the RN, albeit with different epaulettes and cap badges. RFA ratings wore the same Personal Clothing System as the RN but with RFA badges. All RFA employees were required to comply with RN Policy and Regulation as mandated within several RN BRDs, Defence Instructions and Notices, Royal Navy Temporary Memorandums as well as being compliant with MCA and Civil Service Regulations.

The RFA employed circa 1,900 employees of which approximately 95% were specifically employed to go to sea in RFA vessels. RFA employees had an average 4-month embarked assignment cycle followed by a period of leave and mandatory training prior to re-embarking for another 4-month assignment. The RFA assignment cycle was enduring as there was no upper age limit for RFA employees. There were very limited specialised RFA shore establishment positions, therefore RFA employees would be expected to spend most of their career at sea.

RFA employees were required to be trained in accordance with both MCA seafaring regulations and RN CBRNDC and firefighting training policy. The Panel confirmed that FOST was mandated to assess RFA crews broadly to the same standard as RN crews in accordance with BRd 2170²⁶⁶. Most RFA vessels had much leaner complement crews and differing fixed firefighting systems. FOST had taken into account the differences in terms of RN and RFA Branch structures²⁶⁷ when conducting their assessments. BRd 2170 Article 0610 stated that where no procedures existed in BRd 875 then the RN standards were to be adopted; no reference to the contrary existed²⁶⁸ in BRd 875. From evidence gathered the Panel ascertained that some RFA employees would actively try to

²⁶⁶ Evidence reference - DAIB/19/018/2174.

²⁶⁷ The RFA had a System Engineering (SE) Branch as opposed to the RN Weapon Engineering (WE) Branch).

²⁶⁸ Evidence reference - DAIB/19/018/2211.

circumnavigate FOST training²⁶⁹ by seeking appointments to RFA vessels that were deployed outside of UK waters²⁷⁰. The Panel assessed that this was very likely the case and was due to a certain cadre of RFA employees finding FOST serials too physically demanding.

The RFA had to constantly manage the expectation of the RN when endeavouring to maintain the mandated RN operational deployment capability and had often been given insufficient preparation time for RFA vessels, and their civilian crews, to meet FOST standards. The Panel ascertained²⁷¹ that the RFA / FOST relationship was also very dependent on individual personalities.

Conclusion

The Panel concluded that most RFA vessels were comparatively larger with much smaller complement crews than the majority of RN warships and had differing fixed firefighting systems. The Panel further concluded that the assessment criteria used during RFA FOST-mandated training were broadly the same as those used by FOST to assess RN ships and their personnel.

The Panel finds that the use of RN standard assessment criteria by FOST to assess RFA vessels and employees during formal FOST training was an **Other factor**.

Recommendation – Commodore Royal Fleet Auxiliary should amend BRd 875 in order to ensure that the delivery and assessment of Flag Officer Sea Training activity is appropriate for Royal Fleet Auxiliary vessels and employees.

3.11 Pre-incident

The Panel established that there were no specific procedures for RFA HR and Training staff to follow for the medical and physical fitness screening of RFA employees prior to them being loaded onto a BSSC. The Panel further established that RFA 1's Terms of Reference²⁷² stated that RFA 1 was directly accountable to the MWS PTG RFA CBRNDC Training Officer for being the nominated Line Manager for all RFA employees attending BSSC and ISSC. The Panel identified that the MWS PTG RFA CBRNDC Training Officer position had been vacant for a number of years. The Panel further identified that there were no procedures for RFA 1 to follow when inducting RFA employees onto the BSSC; the Panel noted that RFA 1 was a single point of failure.

The Panel confirmed that it was during the MWS Phoenix weekly management meeting that RN 1 agreed that the DP could jump from the lower pontoon²⁷³ during SSM Drill 1 and it was confirmed that RN 1 also stated that the DP must jump from the 3 m platform during SSM Drill 2. MWS SST Policy²⁷⁴ stated that RFA employees attending a BSSC or an ISSC who had documentary evidence to show that they had previously stepped off from the 3 m platform during a previous SSM were exempt from having to step off from this

²⁶⁹ FOST training was generally conducted within UK territorial waters.

²⁷⁰ Evidence reference - DAIB/19/018/6028.

²⁷¹ Evidence reference - DAIB/19/018/6032,6020.

²⁷² Evidence reference - DAIB/19/018/2027.

²⁷³ Evidence reference - DAIB/19/018/6008.

²⁷⁴ Evidence reference - DAIB/19/018/2164.

height and may enter the water from the lower pontoon. The Panel identified that this policy was incorrect²⁷⁵.

The Panel identified that Service personnel who had been inducted on the morning of 14 October 2019 were asked by MWS Phoenix staff in an open forum if any of them had any medical downgrade that would have prevented them from completing the training. MWS Phoenix staff did not conduct any checks of JPA for correct JMES categories or that all Service personnel were in-date for the military swim test²⁷⁶. RFA employees were exempt from this mandated SSM prerequisite.

On successful completion of the BSSC, Service personnel had a JPA²⁷⁷ competency uploaded to provide evidence of successful attendance and completion of training. The RFA did not employ the use of JPA and as such RFA employees received a hardcopy MWS MCA Proficiency Certificate for MCA accredited modules. The Panel identified that at some point between 14 and 17 October 2019 the DP had already been awarded a signed MWS MCA Proficiency Certificate²⁷⁸ in personal survival techniques, which he had counter-signed. This indicated that the DP had successfully completed the SSM and this certificate was found to have been placed in the DP's RFA HR personnel file at HMS EXCELLENT along with an MWS MCA Proficiency Certificate²⁷⁹ in Fire Prevention and Firefighting (which he had completed).

The Panel confirmed that the DP had successfully completed all previous BSSC modules prior to arriving at the SSTC on 18 October 2019. During each of the previous BSSC modules a H&S brief was delivered, students were asked to make themselves known to MWS PTG staff if any one of them had any physical or medical conditions, or individual concerns, that would have prevented them from completing the requisite BSSC module. There was no evidence to indicate that the DP had any concerns with, or had struggled with, any part of the BSSC prior to undertaking the SSM.

The Panel established that upon arrival of groups BSSC 1 and BSSC 2 individual SSTC staff independently identified several students, including the DP, who they assessed were likely to struggle during the SSM²⁸⁰. [REDACTED]

[REDACTED] This dynamic assessment enabled the staff to identify those students who would likely need closer supervision during the practical element of the SSM. Evidence also confirmed that it was more likely than not for SSTC instructors to make this collective observation every Friday on arrival of BSSC 2 students²⁸¹. However the Panel formed the opinion that SSTC staff endeavoured to ensure all students passed the SSM. The Panel further noted that SSTC staff had not been given any formal training to identify a student who would have been considered a training risk. During the introduction brief students were again afforded the opportunity to declare any medical or physical issues that might preclude them from participating in the training. Irrespective of this the Panel confirmed that none of the SSTC staff were medically qualified to assess student suitability to undertake training.

²⁷⁵ Evidence reference - DAIB/19/018/2088.

²⁷⁶ Evidence reference - DAIB/19/018/2008.

²⁷⁷ RFA personnel were not administered on JPA.

²⁷⁸ Evidence reference - DAIB/19/018/2052.

²⁷⁹ Evidence reference - DAIB/19/018/2051.

²⁸⁰ Evidence reference - DAIB/19/018/6001,6003,6004,6013,6016.

²⁸¹ Evidence reference - DAIB/19/018/6003,6011,6012,6013,6016,6017.

The Panel was informed that a small number of RFA BSSC students had previously been required to be issued with an extension to their GSLJ waist attachment belt as their waist size physically prevented them from wearing a standard GSLJ²⁸². The NSI Panel was assured that this was a non-standard method of extending the GSLJ waist attachment belt and was no longer practised by MWS Phoenix staff. The Panel was also informed that the DP did not require the use of an extension to his GSLJ waist attachment belt²⁸³. The Panel established that the DP required some assistance from SSTC staff to fasten his OOSS and this was due to the DP's physical size²⁸⁴.

Conclusion

The Panel concluded that the RFA HR and Training process for screening RFA employees loaded onto a BSSC was insufficient to ensure that they met the MWS PTG medical and physical fitness standards detailed within the MWS PTG joining instructions.

The Panel further concluded that no JPA checks were conducted during the MWS PTG SST induction phase that would have ensured that Service personnel had met the MWS PTG medical and physical fitness standards prior to them attending the course.

The Panel concluded that the MWS PTG SST Policy stating that RFA employees attending a BSSC or an ISSC who had previously stepped off from the 3 m platform during a previous SSM were exempt at subsequent courses was incorrect.

The Panel further concluded that there was a disparity between Service personnel and RFA employees regarding the latter's exemption from the MWS PTG swim test requirement.

The Panel concluded that the DP had been provided with a signed MWS MCA Proficiency Certificate in personal survival techniques, which had been counter-signed by the DP, prior to him attending the SSM on 18th October 2019.

The Panel concluded that the Line Management position detailed in RFA 1's Terms of Reference had been vacant for several years and had left RFA 1 as the single point of contact for all RFA students when attending MWS PTG SST.

The Panel concluded that should an issue be highlighted during the SSM theory element none of the SSTC staff were medically qualified to assess a student's suitability to continue with SSM training.

The Panel finds that the ineffective RFA HR and Training screening procedure for ensuring that RFA employees met the MWS PTG medical and physical fitness standards prior to attending MWS PTG SST was an **Other factor**.

The Panel finds that the lack of a JPA check during the MWS PTG SST induction phase to ensure that Service personnel met the MWS PTG medical and physical fitness standards prior to attending MWS PTG SST was an **Other factor**.

²⁸² Evidence reference - DAIB/19/018/6017.

²⁸³ Evidence reference - DAIB/19/018/3001.

²⁸⁴ Evidence reference - DAIB/19/018/6011.

The Panel finds that the MWS PTG assessment strategy document that incorrectly mandated previously qualified BSSC trained personnel were exempt from the 3 m step-off when requalifying for their MWS PTG SST was an **Observation**.

The Panel finds that the disparity between Service personnel and RFA employees regarding the MWS PTG swim test requirement was an **Observation**.

The Panel finds that the presentation of an MWS MCA Proficiency Certificate to the DP by MWS PTG staff prior to course completion was an **Observation**.

The Panel finds that RFA 1's TORs stating that he was directly accountable to the gapped MWS PTG RFA CBRNDC Training Officer position was an **Observation**.

The Panel finds that RFA 1 being a single point of failure for the Line Management of RFA BSSC students was an **Observation**.

Recommendation – Commodore Royal Fleet Auxiliary should assure the Royal Fleet Auxiliary (RFA) Human Resources and Training screening procedure for RFA employees prior to course loading in order to ensure that the RFA employees meet the Maritime Warfare School Phoenix Training Group medical and physical fitness standards.

Recommendation – [REDACTED] should assure the screening process for Service personnel prior to course commencement in order to ensure that Service personnel meet the Maritime Warfare School Phoenix Training Group medical and physical fitness standards.

3.12 Incident phase

On completion of the SSM dressing drill RN 1 stated²⁸⁵ that he had instructed the DP to stay at the back of the student queue. RN 1 further stated that the DP should be the last student to enter the water, jumping from the lower pontoon. This was almost certainly to mitigate the DP's declared anxiousness along with SSTC staff's assessment of the DP's physical abilities and his physical size. RN 1 additionally stated²⁸⁶ that he believed the DP may struggle as he had been made aware by RFA 1 that the DP was afraid of heights. On entering the water the DP attempted to conduct his initial actions²⁸⁷, but was unable to without assistance. BMT 2 had to physically force the DP's legs down into the water to enable the DP to satisfactorily purge his OOSS; BMT 2 additionally assisted the DP in placing his GSLJ visor over his face²⁸⁸. The DP then attempted to swim to the 25-man life raft and again required further physical assistance from BMT 2.

The DP had further difficulties²⁸⁹ boarding the 25-man life raft and took more than two attempts to board taking longer than normal²⁹⁰ and requiring verbal encouragement (but no physical assistance) from BMT 2. Once inside the 25-man life raft the DP was seen to

²⁸⁵ Evidence reference - DAIB/19/018/6004.

²⁸⁶ Evidence reference - DAIB/19/018/6004.

²⁸⁷ Evidence reference - DAIB/19/018/7088 and DAIB/19/018/2068 STCW code table A-VI/1-1 specification of minimum standard of competence in personal survival techniques.

²⁸⁸ Evidence reference - DAIB/19/018/6013.

²⁸⁹ Evidence reference - DAIB/19/018/6015.

²⁹⁰ Evidence reference - DAIB/19/018/6015.

be out of breath and needed some assistance (slight deflation of life jacket to make DP more comfortable) from BMT 4 and additional time to recover. BMT 4 stated²⁹¹ that the DP seemed embarrassed by his own efforts, however he was talkative, smiling and relaxed. The DP stated that he was fine to continue with Drill 1 before exiting the 25-man life raft unaided.

Once the DP had exited the 25-man life raft he was again seen to struggle and was met by BMT 1 approximately 5 m into the transit to the 8-man life raft re-right drill. BMT 1 stated²⁹² that the DP seemed to have no motivation when swimming and physically assisted him to the 8-man life raft prior to conducting the life raft re-right phase of Drill 1. BMT 1 additionally stated that the DP was able to communicate coherently at this point.

The DP attempted to complete the 8-man life raft re-righting phase of Drill 1. BMT 1 physically assisted the DP and stabilised him on the life raft boarding ramp and further physically assisted the DP to complete the re-righting phase of Drill 1. RN 1 had been monitoring the DP and had issued the DP with a verbal warning with regards to the DP's performance. Once the 8-man life raft had been re-righted the DP and BMT 1 were both submerged underneath it for a split second²⁹³, and both were seen to exit successfully from under the 8-man life raft. However RN 3 stated²⁹⁴ that BMT 1 had physically pulled the DP out from under the 8-man life raft and the DP was then physically towed to the SSTC slipway. Despite these actions, the Panel noted that SSTC staff were not provided with any training which may have better enabled them to identify a student who would be considered a training risk. A majority of SSTC staff believed that they were not suitably empowered to withdraw a student from the SSM.

The Panel ascertained that on leaving the water the DP was able to communicate normally, although he had ingested some water, and was able to walk without undue assistance to the picnic bench where he was instructed by RN 1 to sit down. RN 1 informed the DP at this point that he was being removed from the SSM due to his inability to achieve the required PTG SSM standards. The DP acknowledged this and was seen to be alert and communicating whilst recovering from the exertion of attempting the SSM Drill 1. RN 1 left the DP seated on the picnic bench to further recover and returned to the SSTC to prepare the remaining students for the SSM Drill 2. Shortly after that, RN 3 witnessed the DP slump forward and shouted for urgent assistance.

Conclusion

Throughout the SSM Drill 1 witness testimony affirmed that the DP appeared to be lethargic and only seemed to be expending the minimum effort required in attempting all of the drill phases. The Panel concluded that the DP received a significant amount of physical assistance throughout Drill 1 of the SSM. The Panel established that it was not unusual for SSM students of a certain age, size or physical ability to need some physical assistance during elements of the SSM. Based on SSTC staff testimony the Panel also concluded that it was not unusual for RFA students to struggle²⁹⁵ when undertaking the SSM.

²⁹¹ Evidence reference - DAIB/19/018/6015.

²⁹² Evidence reference - DAIB/19/018/6004,6011.

²⁹³ This was not unusual for the re-right drill.

²⁹⁴ Evidence reference - DAIB/19/018/6001.

²⁹⁵ Evidence reference - DAIB/19/018/6003,6011,6012,6013,6017.

The Panel further concluded that the lack of formal training to identify students who might be at risk and the lack of empowerment to withdraw struggling students was detrimental to effective risk management of the SSM.

The Panel finds that MWS PTG SSTC staff not feeling suitably empowered to withdraw a student from the SSM once it was clear a student was struggling to meet any of the SSM pass criteria was an **Aggravating factor**.

Recommendation – [REDACTED] should ensure that Sea Survival Training Centre staff are suitably trained to identify students at risk and empowered to withdraw struggling students from the Sea Survival Module in order to improve risk management of the activity.

3.13 Post-incident

The Panel established that BMT 1 and BMT 5 responded to the alarm raised by RN 3 and assisted in the delivery of immediate first aid to the DP. The DP was initially observed to be breathing as attempts were made by the SSTC staff to place him into the recovery position. BMT 5 identified that the DP had stopped breathing at that point and rolled him over onto his back; CPR was initiated by BMT 1 and BMT 5. RN 3 collected the SSTC defibrillator and a CPR face mask²⁹⁶ from the SSTC entrance lobby. At the same time RN 1 collected his personal mobile phone from his SSTC office and dialled 999.

The Panel identified that RN 3, BMT 2, BMT 3, BMT 4 and BMT 5 were in-date for the First Aid Level 2 competency at the time of the incident. The competencies of the two other members of SSTC staff involved in the incident had lapsed²⁹⁷. MWS PTG training orders stated that all SSTC staff should be trained and remain in-date with a First Aid Level 2 competency. MWS PTG training orders further stated that competencies may lapse from time to time²⁹⁸ but a minimum of two First Aid Level 2 qualified personnel should be present during each SSM drill. The Panel determined that the requisite number of SSTC first aid qualified personnel²⁹⁹ were present at the time of the incident. The Panel noted that while PTG training orders stated that First Aid Level 2 competencies may lapse from time to time, two out of six permanent SSTC staff had lapsed competencies.

BMT 2 arrived and assisted BMT 5 to apply the SSTC defibrillator to the DP whilst BMT 1 continued with chest compressions and RN 3 attempted to deliver rescue breaths to the DP. RN 1 had contacted the emergency operator and placed his mobile phone on the picnic bench, adjacent to the DP, to enable the emergency call centre staff to hear and communicate with RN 3, BMT 1 and BMT 2. The Panel ascertained that RN 1 then returned to his office and contacted Horsea Island Main Gate and also attempted to contact the MWS Phoenix Duty Instructor (DI) to notify them of the incident.

RN 3 initially had difficulties in establishing a good mouth seal while attempting to use the CPR face mask when delivering rescue breaths to the DP. The Panel noted at this point that bubbling fluid could be seen in the back of the DP's mouth, indicating that air was exhaling out of the DP's lungs³⁰⁰. It was confirmed that the DP's chest was seen to rise

²⁹⁶ A CPR face mask, was a device used to safely deliver rescue breaths during a cardiac arrest or respiratory arrest.

²⁹⁷ Evidence reference - DAIB/19/018/2089.

²⁹⁸ Evidence reference - DAIB/19/018/2069.

²⁹⁹ Evidence reference - DAIB/19/018/2069.

³⁰⁰ Evidence reference - DAIB/19/018/6003.

and fall. However, RN 3 was not content an effective mouth seal had been established and discarded the CPR face mask. There was no evidence that the CPR face mask was faulty and the Panel deemed it almost certain that the difficulty experienced with obtaining a satisfactory mouth seal had been induced by the high level of anxiety experienced by RN 3 when attempting to deliver rescue breaths. Rescue breaths were delivered skin-to-skin until emergency call centre staff instructed SSTC staff to cease delivering rescue breaths and concentrate on chest compressions only.

Despite five SSTC staff having attended defibrillator training in September 2018 the Panel assessed that it was very likely that there was some confusion when initially using the SSTC Heartstart FR2+ defibrillator. That confusion pertained to whether the SSTC defibrillator pads had been correctly positioned and that there was an expectation by the SSTC staff that the SSTC defibrillator unit would provide a shock to the DP; the SSTC defibrillator did not administer a shock to the DP as expected at that point³⁰¹.

The Panel determined that Ambulance Service paramedics arrived on scene within 10 minutes of the SSTC defibrillator being attached to the DP; civilian police and an air ambulance with a doctor also arrived shortly after. The paramedics replaced the SSTC defibrillator with their own ambulance defibrillator and this too reported 'NO SHOCK' once fitted to the DP. The paramedics and doctor continued to treat the DP in the rear of the ambulance until the DP was pronounced dead at the scene by the air ambulance doctor.

The operating manual for the SSTC Heartstart FR2+ defibrillator stated that it was to be used by trained personnel³⁰². The Panel assessed that SSTC staff lacked in-depth knowledge of how the Heartstart FR2+ defibrillator system operated and when to expect a shock to be delivered to a casualty. The Panel established that the ambulance crew provided further information relating to the Heartstart FR2+ defibrillator and informed SSTC staff that it would only deliver a shock if a certain heart rhythm was detected. If no heartbeat was detected, or a non-ventricular fibrillation condition was present, then the defibrillator unit would not deliver a shock. Data downloaded from the SSTC Heartstart FR2+ defibrillator following the incident (see Table 2) indicated that the defibrillator unit functioned correctly and had not detected a treatable heart rhythm at any time when fitted to the DP.

³⁰¹ Evidence reference - DAIB/19/018/3002.

³⁰² Evidence reference - DAIB/19/018/2185.

| Event (a) | Time (mm:ss) (b) | Event (a) | Time (mm:ss) (b) |
|------------------|---------------------|------------------|---------------------|
| Power On | 00:00 | Pause for CPR | 05:50 |
| Pads Off | 01:18 | Pads Off | 05:54 |
| Pads On | 01:18 | Pads On | 05:58 |
| No Shock Advised | 01:30 | Resume Analyse | 08:00 |
| Pause for CPR | 01:30 | No Shock Advised | 08:14 |
| Pads Off | 01:41 | Pause for CPR | 08:14 |
| Pads On | 01:48 | Pads Off | 08:43 |
| Resume Analyse | 03:17 | Pads On | 08:46 |
| No Shock Advised | 03:28 | Pads Off | 08:48 |
| Pause for CPR | 03:28 | Pads Off | 08:49 |
| Resume Analyse | 05:38 | Resume Analyse | 10:24 |
| No Shock Advised | 05:50 | Power Off | 10:28 |

Table 2: SSTC defibrillator log

The Panel assessed that the scope of SSTC staff continuation training was ad-hoc and was not formally standardised³⁰³. The Panel determined that the first aid training undertaken by SSTC staff was of a generic nature and was not specifically tailored to SSM activities. As part of the First Aid Level 2 training course a generic defibrillator was referred to within the delivered theory training. The Panel identified that five of the six SSTC permanent staff members involved in this incident had undertaken Heartstart FR2+ defibrillator continuation training in September 2018 however, this was not a mandated requirement.

The Panel confirmed that RN 1 had contacted the MWS Phoenix DI on more than one occasion and provided a situational report to inform the DI of the fatality. The Panel ascertained that both the Duty Packs held by MWS Phoenix DI, and the Officer of the Day at HMS COLLINGWOOD, contained incorrect and / or out of date contact information; a former OiC of MWS Phoenix was contacted by mistake by the MWS Phoenix DI. It was almost certain that this prevented the expedient reporting of the incident through the CofC and led to a further delay in the dissemination of sensitive information. It was also confirmed that an RFA BSSC student contacted RFA HQ staff to report the incident independently from SSTC staff.

Conclusion

The Panel concluded that it was almost certain that the initial response by SSTC staff and their associated first aid actions were delivered effectively and SSTC emergency equipment was located and employed without significant issue. All SSTC staff had previously undertaken First Aid Level 2 training and were able to fall back on their previous training and experience while following the advice given by the emergency call centre staff. The Panel therefore found that the first aid response of the SSTC staff was **not a factor**.

³⁰³ Evidence reference - DAIB/19/018/2089.

The Panel concluded that SSTC staff were not provided with any form of dedicated emergency communication equipment. The Panel further concluded that there was no effective means of raising the alarm beyond using a loud vocal alarm. RN 1 had utilised his personal mobile phone to contact emergency services and that enabled an effective two-way communication between SSTC staff and the emergency call centre whilst conducting CPR.

The Panel concluded that SSTC staff were required to be First Aid Level 2 trained. However, there was no continuation training requirement mandated for SSTC staff to receive tailored first aid training pertaining to SSM related emergency incidents or specific Heartstart FR2+ defibrillator training. The Panel also determined that further practical continuation training sessions would be beneficial to SSTC staff in order to establish confidence whilst using SSTC emergency first aid equipment.

The Panel noted that incorrect and / or out of date information was contained within the HMS COLLINGWOOD and MWS Phoenix DI duty packs. The Panel concluded that there was a potential for further inaccuracies that could have adversely impacted on an effective safety response.

The Panel finds that a lack of dedicated MWS PTG SSTC emergency communication equipment was an **Other factor**.

The Panel finds that the lack of tailored SSM related first aid training for MWS PTG SSTC staff above that delivered by the First Aid Level 2 training course, and the lack of a standardised MWS PTG SSTC continuation training requirements was an **Other factor**.

The Panel finds that HMS COLLINGWOOD and MWS Phoenix duty packs that contained incorrect and / or out of date information was an **Other factor**.

The Panel finds that the lack of a thorough understanding of the operation of, and the training given to, MWS PTG SSTC staff who had access to a portable defibrillator device, was an **Observation**.

Recommendation – [REDACTED] should improve the Sea Survival Training Centre emergency communication equipment in order to ensure expedient communication in the event of an incident or emergency.

Recommendation – [REDACTED] should formalise a tailored first aid continuation training programme for Sea Survival Training Centre staff in order to ensure that they are appropriately trained, competent and current.

Recommendation – [REDACTED] should assure that HMS COLLINGWOOD Officer of the Day and MWS Phoenix Duty Instructor duty packs contain up to date procedures and emergency contact information in order to ensure timely and effective reporting of incidents.

3.13.1 Post-incident management

The Panel determined that initial post-incident activity consisted of a number of phone calls being made by SSTC staff to MWS PTG managers which concluded in a cascade of information to ██████████ and NCHQ. The DAIB was not informed of the occurrence until 21 October 2019; this was approximately 72 hours after the incident. This was not in accordance with DIN 2018DIN06-011³⁰⁴ which required that the DAIB should be notified as soon as possible following a fatality, an accident or a serious incident.

OiC MWS Phoenix arrived at approximately 16:00³⁰⁵ on 18 October 2019 and offered TRiM support to SSTC staff. It was ascertained³⁰⁶ that no TRiM support was offered to RFA 1 until prompted by the NSI Panel during a follow-up interview. The Panel assessed that the RFA had established³⁰⁷ TRiM practitioners to support incidents afloat. The Panel determined that the RFA did not have an effective number of RFA TRiM practitioners available to support RFA employees ashore. The Panel identified that the PTG SSTC staff were unable³⁰⁸ to immediately contact any member of BMT management to inform them of the incident; contact was established with BMT management approximately 3 hours after the incident.

Following the incident Devon and Cornwall police contacted the DP's NoK to inform them of the DP's death. The Panel established that it was usual practice for civilian police to notify an RFA employee's NoK as RFA employees were civilians and were not members of the Naval Service. The Panel further established that the RFA had no process or procedure for Kinforming³⁰⁹ and casualty notification ashore. An RN Padre had been appointed as the RFA Padre and was directly involved with communicating and liaising with the DP's NoK. The DP's NoK was extremely helpful in providing key evidence to support this NSI.

██████████ instigated an Immediate Ship's Investigation (ISI)³¹⁰ following the incident, although the individuals tasked with conducting the ISI were not trained safety or accident investigators. It was not possible to establish from the ISI report when the ISI was initiated or completed. The findings of the ISI were accepted by ██████████ and the completed report contained five recommendations relating to:

1. MWS Medical self-declaration form for RFA personnel.
2. Clarification of MWS Phoenix emergency response procedures.
3. MWS Phoenix Duty Pack review periodicities.
4. Serious Incident reporting procedures.
5. Commendation of the SSTC staff response to the DP's incident.

██████████ had accepted the findings of the ISI and had agreed with the associated recommendations. The Panel assessed that ██████████ had recognised the correlation between the previous Horsea Island fatality in 2009 and the near miss in 2014. ██████████ had further commented³¹¹ on the suitability of RFA employees to undertake training at MWS Phoenix and the procedures in place for Service personnel (via JMES) which did

³⁰⁴ Evidence reference - DAIB/19/018/2240.

³⁰⁵ Evidence reference - DAIB/19/018/2055.

³⁰⁶ Evidence reference - DAIB/19/018/6009.

³⁰⁷ Evidence reference - DAIB/19/018/6028.

³⁰⁸ Evidence reference - DAIB/19/018/2055.

³⁰⁹ JSP 751 Vol 1 Chap 1, May 2017 Issue 17.

³¹⁰ Evidence reference - DAIB/19/018/2055.

³¹¹ Evidence reference - DAIB/19/018/2055.

not exist for RFA employees at the time of the DP's incident. The ■■■'s comments³¹² included within the ISI indicated that some RFA employees may have been at a higher risk due to being generally of a greater age and less fit.

Conclusion

The Panel concluded that the unit and duty folders did not identify that the DAIB should be notified in accordance with Defence Instructions following a fatality. The Panel also concluded that the RFA's TRiM organisation had not effectively supported their employees ashore. The Panel further concluded that there were no formalised RFA internal procedures established to support expedient and effective Kinforming and casualty notification ashore.

The Panel finds that the DAIB not being informed until approximately 72 hours after the incident was an **Observation**.

The Panel finds that the limited number of RFA TRiM Practitioners available to support RFA employees ashore was an **Observation**.

The Panel finds that the lack of formalised internal procedures established by the RFA to support Kinforming and casualty notification ashore was an **Observation**.

3.14 Health, safety and environmental aspects

OiC MWS Phoenix³¹³ was responsible to the Commanding Officer (CO) HMS EXCELLENT for the implementation of H&S policy within MWS PTG³¹⁴; this included Horsea Island. Naval Service Incident Report forms that were raised by the MWS PTG were staffed by OiC MWS Phoenix before onward transmission to the H&S Advisor to HMS EXCELLENT³¹⁵. The HMS EXCELLENT H&S Advisor was responsible to CO HMS EXCELLENT; MWS PTG was represented at HMS EXCELLENT H&S meetings by their own H&S Examiner (see Figure 22).

³¹² Evidence reference - DAIB/19/018/2055.

³¹³ The H&S policy that covered MWS Triumph was issued by the CO of HMS RALEIGH.

³¹⁴ In accordance with HMS EXCELLENT Standing Orders Chapter 3 Health and Safety.

³¹⁵ Evidence reference - DAIB/19/018/2071.

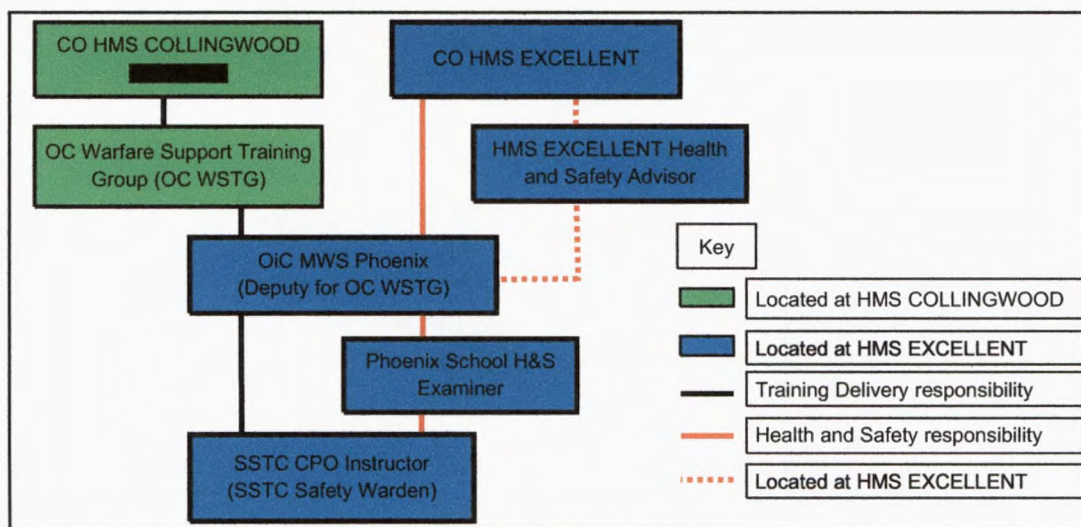


Figure 21: MWS and HMS EXCELLENT structure of SST (repeated)

At the time of the incident CO HMS EXCELLENT's H&S policy applied to MWS PTG. The Health and Safety Executive (HSE) were informed of the incident by a Hampshire Constabulary police officer who had responded to the incident. A Detective Sergeant from Hampshire Criminal Investigation Department³¹⁶ stated that the Coroner had been informed and further stated that the HSE did not intend undertaking an investigation. The Detective Sergeant also stated that the DP's death was not being treated as suspicious.

The Panel ascertained that an NLIMS report³¹⁷ was raised by MWS Phoenix in response to the DP's incident, but not until 3 days after the incident. It was noted that the DP had been recorded within the NLIMS report as being a member of the Naval Service although he was identified as a member of the RFA within a sub-division of the NLIMS report. The Panel assessed that it was almost certain that the Navy Safety Occurrence Report (NSOR)³¹⁸ form in use at the time of the incident did not have a dedicated RFA dropdown box for the originator to annotate the DP's employment Service.

Following this incident an ISI³¹⁹ was instigated by [REDACTED] with the aim of identifying any immediate issues; the ISI did not involve or have any formal input from the H&S organisations from either HMS EXCELLENT or HMS COLLINGWOOD. The Panel identified that the H&S organisations at HMS EXCELLENT and HMS COLLINGWOOD both assumed the other had ownership of post-incident activity for incidents occurring at MWS Phoenix³²⁰. It was almost certain that no internal H&S investigation was undertaken by HMS EXCELLENT's H&S organisation in direct relation to this incident. The Panel noted that the NLIMS report into the November 2009 SSTC fatality had not been linked to the NLIMS raised for this incident.

The Panel identified that no follow up action was carried out on the NLIMS report pertaining to this incident until 12 February 2020, shortly after the NSI Panel contacted MWS Phoenix requesting further H&S information. It was almost certain that the NLIMS

³¹⁶ Evidence reference - DAIB/19/018/2054.

³¹⁷ Evidence reference - DAIB/19/018/2226.

³¹⁸ The process for reporting an incident into NLIMS was to complete an NSOR which provided relevant occurrence information.

³¹⁹ Evidence reference - DAIB/19/018/2055.

³²⁰ Evidence reference - DAIB/19/018/2223.

report pertaining to this incident remained unactioned for a period of 3 months³²¹ and that there was no input from either the report originator, the responsible establishment H&S organisation or the RN Safety Centre.

Conclusion

The Panel concluded that the HMS EXCELLENT H&S organisation had no involvement in any post-incident follow-up activity³²². There was an expectation³²³ that the ISI initiated by [REDACTED] would have covered all aspects of this incident whilst in reality³²⁴ that was not the case.

The Panel finds that the lack of a thorough internal H&S investigation and the ambiguity of H&S organisation responsibilities was an **Observation**.

3.14.1 Horsea Island lake water quality

Water quality testing of Horsea Island lake was conducted against the requirements of Bathing Water Regulations 2013 by a member of the INM; samples were tested on a quarterly basis. At the time of the incident the latest report³²⁵ assessed Horsea Island lake water quality as being 'satisfactory'.

The Panel finds that water quality was **not a factor**.

3.15 Previous Royal Fleet Auxiliary incidents during Sea Safety Training

The Panel examined two previous incidents relating to RFA employees whilst conducting SST.

3.15.1 Previous fatality during Basic Sea Safety Course

On [REDACTED] 2009 an RFA employee also died having just completed Drill 1 of the BSSC SSM. The Panel identified that the incident had marked similarities³²⁶ with the DP's incident. Parallels included:

³²¹ Evidence reference - DAIB/19/018/2226.

³²² Evidence reference - DAIB/19/018/2223.

³²³ Evidence reference - DAIB/19/018/2223.

³²⁴ Evidence reference - DAIB/19/018/2223.

³²⁵ Evidence reference - DAIB/19/018/2120.

³²⁶ Evidence reference - DAIB/19/018/2012.

The Panel also ascertained³²⁷ that following the ██████████ 2009 fatality the RFA decided to cease "wet drill" training due to an ageing RFA workforce. That decision was reversed in March 2010³²⁸, and the mitigation used for the reversal was reliance on a general revision of the ENG 1 medical examination standard and monitoring more closely the fitness of RFA employees. The Panel identified³²⁹ that the decision to recommence "wet drill" training was made at a similar time to the drawdown of the RFA OH Service and the demise of the RFA PMA position. That drawdown would have made it more difficult to monitor the fitness levels of RFA employees. An ISI³³⁰ was initiated following the earlier fatality and the subsequent report concluded with only two non-safety related recommendations.

Medical analysis undertaken post the ██████████ 2009 fatality indicated that if cardiovascular fitness of RFA employees had been assured at the time the likelihood of adverse cardiovascular events occurring during the SSM would diminish³³¹. Further analysis concluded³³² that if an objective measurement of aerobic fitness, such as a fitness test or Harvard step test was employed, this could have determined the cardiovascular fitness of employees mandated to undertake the SST.

3.15.2 Previous Royal Fleet Auxiliary near miss during Intermediate Sea Safety Course

In November 2014 an RFA employee had suffered from a shortness of breath during FFM training of an ISSC and was determined to have experienced a ██████████ brought on by an ██████████. The NLIMS report concluded that there were concerns raised post-incident regarding the medical and physical fitness levels of RFA employees who participated in MWS SST. The report further concluded that all RN personnel were required to be P2³³³ to indicate that they were medically fit before training could commence. The NLIMS report also indicated that there was no such procedure in place for RFA employees who were deemed by the NLIMS author as being at a higher risk due to their age and fitness. The Panel assessed that it was almost certain that there was no further follow-up activity regarding the perceived fitness levels of RFA employees as reported within the November 2014 NLIMS report.

Post incident actions from the November 2014 NLIMS report did not highlight the points raised within the NLIMS conclusion pertaining to RFA employee age and fitness. It was very likely that the OiC MWS Phoenix and HMS EXCELLENT H&S Officer at the time of the ██████████ 2014 incident commented on this report; there was no indication that any medical analysis was conducted following the November 2014 event to correlate with the previous November 2009 fatality. The RFA had not mandated their employees to undertake a fitness test or any type of objective measurement of aerobic fitness.

³²⁷ Evidence reference - DAIB/19/018/2096.

³²⁸ Evidence reference - DAIB/19/018/2096.

³²⁹ Evidence reference - DAIB/19/018/6034.

³³⁰ Evidence reference - DAIB/19/018/2012.

³³¹ Evidence reference - DAIB/19/018/2096.

³³² Evidence reference - DAIB/19/018/2096.

³³³ P2 was a historic UK military medical category equal to the MFD JMES category.

Conclusion

The Panel concluded that despite these reports identifying concerns with the fitness levels of some employees the RFA had not mandated having independent objective measurement of aerobic fitness assessment.

The Panel finds that the RFA not mandating a requirement for an independent objective measurement of aerobic fitness assessment for all RFA employees was an **Other factor**.

Recommendation – Commodore Royal Fleet Auxiliary should introduce an appropriate aerobic fitness assessment for all Royal Fleet Auxiliary (RFA) employees in order to assure enduring RFA medical and physical employment standards.

3.16 MWS Phoenix Training Group Sea Safety Training assurance

BMT provided the management and staff, training delivery support, training design and a Training Quality Management System (TQMS)³³⁴ for MWS PTG. The BMT Head of Assurance was responsible for the delivery of the FOAP(T) Quality System. BMT MWS PTG audit findings were forwarded to OC WSTG for comment. There was no evidence that there was any other established 1PA auditing activity, outside of the FOAP(T) contract, being undertaken within MWS PTG either, as mandated by [REDACTED] or OC WSTG.

A 1PA of MWS PTG was mandated to be undertaken by BMT QA staff. This was a biennial 1PA audit which was carried out in order to assure that MWS PTG training outputs complied with the FOAP(T) TQMS procedures and the DSAT MTS requirements.

The 1PA scope³³⁵ included visiting MWS PTG training areas including Horsea Island. The 1PA regime included conducting interviews with MWS PTG training management, training staff and support staff to gather evidence³³⁶. The 1PA scope did not however include the actual practical delivery aspect of the SSM. The Panel assessed that the 1PA biennial periodicity was too infrequent and did not provide sufficient assurance to the MWS AP of the relatively high risk SSTC activities conducted whilst being geographically dislocated from HMS EXCELLENT and HMS COLLINGWOOD.

The Panel identified that the pre-programmed 1PA conducted in October 2019³³⁷ did not encompass the SSTC due to the incident on 18 October 2019. The Panel ascertained that the October 2017³³⁸ 1PA identified that there was no tracking of SSTC staff training and / or SSTC instructor competencies; this action was reported as being closed in the October 2019 1PA. The SSTC element of the October 2019 1PA was carried out in December 2019³³⁹; this addition was directed to be a low level audit³⁴⁰. The findings of the addition did not identify that some of the SSTC staff were out of date for First Aid Level 2 training.

³³⁴ BMT Head of Training Operations was the BMT QMS owner.

³³⁵ Evidence reference - DAIB/19/018/2018.

³³⁶ Evidence reference - DAIB/19/018/2018.

³³⁷ Evidence reference - DAIB/19/018/2078.

³³⁸ Evidence reference - DAIB/19/018/2018.

³³⁹ Evidence reference - DAIB/19/018/2239.

³⁴⁰ Evidence reference - DAIB/19/018/2239.

The 2PA was also biennial and was conducted in alternate years to the 1PA activity. The 2PA scope focussed on key DSAT areas of MWS policy, specifically training design, resource management, trainee management, trainer development and their qualifications; this also encompassed QA and Continuous Improvement. The 2PA endeavoured to objectively review the FOAP(T) MTS and report audit findings to ACNS(T).

The Panel noted that a 2PA audit³⁴¹ conducted in March 2016 formally identified, via an Observation³⁴², that RFA BSSC students occasionally struggled with the more physical aspects of CBRNDC training. The Panel confirmed that the March 2016 2PA stated that any RFA student who presented a significant medical or fitness issue during the BSSC would be withdrawn from training for their own safety. The Panel could find no evidence that this formal 2PA Observation had been documented as being followed-up. The most recent 2PA³⁴³ conducted in November 2018 did not report any observations or non-compliances with regard to the SSM and / or RFA students and did not refer to any previous 1PA or 2PA audit findings.

In addition to their 1PA role BMT staff were used to support the ACNS(T) Assurance Team during the 2PA activity. The Panel assessed that the presence of the same BMT QA staff supporting the 2PA activity might have prevented the 2PA from being completely independent and objective³⁴⁴.

A 3PA of MWS PTG FFM and SSM training was conducted by the MCA. Accreditation of the MWS PTG as an MCA approved training provider was endorsed once the MCA were satisfied that the MWS training course content, and its associated training delivery, met the MCA criteria as mandated within the STCW. A 3PA was conducted, as a minimum, every 5 years; MWS PTG had an in-date MCA approval³⁴⁵ at the time of the incident.

The Panel established that other external assurance activity was being undertaken by Coaching for Training Network (CfTN) to assure MWS PTG instructor DTTT standards³⁴⁶ were maintained and that the MWS PTG classroom provision was fit for purpose and conducive to a learning environment.

Conclusion

The Panel concluded that the 1PA regime of MWS PTG focussed solely on the assurance of DSAT compliance and the documentation for the delivery of training, not on the actual practical delivery of the SSM by the SSTC staff. The Panel further concluded that the scope of the 2PA was too broad and focussed primarily on BMT contractual compliance across MWS as laid down within in the FOAP(T) contract rather than ensuring that the 1PA regime provided sufficient assurance of the delivery of the practical MWS SST elements. The Panel also concluded that that the 1PA periodicity should be reduced to provide greater assurance to the MWS AP of the practical delivery of the MWS SST elements.

The Panel assessed that the SSTC delivered relatively high-risk SST whilst being geographically dislocated from HMS EXCELLENT. The Panel concluded that the 1PA

³⁴¹ Evidence reference - DAIB/19/018/2010.

³⁴² Observations would generally either highlight best practice or seek to articulate areas that could be "fine-tuned" to better effect.

³⁴³ Evidence reference - DAIB/19/018/2019.

³⁴⁴ Evidence reference - DAIB/19/018/2078.

³⁴⁵ Evidence reference - DAIB/19/018/2225.

³⁴⁶ Evidence reference - DAIB/19/018/2224.

scope and 1PA biennial assurance cycle, coupled with 2PA Observations not being adequately followed-up, did not provide sufficient assurance to the MWS AP for the delivery of SST at Horsea Island.

The Panel finds that the scope of the FOAP(T) 1PA, and its associated audit periodicity, did not provide the MWS AP with sufficient assurance of the practical elements of MWS delivered SST was a **Contributory factor**.

The Panel finds that the scope of the 2PA was too broad and previous observations had not been adequately followed-up to provide the MWS AP with sufficient assurance of the practical elements of MWS PTG delivered SST was an **Other factor**.

Recommendation – Director People and Training should conduct a review of the Fleet Outsourcing Activities Project (Training) assurance activity, and associated audit periodicities, in order to ensure that sufficient assurance is provided to the Maritime Warfare School Accountable Person with regards to MWS delivered practical Sea Safety Training.

Recommendation – Director People and Training should conduct a review of the scope of the Maritime Warfare School (MWS) 2nd Party Audit in order to ensure that the Babcock 1st Party Audit regime provides sufficient assurance to the MWS Accountable Person with regards to MWS delivered practical Sea Safety Training.

3.17 Human Factors

The INM was tasked by the DAIB to provide HF support to the NSI and to ensure that any HF relevant to the investigation were identified and analysed. The aim of the HF process was to identify the situational factors which may have affected human behaviour prior to the incident and to provide any associated evidence to indicate how, and why, it may have occurred. The results of the HF investigation³⁴⁷, and the associated analysis, were used as evidence in accordance with the Terms of Reference³⁴⁸ for the NSI.

The key information from the INM evidence related to the DP not fully reporting his underlying medical conditions on the self-declaration form. The Panel assessed that the DP may have been aware of the seriousness of his health condition but was influenced by an apparent incentive to misrepresent data in order to retain his employment with the RFA.

The HF report cited age as a likely factor for the inaccurate disclosure of weight or understanding of medical conditions and their seriousness. The Panel assessed that it was more likely that not reporting his underlying medical conditions to his MCA AD or his employer was influenced by an apparent incentive to misrepresent data in order to retain his employment with the RFA.

³⁴⁷ Evidence reference - DAIB/19/018/2231.

³⁴⁸ Evidence reference - DAIB/19/018/2233.

The Panel assessed that the DP's reported characteristics were consistent with perceived stereotypes of RFA students being overweight, older in age and more likely to struggle with the physical components of the SSM.

Conclusion

HF analysis indicated that this may have been an example of the Representativeness Heuristic³⁴⁹, where the likelihood of the DP being unable to cope with the physical aspects of the SSM resembled the 'typical' case of an RFA student as observed by SSTC staff. It was more likely than not that the perceived stereotyping of RFA students may have led SSTC staff to attribute the DP's difficulties to a lack of effort, poor physical capacity as related to his age, weight and / or the fact that it was the norm for RFA students to struggle with the physical aspects of the SSM.

3.18 Defence Fire and Rescue Service and MOD Police fitness assessment strategies

MOD police officers and Defence Fire and Rescue Service (DFRS) employees were also Civil Servants required to carry out roles that could be dangerous, strenuous and physically demanding often requiring them to deal with a variety of situations involving physical challenges. MOD police officers were required to have a reasonable level of strength, agility and stamina to be effective when operating in arduous conditions. The fitness of MOD police officers was regularly assessed, individuals were required to pass the Job Related Fitness Test³⁵⁰ on an annual basis. Failure to attain a pass during this fitness test, at any stage, may have led to their discharge. There was no upper age limit for MOD police officers.

The DFRS had a compulsory retirement age of 60. All DFRS employees were required to undertake periodic Operational Fitness Assessments (OFA)³⁵¹ in accordance with the DFRS medical standards; DFRS employees were required to undertake a step test. To minimise the risk to an individual, the step test used by the DFRS was a "sub-maximal" test (80% of maximum) and the results were then extrapolated to determine their fitness level. The frequency of the DFRS OFA was undertaken either every 3 years (up to the age of 45), every 2 years (45 to 55) and annually (over the age of 55). DFRS employees were required to meet a minimum criterion as defined within DFRS medical standards otherwise DFRS employees were very likely to be removed from operational duty.

Conclusion

The Panel concluded that the employment standards of both the MOD Police and DFRS who both employed a formalised assessment of fitness for their respective employees indicated that there was a high degree of parity with RFA-required levels of physical and medical fitness. Whilst the DFRS mandated that there should be an upper age limit the MOD Police did not. An assessment of an individual's fitness for task, in both cases, was assessed during formalised fitness testing either by a step test designed as a sub-maximal aerobic test or by a multi-stage test designed as a maximal aerobic test. The RFA did not employ either of these two tests to assess the aerobic fitness of their employees. It was established during the NSI that the general level of fitness of RFA

³⁴⁹ A cognitive bias in which an individual categorised a situation based on a pattern of previous experiences or beliefs.

³⁵⁰ This was a multistage fitness test (Bleep test)- www.MOD.police.uk.

³⁵¹ MOD Report on the likely effect of Section 10 of the Public Service Pensions Act 2013 on members of the Defence Fire and Rescue Service and the Ministry of Defence Police.

employees was of concern to³⁵² RFA Senior Officers, RN Medical Officers, RFA Officers, RFA employees, MWS Phoenix RN Officers and Ratings and MWS Phoenix BMT staff.

The Panel finds that the RFA not employing a fitness assessment strategy similar to other MOD Civil Servant organisations who also had strenuous and physically demanding employment and training standards was an **Observation**.

³⁵² Evidence reference - DAIB/19/018/6020,6032,6031,6028,6019,6008,2055,6004,6003,6010.

4 Conclusion

4.1 NSI Conclusion

The DP's death certificate recorded the cause of death as [REDACTED]. The DP's DoB was established as 30 April 1947 confirming an age of 72 years making him the oldest serving member in the RFA at the time of his death. The DP was taking medication for a [REDACTED] condition at the time of the incident. It was almost certain that the DP had not disclosed his actual age, underlying medical condition, his previous [REDACTED] or the prescribed medication he was taking to either the MCA AD or the RFA.

All RFA employees were mandated to attend and complete the BSSC and ISSC at MWS PTG. The SSTC delivered relatively high-risk elements of SST whilst being geographically dislocated from HMS EXCELLENT and HMS COLLINGWOOD where the H&S organisation and Command chain respectively sat. It was likely that the 1PA scope and 1PA biennial assurance cycle, coupled with the 2PA Observations that had not been adequately followed-up, did not provide sufficient assurance to the [REDACTED] / CO HMS COLLINGWOOD) for the delivery of the SSM at Horsea Island. It was almost certain that the DP was considered a training risk by a large percentage of SSTC staff on the day of the incident although no direction or training had been given that would formally allow staff to identify an individual as a training risk. Following a fatality during a BSSC in 2009, the Panel confirmed that a majority of the SSTC staff involved with the delivery of the SSM at the time of this incident were fearful of a similar occurrence.

The Panel identified that the ENG 1 medical examination was of a generic nature and did not necessarily consider any extra environmental requirements or employment fitness standard for RFA employees beyond that of a generic seafarer. RFA seafarers were not employed with similar regard to that of a generic seafarer and therefore the Panel concluded that a separate employment standard should be established to assure RFA employees' medical and physical fitness standards. The Panel further concluded that the removal of RN CoADs had a detrimental effect on the ability of the RN MED DIV to provide sufficient guidance, support and assurance of RFA employee medical and OH fitness standards.

Over recent decades the RFA had transitioned from its traditional auxiliary supporting role to that of delivering Defence-directed RN tasking and being directly controlled by today's RN. There was no clear evidence of a formalised transformation stairway to the current RFA assumed relationship with the RN; there was no new high-level policy beyond what was detailed within the BRd 2 and BRd 875. There was a mandated requirement for RFA employees to undertake RN training and to be assessed and meet broadly the same assessment standards used by FOST, yet the RN and RFA medical and physical employment standards were different.

The 1SL had been mandated as being responsible and accountable for the fighting effectiveness, efficiency and morale of the RFA. The 1SL had further formally delegated Full Command of the RFA to the Fleet Commander to enable the generation of RFA vessels for tasking in accordance with the Navy Command Plan. ACOS AFSUP was the appointed RFA AP but had been incorrectly referred to as RFA ODH in the BRd 875 Version 1; this was amended in BRd 875 Version 2 in November 2019. It was not clear, therefore, who definitively held the operating risk of RFA civilian employees undertaking

Defence-directed tasking. The Panel assessed that the RFA was a byzantine organisation with many threads and the RN / RFA relationship allowed for some mutual benefits due to uniformity with working environments, training requirements, ships, language and institutionalised uniformed roles at sea. The Panel identified that there remained fundamental differences between the RN and RFA primarily in employee age, employment standards, fitness standards, terms and conditions, OH standards and medical standards. External reviews identified that NCHQ lacked enough skilled and experienced people in key areas, and that responsibilities, accountabilities and governance across their organisation were unclear.

The Panel identified that following the ██████████ 2009 fatality, medical analysis indicated that if cardiovascular fitness of RFA employees had been assured the likelihood of adverse cardiovascular events occurring during the SSM would have diminished. Further analysis concluded that if an objective measurement of aerobic fitness, such as a fitness test or Harvard step test was employed, this could have determined the cardiovascular fitness of employees mandated to undertake SST. The Panel was able to confirm that post-incident actions from the November 2014 NLIMS report did not highlight the points raised within the NLIMS conclusion pertaining to RFA employee age and fitness. There was no evidence to indicate that any medical analysis was conducted following the November 2014 incident to correlate with the previous November 2009 fatality. Unlike the RN, the RFA did not mandate employees undertake a fitness test, or any other type of objective measurement of aerobic fitness. The RN had an upper age limit but the RFA did not, even though they undertook very similar strenuous and challenging activities at sea that were in many cases the same as those of the RN.

The Panel confirmed that MOD Police and the DFRS employed Defence Civil Servants and both organisations required their employees to undertake and meet a physical fitness test to mitigate the dangerous, strenuous and physically demanding roles of their employees within the MOD. RFA employees were unique seafarers, Civil Servants and Sponsored Reservists who were mandated to meet the same RN training, and broadly the same FOST assessment standards as Regular Service personnel.

The Panel concluded that should the RFA utilise a thorough ENG 1 medical examination and combine it with an objective measurement of aerobic fitness it was likely that 'at risk RFA employees' would be identified. This would enable appropriate medical and OH actions to be employed, risks managed and where necessary mitigated by the RFA and the RN MED DIV. The Panel further concluded that RFA seafarers should be assessed differently to a generic Seafarer, with medical and physical assessments undertaken by a CoAD instead of a general list AD. This would provide the necessary medical and physical fitness assurance to, the RN approved training provider, the assessment organisation, the RFA Head of Service, the 1SL and ultimately to the Head of the MOD, the SofS for Defence.

5 Summary of findings and recommendations

5.1 Findings

The DAIB NSI Panel identified the following findings, factors and recommendations from the investigation into the fatality during the BSSC incident on 18 October 2019 at Horsea Island.

5.1.1 Causal factors

The cause of the accident was:

- The DP's underlying medical condition coupled with his declared age.

5.1.2 Contributory factors

Contributory factors included:

- The lack of coverage in the ADM of seafarers who were required to be trained to embark and deploy in RN warships and RFA vessels.
- The lack of assurance of the provision of the RFAs physical and functional employment requirements to an MCA AD.
- The lack of assurance of the proof of identification process for seafarers when attending the ENG 1 medical examination.
- Not incorporating the DP's NHS GP medical history in DMICP.
- The ineffective medical and physical fitness suitability screening processes and procedures employed during the MWS PTG induction phase, including the MWS PTG Medical Self-declaration form, for all RFA employees undertaking training.
- The scope of the FOAP(T) 1PA, and its associated audit periodicity, did not provide the MWS AP with sufficient assurance of the practical elements of MWS delivered SST.

5.1.3 Aggravating factors

Aggravating factors included:

- MWS PTG SSTC staff not feeling suitably empowered to withdraw a student from the SSM once it was clear a student was struggling to meet any of the SSM pass criteria.

5.1.4 Other factors

Other factors included:

- The process for issuing Seaman's Discharge Books not being appropriately assured.
- [REDACTED]
- The RFA HR information contained within Magellan not being appropriately assured.
- The lack of clarity over the RN and RFA relationship and associated boundaries of roles and responsibilities, employment, training, assessment and tasking of RFA civilian crews manning MOD vessels whilst delivering Defence-directed RN tasking.
- The decision not to include the RFA within the Navy Command Duty Holder construct.
- DMICP not being updated accurately or providing a thorough and accurate medical history for RFA employees to enable an assured medical assessment to be carried out.
- Not undertaking RFA NJMs in a standardised manner as mandated in BRd 875.
- The low levels of RFA employees booked onto an ISSC.
- The BSSC timetable that programmed SSM training for the majority of RFA employees on a Friday.
- The ineffective medical and physical fitness suitability screening processes and procedures employed during the MWS PTG induction phase for all UK Service personnel, civilian personnel and International students undertaking training.
- The absence of clear medical and fitness standards on the joining instructions for all personnel attending MWS courses at PTG.
- The RFA policy that mandated that RFA employees must undertake MWS PTG SST with a differing medical and physical fitness standard to RN personnel.
- The lack of access to adequate OH support for the RFA.
- The lack of MCA CoADs to conduct ENG 1 Medical Examinations for RFA employees.
- The gapping of the RFA PMA post since 2004.

- The absence of 3PA assurance undertaken by the DMSR on RN MED DIV and the RFA.
- The use of RN standard assessment criteria by FOST to assess RFA vessels and employees during formal FOST training.
- The ineffective RFA HR and Training screening procedure for ensuring that RFA employees met the MWS PTG medical and physical fitness standards prior to attending MWS PTG SST.
- The lack of a JPA check during the MWS PTG SST induction phase to ensure that Service personnel met the MWS PTG medical and physical fitness standards prior to attending MWS PTG SST.
- A lack of dedicated MWS PTG SSTC emergency communication equipment.
- The lack of tailored SSM related first aid training for MWS PTG SSTC staff above that delivered by the First Aid Level 2 training course, and the lack of a standardised MWS PTG SSTC continuation training requirements.
- HMS COLLINGWOOD and MWS Phoenix duty packs that contained incorrect and / or out of date information.
- The RFA not mandating a requirement for an independent objective measurement of aerobic fitness assessment for all RFA employees.
- The scope of the 2PA was too broad and previous observations had not been adequately followed-up to provide the MWS AP with sufficient assurance of the practical elements of MWS PTG delivered SST.

5.1.5 Observations

Observations included:

- Reference to RFA DH construct in medium and low-level documentation, in contradiction to BRd 10.
- The available support from HMS EXCELLENT and BMT management on a Friday afternoon.
- The lack of formalised and assured MWS PTG student induction processes and procedures.
- The RN MED DIV had only submitted one Tier 4 assurance report to the DMSR pertaining to the RFA.
- The MWS PTG assessment strategy document that incorrectly mandated previously qualified BSSC trained personnel were exempt from the 3 m step-off when requalifying for their MWS PTG SST.

- The disparity between Service personnel and RFA employees regarding the MWS PTG swim test requirement.
- The presentation of an MWS MCA Proficiency Certificate to the DP by MWS PTG staff prior to course completion.
- RFA 1's TORs stating that he was directly accountable to the gapped MWS PTG RFA CBRNDC Training Officer position.
- RFA 1 being a single point of failure for the Line Management of RFA BSSC students.
- The lack of a thorough understanding of the operation of, and the training given to, MWS PTG SSTC staff who had access to a portable defibrillator device.
- The limited number of RFA TRiM Practitioners available to support RFA employees ashore.
- The lack of formalised internal procedures established by the RFA to support Kinforming and casualty notification ashore.
- The DAIB not being informed until approximately 72 hours after the incident.
- The lack of a thorough internal H&S investigation and the ambiguity of H&S organisation responsibilities.
- The RFA not employing a fitness assessment strategy similar to other MOD Civil Servant organisations who also had strenuous and physically demanding employment and training standards.

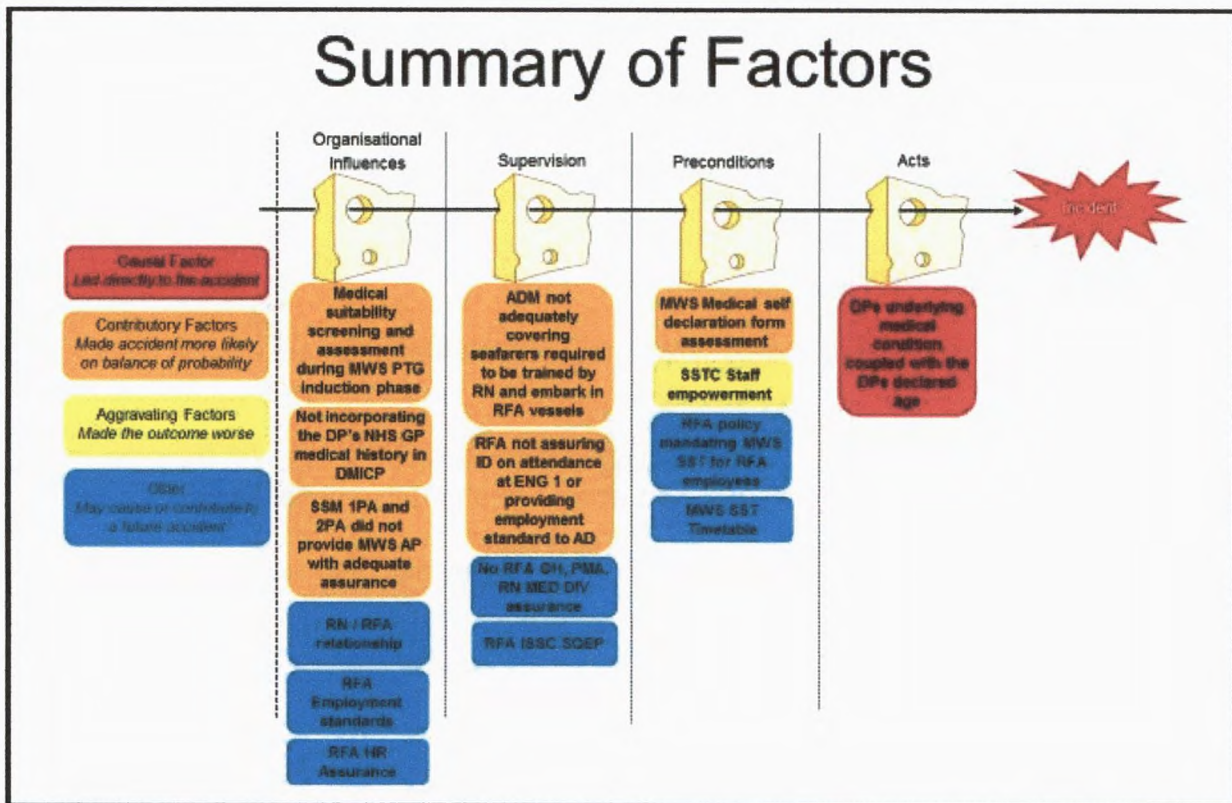


Figure 22: Summary of factors

5.2 NSI Safety Recommendations

The following recommendations are made to reduce the likelihood of reoccurrence and enhance safety:

5.2.1 Organisation

Recommendation DAIB19/018/001 – The Secretary of State for Defence should direct a review of the management structure of the Royal Fleet Auxiliary (RFA) in order to clarify and define the Royal Navy (RN) and RFA relationship, determining clear boundaries of roles and responsibilities for RFA civilian crews manning Ministry Of Defence vessels delivering Defence-directed tasking.

Recommendation DAIB19/018/002 – Commodore Royal Fleet Auxiliary should assure the process and procedures for recording Royal Fleet Auxiliary (RFA) Human Resources information in order to ensure that all electronic and hardcopy RFA Human Resources information is accurate.

Recommendation DAIB19/018/003 – Commodore Royal Fleet Auxiliary should implement a process to provide Approved Doctors (AD) with the Royal Fleet Auxiliary's physical and functional employment standards requirements in order to ensure that ADs carry out appropriate medical assessments.

Recommendation DAIB19/018/004 – Commodore Royal Fleet Auxiliary should assure the process for Royal Fleet Auxiliary (RFA) employees to conduct an Intermediate Sea

Safety Course on expiry of an initial Basic Sea Safety Course in order ensure that RFA vessels are manned and operated by Suitably Qualified and Experienced Personnel.

Recommendation DAIB19/018/005 – Commodore Royal Fleet Auxiliary should clarify the rationale for Royal Fleet Auxiliary (RFA) personnel being mandated to undertake Royal Navy (RN) Sea Safety Training with differing medical and physical fitness entry standards to RN personnel in order to establish the occasions when outsourced Commercial Training could be used by RFA employees.

Recommendation DAIB19/018/006 – Commodore Royal Fleet Auxiliary should assure the Royal Fleet Auxiliary (RFA) Human Resources and Training screening procedure for RFA employees prior to course loading in order to ensure that the RFA employees meet the Maritime Warfare School Phoenix Training Group medical and physical fitness standards.

5.2.2 Assurance

Recommendation DAIB19/018/007 – Director People and Training should conduct a review of the Fleet Outsourcing Activities Project (Training) assurance activity, and associated audit periodicities, in order to ensure that sufficient assurance is provided to the Maritime Warfare School Accountable Person with regards to MWS delivered practical Sea Safety Training.

Recommendation DAIB19/018/008 – Director People and Training should conduct a review of the scope of the Maritime Warfare School (MWS) 2nd Party Audit in order to ensure that the Babcock 1st Party Audit regime provides sufficient assurance to the MWS Accountable Person with regards to MWS delivered practical Sea Safety Training.

Recommendation DAIB19/018/009 – [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Recommendation DAIB19/018/010 – The Maritime and Coastguard Agency Chief Executive should assure the procedures for compiling and issuing a Seaman’s Discharge Book in order to ensure that the applicants identification details are correct.

Recommendation DAIB19/018/011 – [REDACTED] should assure the screening process for Service personnel prior to course commencement in order to ensure that Service personnel meet the Maritime Warfare School Phoenix Training Group medical and physical fitness standards.

Recommendation DAIB19/018/012 – [REDACTED] should implement assured medical and physical fitness suitability screening processes for all personnel undertaking Sea Safety Training courses in order to ensure that all personnel meet the minimum medical and physical fitness standards.

Recommendation DAIB19/018/013 – [REDACTED] should enhance the joining instructions for all personnel attending MWS courses at Phoenix

Training Group in order to assure the medical and physical fitness standards of all students who are assigned to undertake Sea Safety Training.

Recommendation DAIB19/018/014 – The Maritime and Coastguard Agency Chief Medical Advisor should improve the guidance in the Approved Doctors Manual in order to ensure that it adequately assures the identification of seafarers when attending the ENG 1 medical examination.

5.2.3 Risk management

Recommendation DAIB19/018/015 – The First Sea Lord should direct a review of Duty Holding requirements within the Royal Fleet Auxiliary against the criteria in DSA 01.2 Chapter 3 when delivering Defence-directed tasking.

Recommendation DAIB19/018/016 – [REDACTED] should conduct a review of the Sea Safety Training timetables in order to mitigate any identified risks with delivering the Sea Survival Module phase of Sea Safety Training at Horsea Island.

5.2.4 Training and supervision

Recommendation DAIB19/018/017 – Commodore Royal Fleet Auxiliary should amend BRd 875 in order to ensure that the delivery and assessment of Flag Officer Sea Training activity is appropriate for Royal Fleet Auxiliary vessels and employees.

Recommendation DAIB19/018/018 – [REDACTED] should ensure that Sea Survival Training Centre staff are suitably trained to identify students at risk and empowered to withdraw struggling students from the Sea Survival Module in order to improve risk management of the activity.

Recommendation DAIB19/018/019 – Captain Maritime Warfare School (MWS) should formalise a tailored first aid continuation training programme for Sea Survival Training Centre staff in order to ensure that they are appropriately trained, competent and current.

5.2.5 Medical

Recommendation DAIB19/018/020 – Commodore Royal Fleet Auxiliary should implement a process to provide Approved Doctors with appropriate documentation in order to assure the identity of all Royal Fleet Auxiliary employees when attending the ENG 1 medical examination.

Recommendation DAIB19/018/021 – Assistant Chief Of Staff Medical should further investigate how the associated risk of not incorporating General Practitioner medical records for Royal Fleet Auxiliary (RFA) employees could be mitigated in order to provide a more complete and accurate RFA employee medical summary.

Recommendation DAIB19/018/022 – Assistant Chief Of Staff Medical should standardise the conduct of Royal Fleet Auxiliary New Joiner Medicals in order to provide assurance that consistent medical scrutiny is applied.

Recommendation DAIB19/018/023 – Commodore Royal Fleet Auxiliary should determine the requirement for Maritime and Coastguard Agency Company Approved Doctors to be established to conduct ENG 1 Medical Examinations for the Royal Fleet Auxiliary (RFA) in order to provide additional assurance of medical and fitness employment standard for RFA employees.

Recommendation DAIB19/018/024 – Assistant Chief Of Staff Medical should reinvigorate the role of the Principal Medical Advisor for the Royal Fleet Auxiliary (RFA) in order to ensure that focused medical advice and guidance is provided to the RFA.

Recommendation DAIB19/018/025 – Commodore Royal Fleet Auxiliary should introduce an appropriate aerobic fitness assessment for all Royal Fleet Auxiliary (RFA) employees in order to assure enduring RFA medical and physical employment standards.

Recommendation DAIB19/018/026 – Commodore Royal Fleet Auxiliary should conduct a review of Royal Fleet Auxiliary (RFA) Occupational Health requirements in order to ensure that a suitably assured Occupational Health Service is provided for RFA employees.

Recommendation DAIB19/018/027 – The Head of the Defence Medical Services Regulator should assure the process by which the Defence Medical Information Capability Programme is updated by Royal Fleet Auxiliary (RFA) Medical Technicians and employed by embarked Medical Officers in order to ensure medical records are maintained with timely and accurate medical information for RFA employees when embarked in RFA vessels.

Recommendation DAIB19/018/028 – The Head of the Defence Medical Services Regulator should conduct an appropriate level of assurance of the Royal Fleet Auxiliary (RFA) and Royal Navy Medical Division in order to ensure that a suitable level of medical services are provided to the RFA and its employees.

Recommendation DAIB19/018/029 – The Maritime and Coastguard Agency (MCA) Chief Medical Advisor should amend the MCA Approved Doctors Manual in order to ensure that it adequately covers seafarers who are required to be Royal Navy trained, and to embark in Royal Navy warships and Royal Fleet Auxiliary vessels.

5.2.6 Communication

Recommendation DAIB19/018/030 – ██████████ should improve the Sea Survival Training Centre emergency communication equipment in order to ensure expedient communication in the event of an incident or emergency.

Recommendation DAIB19/018/031 – ██████████ should assure that HMS COLLINGWOOD Officer of the Day and MWS Phoenix Duty Instructor duty packs contain up to date procedures and emergency contact information in order to ensure timely and effective reporting of incidents.

6 References

Documents referenced below not held on file by DAIB. Individual chapters used as evidence held within DAIB Horsea Island NSI evidence folder.

| | Reference | Provided by |
|---|---|---|
| A | JSP 751 May 2017 Issue 17 - Joint Casualty & Compassionate Policy & Procedures | Chief of Defence People - Defence Authority for People |
| B | JSP 822 June 2019 Version 3.2 - Defence Direction and Guidance for Training and Education. | Chief of Defence People - Defence Authority for People |
| C | JSP 898 November 2014 Version 1.1 - Defence Direction and Guidance on Training, Education and Skills | Chief of Defence People - Defence Authority for People |
| D | JSP 950 December 2014 Version 1.0 - Medical Policy. | Surgeon General - Defence Authority for Healthcare and Medical |
| E | BRd 2 April 2017 Version 4 - The Queen's Regulations for the Royal Navy. | Defence Council - Fleet Commander |
| F | BRd 3 (1) June 2016 Version 12 - Naval Personnel Management. | Defence Council - 2SL & Fleet Commander |
| G | BRd 10 November 2018 Version 1 - Navy Command Safety and Environmental Management System (NC SEMS). | Defence Council - Fleet Commander |
| H | BRd 875 September 2018 Version 1 - Regulations for Royal Fleet Auxiliaries | Defence Council - COM RFA |
| J | BRd 875 September 2018 Version 2 - Regulations for Royal Fleet Auxiliaries. | Defence Council - COM RFA |
| K | BRd 1991 September 2017 Version 3 - Instructions for the Royal Naval Medical Service. | Defence Council - Fleet Commander |
| L | BRd 2170(1) February 2016 - Ship CBRNDC Manual Volume 1 Damage Control. | Defence Council - Fleet Commander & DCNS |
| M | BRd 9275(1) May 2016 Version 2 - Operational Sea Training Guide (OSTG) Volume 1. | Defence Council - Fleet Commander |
| N | BRd 9467 January 2017 Version 4 - Fleet Administrative and General Orders | Defence Council - Fleet Commander |
| O | Maritime Labour Convention 2006, Amendment date 08 July 2018. | The General Conference of the International Labour Organisation |
| P | International Safety Management Code Revision 2013. | International Maritime Organisation |
| Q | STCW 2017 Edition - Standards of Training, Certification & Watchkeeping for Seafarers including 2010 Manila Amendments. | International Maritime Organisation |
| R | Approved Doctor's Manual - Seafarer Medical Examinations July 2019 Edition. | Maritime & Coastguard Agency |
| S | Philips Heartstart FR2+ Defibrillator Instructions for Use Edition 15. | Philips Medical Systems |

7 Distribution

7.1 Action:

SofS for Defence
First Sea Lord
DG DSA
Director People and Training
Head DMSR
ACOS MED
COMRFA

██████████
MCA Chief Executive
MCA Chief Medical Advisor
██████████

7.2 Copy to:

Fleet Commander
Flag Officer Sea Training
Navy Safety Director
Commanding Officer HMS RALEIGH
Commanding Officer INM
Commanding Officer HMS EXCELLENT
NoK

DSA:

MA/DG
AMA/DG
COS
Sec Comms
DMSR TL
SO1 Service Inquiries
Legad

DAIB:

Hd
Deputy Hd
Land Snr Ops
SO1 Air
Land Snr Eng
Air Snr Eng
Investigation Manager

