

PART 1.1 – COVERING NOTE

5 RIFLES AFT 01

4 Mar 16

DG DSA

**SERVICE INQUIRY INVESTIGATION INTO THE DEATH OF 30210868 RIFLEMAN MJ EVANS,
5 RIFLES ON 18 JUNE 2015 IN PADERBORN, GERMANY**

1. The Service Inquiry Panel assembled at RNAS Yeovilton, on the 26 Jun 15 by order of the DG DSA for the purpose of investigating the death of 30210868 Rfn Evans on 18 Jun 15 and to make recommendations in order to prevent recurrence. The Panel has concluded its inquiries and submits the provisional report for the Convening Authority's consideration.

PRESIDENT

[Signature]

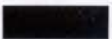


Lt Col RM

President
5 Rifles AFT SI

MEMBERS

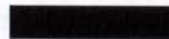
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Maj

Member
5 Rifles AFT SI

[Signature]



WO

Member
5 Rifles AFT SI

2. The following inquiry papers are enclosed:

- Part 1 (The Report)
- Part 1.1 Covering Note
- Part 1.2 Convening Orders & TORs
- Part 1.3 Narrative of Events
- Part 1.4 Findings
- Part 1.5 Recommendations
- Part 1.6 Convening Authority Comments

Part 2 (The Record of Proceedings)

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- Part 2.1 Diary of Events
- Part 2.2 List of Witnesses
- Part 2.3 Witnesses Statements
- Part 2.4 List of Attendees
- Part 2.5 List of Exhibits
- Part 2.6 Exhibits
- Part 2.7 List of Annexes
- Part 2.8 Annexes
- Part 2.9 Schedule of Matters Not Germane to the Inquiry
- Part 2.10 Master Schedule



Defence
Safety
Authority

Service Inquiry Convening Order

23 Jun 15

SI President

EA/CO YEOVILTON
ADJT/5 RIFLES
Hd LAIT
Hd MilAAIB
DSA-Legad

SI Members

Copy to:

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PSO/COMD JFC

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DSA DLSR TL

DSA DG/SI/02/15 – CONVENING ORDER FOR SERVICE INQUIRY INTO THE DEATH OF RIFLEMAN MJ EVANS (30210868), 5 RIFLES DURING AN ANNUAL FITNESS TEST ON 18 JUN IN PADERBORN, GERMANY.

1. A Service Inquiry (SI) is to be held under Section 343 of Armed Forces Act 2006 and in accordance with JSP 832 – Guide To Service Inquiries (Issue 1.0 Oct 08).
2. The purpose of this SI is to investigate the circumstances surrounding the subject land occurrence and to make recommendations in order to prevent recurrence.
3. The SI Panel is to assemble at the Ministry of Defence, Whitehall on Thu 25 Jun 15 at 1030L.
4. The SI Panel comprises:

President:	Lt Col	[REDACTED]	RM
Members:	Maj	[REDACTED]	PWRR
	WO	[REDACTED]	RAF
5. The legal advisor to the SI is **Maj** [REDACTED] (**DSA-Legad**) and investigation support/assistance is to be provided by the Land Accident Prevention and Investigation Team (LAIT).

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6. The SI is to investigate and report on the facts relating to the matters specified in its Terms of Reference (TOR) and otherwise to comply with those TOR (at Annex). It is to record all evidence and express opinions as directed in the TOR.

7. Attendance at the SI by advisors/observers is limited to the following:

Hd LAIT – Unrestricted Attendance.

Hd MilAAIB – Unrestricted Attendance.

LAIT investigators in their capacity as advisors to the SI Panel – Unrestricted Attendance¹.

MilAAIB investigators in their capacity as advisors to the SI Panel – Unrestricted Attendance².

8. The Panel will work from RNAS Yeovilton and Alanbrooke Barracks, Paderborn, Germany. CO Yeovilton and CO 5 Rifles are requested to provide facilities, equipment and assistance suitable for the nature and duration of the SI as required by the SI President.

9. Reasonable costs will be borne by DG DSA under UIN D0658A.

Original Signed

R F Garwood
AM
DG DSA – Convening Authority

Annex:

A. Terms of Reference for SI into the death of Rifleman MJ Evans (30210868) on 18 Jun 15 in Paderborn, Germany.

¹ On a case by case basis as authorised by Hd LAIT.

² On a case by case basis as authorised by Hd MilAAIB.

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TERMS OF REFERENCE FOR SI INTO THE DEATH OF RIFLEMAN MJ EVANS (30210868), 5 RIFLES, DURING AN ANNUAL FITNESS TEST ON 18 JUN IN PADERBORN, GERMANY.

1. As the nominated Inquiry Panel for the subject SI, you are to:
 - a. Investigate and, if possible, determine the cause of the occurrence, together with any contributory, aggravating and other factors and observations.
 - b. *Ascertain whether Service personnel involved were acting in the course of their duties.*
 - c. *Examine what policies, orders and instructions were applicable and whether they were complied with.*
 - d. *Review the levels of authority and supervision covering the task during which the incident occurred.*
 - e. *Establish the level of training, relevant competencies, qualifications and currency of the individuals involved in the activity.*
 - f. *Identify if the levels of planning and preparation were commensurate with the activities' objectives.*
 - g. *Investigate and comment on relevant fatigue implications of individuals' activities prior to the matter under investigation.*
 - h. *Determine the state of serviceability of any relevant equipment.*
 - i. *Determine any relevant equipment deficiencies.*
 - j. *Assess any Health and Safety at Work and Environmental Protection implications in line with JSP 375 and JSP 418.*
 - k. *.Determine and comment on any broader organizational and/or resource factors.*
 - l. *Report and make appropriate recommendations to DG DSA.*
2. During the course of your investigations, should you identify a potential conflict of interest between the CA and the Inquiry, you are to pause work and take advice from your DSA Legal Advisor, Hd LAIT and DG DSA. Following that advice it may be necessary to reconvene reporting directly to MOD PUS.

GLOSSARY

1.2-3

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Acronym/ Abbreviation	Explanation
20 Armd Bde	20 Armoured Brigade
2ic	Second-in-Command
5 RIFLES	Fifth Battalion of the Rifles
A2020	Army 2020
AAPTI	All Arms Physical Training Instructor
ACT	Annual Crew Test
AED	Automated External Defibrillator
AF	Adaptable Force
A-FORM	Army – Formation Operational Readiness Mechanism
AFT	Annual Fitness Test
AGAI	Army General Administration Instructions
AHQ	Army Headquarters
ALARP	As Low As Reasonably Practicable
AoR	Area of Responsibility
ASPT	Army School of Physical Training
BATUK	British Army Training Unit Kenya
BATUS	British Army Training Unit Suffield
BFBS	British Forces Broadcasting Service
BFG	British Forces Germany
BLS	Basic Life Support
Bn	Battalion
CESO(A)	Chief Environment and Safety Officer (Army)
CLF	Commander Land Forces
CMT	Combat Medical Technician
CO	Commanding Officer
CoC	Chain of Command
COEFOR	Contemporary Operating Environment Force
Coy	Company
CPR	Cardio Pulmonary Resuscitation
CSM	Company Sergeant Major
CT	Collective Training
CTCRM	Commando Training Centre Royal Marines
CTG(A)	Collective Training Group (Army)
DDH	Delivery Duty Holder
DH	Duty Holding
DG	Director General
DIN	Defence Instructions and Notices
DLE	Defence Learning Environment
DMS	Defence Medical Services
DS	Directing Staff
DSA	Defence Safety Authority
DTrg(A)	Director Training (Army)
ECG	Electro-cardiogram (heart tracing)
FFD	FORM Fitness Doctrine
FORM	Formation Operational Readiness Model
GPS	Global Positioning System
HQ	Headquarters
ISPEC	Instructional Specifications
ITC	Infantry Training Centre Catterick
JSP	Joint Service Publication
INM	Institute of Naval Medicine
LAIT	Land Accident Prevention and Investigation Team

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LFSO	Land Forces Standing Orders
LONDIST	London District
Lt Col	Lieutenant Colonel (OF4 Rank)
LWC	Land Warfare Centre
MATT	Military Annual Training Tests
MilAAIB	Military Air Accident Investigation Branch
MOD	Ministry of Defence
MRS	Medical Reception Station
NCO	Non Commissioned Officer
OC	Officer Commanding
OIC	Officer in Charge
OPFOR	Opposing Force
Ops	Operations
PAYD	Pay as you Dine
PD	Physical Development
PFA	Personal Fitness Assessment
POTL	Post Operational Tour Leave
PTI	Physical Training Instructor
QT-34	QuesTemp QT-34 (WBGT Monitor)
RA	Risk Assessment
RAAT	Regular Army Assistance Table
RAF	Royal Air Force
RAP	Regimental Aid Post
RAPTCI	Royal Army Physical Training Corps Instructor
Rfn	Rifleman
RIG	Regimental Instructor Gunnery
RM	Royal Marines
RMO	Regimental Medical Officer
RN	Royal Navy
RtL	Risk to Life
SADS	Sudden Adult Death Syndrome
SFIA	Skills for the Information Age
SHE	Safety Health Environment
SI	Service Inquiry
SIB	Special Investigations Branch
SME	Subject Matter Expert
SST	Safe System of Training
STC	Sennelager Training Centre
SV	Safety Vehicle
TAB	Tactical Advance to Battle
TM	Team Medic
TORs	Terms of Reference
Trg	Training
UFTO	Unit Fitness Training Officer
UK	United Kingdom
VSI	Very Seriously Ill
WBGT	Wet Bulb Globe Temperature
WgO	Warning Order

DEFINATION OF TERMS

Acronym/ Abbreviation	Explanation
AAPTI	A soldier of any cap badge outside the RAPTC who has completed an initial PTI course and has retained their currency. The soldier may run various physical training events.
AF	Those elements of the Army forming the primary source of capability for Defence Engagement at home and overseas.
AFT	An eight mile loaded march to be completed in between 1 hour 55 and two hours.
ALARP	Associated with risk management.
Army 2020	A plan to restructure the Army (including the reserves) by 2020.
BATUK	A permanently deployed training unit in Kenya. The term is also used to describe the training area and exercises run on it.
BATUS	A permanently deployed training unit in Canada. The term is also used to describe the training area and exercises run on it.
BFG	The organisation managing British Troops in Germany.
CT1	Collective training up to troop/ platoon level.
CT3	Sub-unit training in a task organised unit.
DH	Formalising the 'assurance' of an activity and the people conducting it
DLE	An internet resource which can be used to access online learning facilities.
MATT	Tests to be completed annually which represent the minimum standard a trained soldier should be at.
OP HERRICK 20	The twentieth iteration of the enduring operation in Afghanistan
PD	Physical development of soldiers which is broken down into physical training, sport and adventurous training.
RtL	Activities deemed to pose significant risk to life and which must be recorded on a unit register.

PART 1.3 – NARRATIVE OF EVENTS

All times local (GMT plus 2 hours).

Synopsis

1.3.1 At or around 0912 hrs on Thu 18 Jun 15, Rifleman (Rfn) Evans collapsed having completed approximately 7.3 miles of an 8 mile Annual Fitness Test¹ (AFT) in the vicinity of Alanbrooke Barracks, Paderborn, Germany. Almost immediately after his collapse he became unconscious and stopped breathing, at which point he was given Cardiopulmonary Resuscitation (CPR). German Paramedics and an Accident & Emergency Doctor attended the scene, initially taking over the CPR and subsequently taking Rfn Evans to hospital². Rfn Evans was pronounced dead by the German medical services at 1609 hrs that same day.

Exhibit 102

Personalities

1.3.2 **Rfn Evans.** Rfn Evans commenced initial training at the Infantry Training Centre, Catterick (ITC) on 06 Jul 14, having passed the initial recruit selection process, including a medical on 3 Feb 14. On 5 Dec 14 he passed the AFT at ITC, where it is a mandatory output standard. Rfn Evans passed out of ITC on 23 Jan 15. Rfn Evans joined B Company (Coy), 5 RIFLES on 8 Feb 15; he was 24 years of age. As part of B Coy training he completed an AFT on 6 Mar 15 and a Personal Fitness Assessment³ (PFA) on 6 Apr 15.

Exhibit 2

**Exhibit 3
Exhibit 4**

1.3.3 **Commanding Officer (CO).** A Lieutenant Colonel who is in charge of 5 RIFLES. He has a personal responsibility for all the manpower within the unit and must ensure that all activities they participate in are conducted in a safe manner. The current CO took command of the Unit following its return from Op HERRICK 20 in Dec 14.

**Exhibit 87
Exhibit 5**

1.3.4 **Officer Commanding (OC) B Coy.** A Major who is in charge of B Coy, 5 RIFLES. He is responsible for the planning and execution of tasks given to B Coy by the unit Headquarters. The current OC took command of B Coy on 15 Jun 15.

**Exhibit 5
Soldier R**

1.3.5 **Royal Army Physical Training Instructor (RAPTCI).** A subject matter expert in the planning, preparation and execution of Physical Development⁴ (PD) within the unit. The current incumbent arrived in the unit in Jul 14 and immediately deployed to Kenya until Jan 15. Following leave and attendance on a course he arrived back in the unit in mid Apr 15.

Exhibit 42

Exhibit 6

1.3.6 **Physical Training Instructor One (PTI 1).** A Lance Corporal who is one of the All Arms Physical Training Instructors in B Coy. He joined the Army in 2012 and 5 RIFLES in Mar 13. Qualifying as a PTI in Jun 14, he joined B Coy in Jan 15.

PTI 1

¹ The AFT is a loaded march over 8 miles to be completed in no more that 2 hrs and not less than 1 hr 55mins.

² First to St Vincenz Hospital, Paderborn and then to the Heart and Diabetes Centre, Bad Oeynhausen.

³ Personal Fitness Assessment consists of press-ups, sit-ups and an aerobic test (run or multi-stage fitness test).

⁴ Physical Development encompasses the three pillars of Physical Training, Sport and Adventurous Training.

1.3.7 **Physical Training Instructor Two (PTI 2).** A Corporal who is one of the All Arms Physical Training Instructors in Fire Support Coy. He joined the Army in 2007 and on completion of initial training joined 5 RIFLES later that same year. He qualified as a PTI in 19 Jun 09 and as per policy undertook the requalifying course in 13 -15 Jan 14. He joined B Coy on 15 Jun 15.

**Exhibit 53
Soldier R
PTI 2**

Pre-Incident Events

1.3.8 **5 RIFLES.** 5 RIFLES entered their 'Other Task Year'⁵ in Jan 15 having completed Post Operational Tour Leave (POTL) following their Op HERRICK 20 deployment to Afghanistan. This deployment did not involve the whole Battalion (Bn), but saw sub-units and individuals rotating through Afghanistan during the period May – Nov 14. The Unit was directed to achieve Collective Training Level 1⁶ by 30 Nov 15 and complete directed tasks, such as Regular Army Assistance Table⁷, Ceremonial Duties and Exercise Support.

Exhibit 7

Exhibit 8

1.3.9 **B Coy 5 RIFLES.** B Coy was the last to return from Op HERRICK 20 in Nov 14 and consequently were the last to return to work following POTL. Falling in with the Bn plan they were working towards CT1 when the Bn received a tasking e-mail or Warning Order (WgO) dated 5 May 15 to provide a Coy to the British Army Training Unit Kenya (BATUK) to act as the Contemporary Operating Environment Force⁸ (COEFOR) in support of the Grenadier Guards during Exercise ASKARI STORM 4. HQ 5 RIFLES allocated B Coy to the task. B Coy commenced planning and preparation for a Main Body Deployment on 25/26 Jun 15. One of the planning considerations was that all participating ranks must have passed an AFT within 6 months of the deployment date. Therefore, an AFT for B Coy was scheduled for 18 Jun 15.

Exhibit 10

Exhibit 10

Exhibit 11

Exhibit 12

Exhibit 11

Soldier X

1.3.10 **AFT.** The AFT⁹ is undertaken by Army¹⁰, Royal Marines¹¹ and RAF¹² Personnel. It comprises an 8 mile loaded march to be completed in no more than 2 hrs and not less than 1 hr 55 mins. The weight carried by Rfn Evans was 25kg¹³. The procedures for planning and executing the AFT are laid down in the Military Annual Training Test 2¹⁴ (MATT 2) Protocol.

Exhibit 13

1.3.11 According to the B Coy weekly training programme, in the days prior to the

⁵ In the Other Tasks Year, units will support the training of others but nevertheless, they will conduct individual training.

⁶ Rfn operating together to produce an operationally effective sub-unit (Platoon).

⁷ Regular Army Assistance Table lists all the activities that are required to support the output of the Army. They include provision of enemy for military exercises, support staff to run ranges and subject matter experts to support civilian led activities.

⁸ COEFOR is the name given to the enemy in a military exercise.

⁹ Royal Marines refer to the AFT as the Combat Fitness Test. The RAF refer to the AFT as a Loaded March.

¹⁰ Level 1 and 2 units iaw with Annex A of 2015DIN07-081(2015DIN07-081).

¹¹ All personnel within 3 Commando Brigade.

¹² RAF Regiment (and attached ranks) and RAF Physical Training Instructors iaw the RAF Physical Education Hand Book (AP 3342).

¹³ The weight carried by an individual varies according to the individual's cap badge. Infantry soldiers carry 25kg.

¹⁴ MATTs 1 – 9 are tests conducted every year to ensure that all soldiers are at the same baseline level of training. MATT 2 is the physical training baseline test.

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AFT, B Coy conducted mandatory deployment briefings for BATUK, caught up with PFAs and completed a number of classroom based MATTs.

Exhibit 11

1.3.12 **Previous 24 hrs.** On Wed 17 Jun, Rfn Evans participated in military training events in the morning and Coy sport in the afternoon. According to witnesses Rfn Evans went shopping at lunchtime and then swimming in the afternoon. In the evening he was seen in the B Coy accommodation preparing his kit (which included weighing his equipment) for the AFT the following day.

**Soldier B
Soldier S**

1.3.13 **AFT Planning/Administration.** PTI 1 was the original Officer in Charge (OIC) for the AFT and conducted the initial planning during the preceding two days, this amounted to: booking a Safety Vehicle¹⁵ (SV) and requesting a Combat Medical Technician (CMT) to accompany the AFT be provided by the Medical Centre.

Exhibit 14

PTI 1

1.3.14 **Events on the morning of 18 Jun 15.** At or around 0600 hrs on Thu 18 Jun 15 Rfn Evans collected his weapon from the D¹⁶ Coy Armoury before making his way to the cookhouse for breakfast with some of his fellow Rfn.

**Soldier B
Soldier T
Soldier U**

1.3.15 **Meteorology.** The meteorological forecast¹⁷ for the day was 15 -17°C, overcast with light winds and humidity varying between 70 – 100%.

Exhibit 16

1.3.16 **Administration.** PTI 1 and PTI 2 arrived at the gymnasium independently. PTI 2 conducted administration (including signing the daily Risk Assessment, checking his own kit and then ensuring he had weighing scales to weigh the AFT participants equipment). Concurrently, PTI 1 (along with the 5 RIFLES Duty AAPT1) carried out a Wet Bulb Globe Temperature (WBGT) measurement and also signed the daily Risk Assessment sheet. Following a short discussion PTI 2 assumed the position of AFT OIC.

**PTI 2
Exhibit 15
Soldier Q
Exhibit 17
Exhibit 15
PTI 2
PTI 1**

1.3.17 **Morning Parade.** B Coy, including Rfn Evans, had been instructed to fall in at 0715 hrs outside B Coy accommodation. They assembled at around this time and had their equipment weighed by PTI 2 before marching to the gymnasium. Concurrently PTI 1 briefed the SV driver.

**Exhibit 18
Soldier B
Soldier U
PTI 1**

1.3.18 **AFT Briefs.** At 0725 hrs PTI 2 selected and briefed the road safety personnel¹⁸ before briefing the participants on the AFT.

PTI 2

1.3.19 **AFT Route.** The route used for this AFT exited Alanbrooke Barracks and followed a hard surface route through built up areas, alongside and across major roads as well as through areas of countryside. The route was split into four legs of approximately two miles each finishing with a rehydration stop.

¹⁵ 9 seater mini bus.

¹⁶ B Coy weapons were packaged up for the deployment to Kenya and so D Coy weapons were used for the AFT.

¹⁷ Provided by the Bad Lipspringe automated reporting station, which is approximately 6 miles from Alanbrooke Barracks.

¹⁸ Personnel who are positioned in front and rear of the main body who notify the OIC of oncoming traffic.

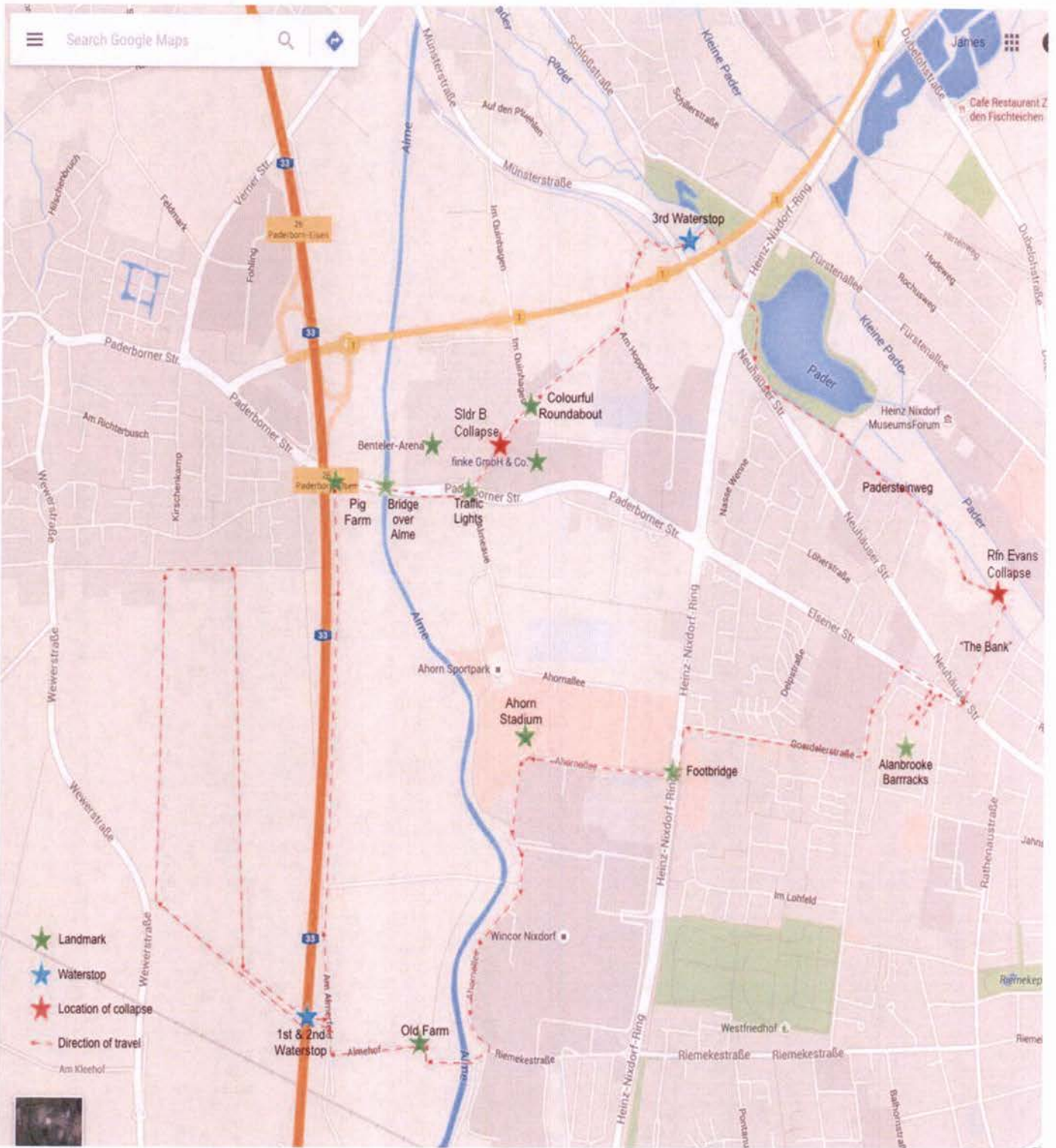


Fig 1.3.1 – AFT Route – Data downloaded from OIC GPS and plotted on map by the SI.

1.3.20 **Legs 1 and 2.** The first two legs passed without incident, with the group meeting with the SV as planned and proceeding through the 2 and 4 mile rehydration stops.

1.3.21 **Leg 3.** Shortly after the 4 mile rehydration stop Soldier A was struggling to keep up with the main body. At approximately 5.5 miles Soldier B collapsed. Under the direction of Soldier E, Soldier B was placed on the SV. Minutes later Soldier A arrived at the SV and, following an assessment of the situation by PTI 1, Soldier A (who was unable to maintain the pace) was placed on the SV to look after Soldier B. PTI 1 then dispatched the SV to the Medical Reception Station (MRS) at Sennelager Training Centre (STC). On arrival at STC the occupants of the SV were advised that medical facilities were unavailable due to a power outage and they were therefore redirected to Barker Barracks Medical Centre, arriving at 0949 hrs. Soldier B was seen by a doctor at 1004 hrs and was taken back to Alanbrooke Barracks later in the day. The SV with driver and Soldier A returned directly to Alanbrooke Barracks.

Soldier A
PTI 1
Exhibit 19
Soldier E
Soldier B

PTI 1

Exhibit 20

Soldier B

1.3.22 Having dispatched the SV to the STC, PTI 1 re-joined the main body (which had reached and stopped) at the 6 mile rehydration stop and informed PTI 2 that the SV was no longer in attendance.

PTI 1

Incident Events

1.3.23 Shortly after the 6 mile rehydration stop three soldiers began to struggle which resulted in the main body becoming spread out.

PTI 1

Exhibit 19

1.3.24 At the 7.3 mile point Rfn Evans, who until this point had been near the front of the AFT dropped back rapidly through the main body. This was immediately noticed by Soldier F who was positioned at the rear of the main body. Whilst soldier F questioned Rfn Evans on how he was feeling the main body continued. Rfn Evans responded "I just need a breather" but was "fine and was determined to continue" so Soldier F moved forward to rejoin the main body, leaving Rfn Evans with several JNCOs (Soldiers E, G, H) and an AAPT1 (Soldier J). Shortly after Soldier F moved forward, Soldier E noticed that Rfn Evans was starting to wobble like he was drunk and so asked him if he was going to pass out, Rfn Evans replied "no no I'm fine".

Soldier F

Soldier E, G, H
and J
Soldier E

1.3.25 Shortly afterwards, at approximately 0912 hrs, Rfn Evans became unsteady and on the point of collapse. He was caught by Soldiers E and G before he fell, and it appeared to Soldier J as if he was starting to fit, before becoming unconscious soon afterwards. Soldiers G and H removed his equipment and placed him in the recovery position. At this stage his breathing was rapid and shallow and his heartbeat like a mobile phone vibrating in his chest.

Soldier G
Soldier J
Soldier H
Soldier G
Exhibit 108
Soldier J

1.3.26 Soldiers G and H had started to monitor his airway, breathing and circulation, when they both realised that Rfn Evans had stopped breathing and so immediately commenced CPR. Soldier E ran forward towards the main body and shouted to Soldier F that Rfn Evans had collapsed and was fitting. At the scene Soldier J told PTI 1, (the SI has assessed that PTI 1 was approximately 300 – 400m behind the main body when Rfn Evans collapsed) to call the Emergency Services, which he did at 09:14:09 hrs. PTI 1 then made his way to Alanbrooke Barracks to act as a guide for the Emergency Services.

Soldier G, H, J
and E
Soldier J
PTI 1
Exhibit 21
PTI 1

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1.3.27 Soldier F, who was one of the individuals at the back of the AFT and who saw Rfn Evans drop back with Soldier E, was trying to catch up with the body of the AFT when he heard a shout from Soldier E saying that Rfn Evans had collapsed. Catching up with the B Coy Company Sergeant Major (CSM) Soldier F relayed the message about Rfn Evans' collapse. The CSM directed Soldier F to go to Alanbrooke Barracks and get the 5 RIFLES medical staff. The CSM then made his way back down to Rfn Evans. Simultaneously PTI 2 directed Soldier L to run the 400m to Alanbrooke Barracks Guardroom, call the Emergency Services and remain there as a guide. The call was made at 09:14:29 hrs. PTI 2 then took the remainder of B Company back into Alanbrooke Barracks, arriving at approximately 0915 hrs.

Soldier E

Soldier F

**Soldier F
PTI 2**

Exhibit 21

PTI 2

Exhibit 22

1.3.28 At the 5 RIFLES Regimental Aid Post¹⁹ (RAP), Soldier F located and briefed the RAP Nurse on the incident. They went outside and located a CMT who had just finished a physical training session with another Coy. Having led the remainder of the Coy back to Alanbrooke Barracks, PTI 2 then joined them and together they decided that the RAP Nurse and CMT (who were in a car) would follow PTI 2 and Soldier F (who were running) the 700m to the scene.

**Soldier M
Soldier F**

PTI 2

1.3.29 The RAP Nurse and CMT arrived at the scene at approximately 0919 hrs and took control of the life support to Rfn Evans until German paramedics (one of whom was a qualified doctor) arrived at 09:22:26 hrs. The German civilian paramedics administered intravenous fluids and drugs, attached a heart monitor and placed Rfn Evans on an Automatic Heart Compression device.

**Soldier M
Exhibit 21**

Exhibit 23

1.3.30 After a further period of advanced life support, Rfn Evans was taken by ambulance to St Vincenz Hospital, Paderborn, accompanied by PTI 2 and the CSM. Subsequently he was transferred to the Heart and Diabetes Hospital in Bad Oeynhausen.

**Soldier K
PTI 2
PTI 2
Exhibit 1**

1.3.31 Despite extensive attempts at resuscitation Rfn Evans never regained consciousness and was pronounced dead at 1609 hrs.

Exhibit 102

¹⁹ 5 RIFLES RAP is located 100m from the Alanbrooke Barracks Main Gate. It is a medical administration facility that does not deliver clinical care. Clinical care for 5 RIFLES is provided by the Medical Reception Station located at Sennelager Training Centre, approximately 15 minutes drive away.

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Incident Timeline

1.3.32 The table below summarises the timeline of the incident.

Ser (a)	Event (b)	Time (c)	Remarks (d)
1	Draw weapons from D Coy armoury	Approximately 06:00	Exhibit 18
2	Breakfast in the unit restaurant	Approximately 06:20	Exhibit 18
3	PTI 2 arrive at the gymnasium	Approximately 07:00	PTI 2
4	PTI 1 arrive at the gymnasium	07:00 – 07:05	PTI 1
5	B Company on parade	07:15	Exhibit 18
6	AFT brief to Safety Vehicle Driver	07:15	PTI 1 Exhibit 14
7	B Company equipment checked and weighed	Approximately 07:15	PTI 2
8	B Company marched from accomodation to gymnasium	Approximately 07:20	PTI 2
9	Initial WBGT reading taken	07:25	Exhibit 17
10	AFT brief to RoadTraffic Personnel	Approximately 07:25	PTI 2
11	AFT brief to participants	Approximately 07:25	PTI 2
12	B Company commence AFT	07:30	Exhibit 22
13	AFT Waterstop 1	07:58:11	Exhibit 22
14	AFT Waterstop 2	08:25:45	Exhibit 22
15	AFT Waterstop 3	08:53:33	Exhibit 22
16	Rfn Evans collapses	Approximately 09:12	
17	1 st Call to emergency services	09:14:09	Exhibit 21
18	2 nd Call to emergency services	09:14:29	Exhibit 21
19	B Company arrive back at Alanbrooke Barracks	Approximatley 09:15	
20	5 RIFLES RAP Nurse and CMT arrive at the incident scene	Approximately 09:18	
21	German paramedics arrive at the incident scene	09:22:26	Exhibit 21

Post Incident Events

1.3.33 The Unit Chain of Command²⁰ was informed and a NOTICAS²¹ was sent to Joint Casualty and Compassionate Centre (JCCC).

1.3.34 The Land Accident Prevention and Investigation Team were notified and arrived in Germany at 2340 hrs on 18 Jun 15 and commenced their investigation at 0830 hrs the following day.

1.3.35 The SI Panel was formally convened on 25 Jun 15 and commenced their inquiry on 29 Jun 15.

Cause of Death

1.3.36 The post-mortem examination was carried out on the 24 Jun 15 by a Home Office Registered Pathologist under the authority of the British Forces Germany Coroners Office. This included obtaining Histology and Toxicology reports. Cardiac Pathology was carried out by the Professor in charge of the Cardiac Risk in the Young, Cardiovascular Sciences Research Centre, St George's University of London. She determined that Rfn Evans' heart was morphologically²² normal. The post-mortem report was completed on 29 Aug 15 and released to the Defence Inquest Unit on 3 Sep 15. According to the pathologist's report, the cause of death was 'Sudden cardiac arrhythmic (electrical instability within the heart) death with a morphologically normal heart of uncertain aetiology'.

1.3.37 Rfn Evans was buried on 15 July 2015 with full Military Honours.

**Soldier R
Exhibit 24**

Exhibit 113

Part 1.2

Exhibit 1

²⁰ Unit Second-in-Command and Adjutant at about 1000 hrs.

²¹ NOTICAS – Notification of Casualty. Message sent to the JCCC informing them of a casualty.

²² The structure of the heart was normal.

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Introduction

Part 1.2

1.4.1 The 5 RIFLES Service Inquiry (SI) was convened on 25 Jun 15 to investigate the circumstances surrounding the death of Rifleman (Rfn) Evans, who collapsed whilst participating in an Annual Fitness Test (AFT) on 18 Jun 15 and subsequently died later that same day in a German Hospital. The SI initially focussed on the planning, preparation and execution of the AFT as directed in the Convening Order. However it quickly became apparent that this focus would need to be broadened in order to capture the impacts and effects that wider policy and organisational influences may have had on the planning, preparation and execution of the AFT in order to help prevent an accident or incident in the future.

1.4.2 This part of the report is divided in two sections; section one is the analysis of what (if anything) could have been done on the day, or previously, that could have affected the outcome on the day; section two analyses the wider issues identified during the inquiry and which if not reviewed, amended or improved could lead or contribute to incidents in the future.

1.4.3 The SI had access to all those involved in the planning, preparation and execution of the AFT as well as all of those participating on the day. Due to the nature of the incident the majority of the evidence was drawn from interviews conducted by the SI. This was supplemented and then cross referenced against: extant policies and procedures, direction and guidance given by superior headquarters, historical events and Subject Matter Expert (SME) opinion from Training Schools and Support Organisations (such as British Forces Germany (BFG) Safety, Health and Environmental (SHE) Department).

Methodology

Incident Factors

1.4.4 Once an incident factor had been determined it was then assigned to one of the following categories:

- a. Cause. An event which led directly to the incident.
- b. Contributory Factor. A factor which made the incident more likely.
- c. Aggravating Factor. A factor which made the outcome worse.
- d. Other Factor. A factor which was none of the above, but was noteworthy in that it may cause or contribute to future incidents or accidents.
- e. Observations. An issue that was not relevant to the incident but worthy of consideration to promote better working practices.

Available Evidence

1.4.5 The SI had access to the following evidence:

- a. Interviews with all the Directing Staff (DS) and other witnesses.
- b. Photography and mapping from various sources.

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- c. Relevant orders.
- d. Terms of Reference (TORs) and documentation including briefing material.
- e. Training Records.
- f. Land Accident Prevention and Investigation Team (LAIT) Triage Report (and LAIT reports from previous incidents).
- g. Wet Bulb Globe Temperature (WBGT) monitoring kit used during the event.
- h. Defence Statistics (Health).
- i. Instructional Specifications¹ (ISPEC) for: Annual Fitness Test, Royal Marines Combat Fitness Test, RAF Loaded March, Army School of Physical Training (ASPT) courses for Royal Army Physical Training Corps Instructor (RAPTCI) and All Arms Physical Training Instructor (AAPTI).
- j. Defence Learning Environment (DLE) course for Unit Fitness Training Officers (UFTO).
- k. Extant policies regarding Physical Development² (PD) , Environmental Training³, Risk Assessment⁴ (RA) and Duty Holding⁵(DH).
- l. Global Positioning System (GPS) Data from the AFT.
- m. Subject Matter Expert opinions from Army School of Physical Training (ASPT), Chief Environmental Safety Officer (Army) (CESO(A)), British Forces Germany (BFG), Defence Consultant Advisors (Medical).
- n. Evidence⁶ obtained by and released to the SI by the SIB.

Services

1.4.6 The SI was assisted by the following personnel and agencies:

- a. Military Air Accident Investigation Branch (MilAAIB).
- b. Institute of Naval Medicine (INM).
- c. Commando Training Centre Royal Marines (CTCRM).

¹ ISPECs are produced from the products of Training Design and Development Assessment Strategy. They contain Key Learning Points, assessment criteria and training resources required.

² This includes Army General Administration Instructions, Queens' Regulations for the Army, A2020 Formation Operational Readiness Model (FORM) Fitness Doctrine, Commanding Office 5 RIFLES PD Directive, Military Annual Training Tests, Unit Fitness Training Officers course and the Army Risk to Life activities operations order.

³ This includes Joint Service Publication (JSP) 539 – Climatic Illness and Injury in the Armed Forces and the Individual and Commanders Guides to Heat Casualties.

⁴ JSP 375 - Management of Health and Safety in Defence.

⁵ Land Forces Standing Orders.

⁶ This includes medical information and statements from German witnesses.

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- d. Royal Marines School of Physical Training.
- e. Army Headquarters (AHQ).
- f. Land Accident Prevention and Investigation Team (LAIT).
- g. Army School of Physical Training (ASPT).
- h. 20 Armd Inf Bde.
- i. British Forces Germany (BFG).
- j. Collective Training Group (Army) (CTG(A)).
- k. British Army Training Unit Kenya (BATUK).
- l. RAF School of Physical Training.
- m. Director of Medical Policy and Operational Capability.
- n. Officer Candidate School, United States Marine Corps.
- o. Defence Medical Services (DMS).

Subjects Considered by the Service Inquiry

1.4.7 The SI analysed the following in order to determine the event factors:

- a. **Medical Diagnosis.** The medical background to the given cause of death.
- b. **Basic Life Support.** The medical cover and medical equipment provided on the day of the AFT and its impact on the outcome.
- c. **Medical Pre-Screening.** The medical pre-screening of potential recruits to see if it could be improved.
- d. **AFT.** The rationale for why the AFT is conducted by the Army.
- e. **AFT Governance.** The policies in place to govern the planning and conduct of the AFT.
- f. **AFT Conduct.** The conduct of the AFT on 18 Jun 15 and compliance with the extant AFT governance.
- g. **Situation of 5 RIFLES in Jan 15.** To understand the situation within 5 RIFLES the SI looked at events and decisions being made that influenced how the unit was operating. This includes the return from Op HERRICK 20, the impact of A2020⁷, staff churn, manning levels and direction given by superior Headquarters with regards to training objectives.
- h. **Legacy PD Processes and Procedures.** The AFT route used on 18 Jun

⁷ A plan to restructure the Army (including the reserves) by 2020.

15, previous incidents, the assurance process and the standard of RAs.

- i. **Tasking Process.** The process that resulted in B Coy, 5 RIFLES being tasked to deploy to BATUK as the Contemporary Operating Environment Force⁸ (COEFOR).
- j. **PD Preparation for AFT.** The adaption of the training programme in light of the short notice tasking to BATUK.
- k. **Decision to conduct the AFT.** The policy drivers for scheduling an AFT for 18 Jun 15 and the decision making process that led to Rfn Evans participating in that AFT.
- l. **Policy Documents.** The policy documents to look at content, coherency and/or conflict.
- m. **Duty Holding.** The Duty Holding process in place in 5 RIFLES at the time of the AFT.
- n. **Dissemination of Policy.** The dissemination of policy in order to understand how policy may have been missed.

Analysis of Factors – Section 1

Determining the Cause

1.4.8 During his initial treatment at St Vincenz Hospital an angiogram was performed which revealed no significant coronary artery disease. There was however speculation that Rfn Evans might have suffered from Hypertrophic Cardiomyopathy⁹.

Exhibit 1
Exhibit 1

1.4.9 During the post mortem the heart was examined. The myocardium appeared slightly mottled and the septum¹⁰ appeared to be asymmetrically thickened. In view of these findings and the speculation of hypertrophic cardiomyopathy, the heart was forwarded to the Professor in charge of the Cardiac Risk in the Young (CRY), Cardiovascular Sciences Research Centre, St George's University of London for further detailed analysis. The Professor's findings confirmed (despite the clinical impression of hypertrophic cardiomyopathy) that the heart was morphologically¹¹ normal.

Exhibit 1

Exhibit 1

1.4.10 HM Coroner has recorded the death of Rfn Evans as one of natural causes. The Pathologist's Report provided a Cause of Death of 'Sudden cardiac arrhythmic death with a morphologically normal heart of uncertain aetiology'¹². The Pathologist explained that this is sometimes described as 'Sudden Adult Death Syndrome' (SADS) although there are no strict criteria to diagnose the syndrome. The Pathologist said that the cause of SADS 'may be genetic' and Professor in charge of CRY said 'most causes are genetic'. The Pathologist's final comments were that Rfn

Exhibit 1

Exhibit 1

⁸ COEFOR is the term used to describe the enemy in military training exercises.

⁹ Hypertrophic cardiomyopathy (HCM) is a disease in which the heart muscle (myocardium) becomes abnormally thick (hypertrophied).

¹⁰ The dividing wall between the right and left sides of the heart was not symmetrical.

¹¹ Structurally normal.

¹² Aetiology is a medical term for the cause or origin of a disease.

Evans 'collapsed towards the end of an 8 mile weighted march although it does not appear as though the activity or the conditions were unduly harsh. Sudden cardiac death during sport or physical activity is largely due to clinically silent cardiomyopathies or primary electrical disorders with a morphologically normal heart (the conditions referred to in the report produced by the Professor in charge of CRY). Previous symptoms and family history are absent in these cases¹³.' The Pathologist's concluding opinion is that 'whilst the physical exertion on the day may have been a precipitant of the cardiac arrhythmia, in my opinion neither the nature of the physical activity nor were the conditions were primary causes'.

Exhibit 25

Exhibit 1
Exhibit 109
Exhibit 114

Exhibit 1

1.4.11 Given the findings of the Coroner, the SI sought to identify any factors which may have made this medical emergency more likely or aggravated the outcome

Cardiovascular Death

1.4.12 A precipitant factor is defined¹⁴ as 'the catalyst for an illness, symptom or episode. This may not be the underlying cause of the illness, rather it is what elicits it.' In the case of Rfn Evans this could be read as a trigger. The Panel investigated whether this underlying medical condition could have been identified prior to the AFT.

Exhibit 26

1.4.13 According to a recent study, cardiovascular death is currently the leading cause of death from disease in military populations. The study identified that in the UK Armed Forces 1 in 10 deaths are due to cardiovascular disease. In populations aged younger than 35 years it is the opinion of the authors that the majority of deaths are due to a number of inherited or congenital heart diseases, most commonly cardiomyopathies or primary electrical diseases. The majority of deaths in populations similar to the Armed Forces are associated with physical exertion, such as that seen in military training. In 80% of the deaths, the first manifestation of the underlying disease is the terminal event and in the authors opinion 'waiting for symptoms to develop is also not an effective alternative option'.

Exhibit 34

Exhibit 35

1.4.14 Rfn Evans died of a sudden cardiac arrhythmia. It has been explained to the SI that this means death was caused by the heart failing to pump properly. Arrhythmia is usually caused by an abnormality of the conduction pathways in the heart. In essence the electrical firing of the heart is abnormal, resulting in uncoordinated contraction of the heart muscle and thus failure to pump blood adequately to the brain and tissues of the body. The causes of sudden cardiac arrhythmia include numerous genetic defects which may remain dormant and undetected until some activity triggers them.

Exhibit 36

Exhibit 1

Pre-Screening On Recruitment

1.4.15 Prior to Apr 13, the Army pre-screening system consisted of a review of an individual's civilian medical notes, a face-to-face interview and a physical examination. If a suspicious finding or prohibited disease was identified, the potential recruit was either sent for further tests or prevented from joining. This two stage process was time consuming, costly and did not always pick up occult¹⁵ cardiac disease. Following research, including a trial comparing two systems (the old one and a modified version), the Army introduced a new screening system in Apr 13. This consists of all elements of the old system and the addition of an electrocardiogram

Exhibit 39

¹³ De Noronha et al. Aetiology of sudden cardiac death in athletes in the United Kingdom: a pathological study. Heart 2009;95(17):1409-1414.

¹⁴ On-line medical dictionary (<http://medical-dictionary.thefreedictionary.com/precipitating+factor>)

¹⁵ Occult in this case means 'hidden'.

(ECG) and a cardiac ultrasound should the ECG detect some anomaly. This process is completed in one day, streamlining the recruiting process and offers a greater chance of identifying occult cardiac conditions. When identified these cardiac diseases can either be managed by intervention or allow the individual to seek further medical treatment and thus reduce the risk of sudden death during physical exertion.

1.4.16 Rfn Evans' screening followed this new system and his ECG was considered normal. This was confirmed by the Defence Consultant Advisor for Cardiology who reviewed the ECG after Rfn Evans death. **Exhibit 40**
Exhibit 41

1.4.17 The underlying cardiac conditions leading to 'Sudden cardiac arrhythmic death', as occurred in Rfn Evans' case, are recognised as difficult to identify (see para 1.4.10) even with far more exhaustive diagnostic testing than that currently employed by the British Army. The Panel is of the opinion that the pre-screening process employed by the Army is proportionate to the risk, given the volume of potential recruits seen every year and the unacceptability (to both the candidate and the Army) of additional invasive, expensive and time-consuming tests. The SI noted that the RAF¹⁶ and the RN¹⁷ continue to follow the same less rigorous screening process that the Army had employed up until Apr 13. **Exhibit 25**

1.4.18 **Summary:** Given the limitations to current medical science with regard to screening for potential genetic cardiac conditions, the SI found that neither Rfn Evans nor his Chain of Command would have been aware of his undiagnosed medical condition or the potential catastrophic effect exercise might have on that condition. Following the review of the Pathologist's Report and articles from the British Medical Journal regarding the screening for cardiac diseases and cardiac disease more generally in the Armed Forces, the SI acknowledges the Pathologist's opinion that the physical exertion may have been the trigger to a previously undiagnosed condition. As a consequence the SI cannot exclude Rfn Evans' participation in the AFT as a **contributory factor** although they note the Pathologist's conclusion that neither the 'nature of the physical activity nor the conditions were primary causes'.

1.4.19 **Recommendation. The SI recommends that the Surgeon General's Medical Director implements a standing review to monitor advances in the detection of occult cardiac diseases with a view to improving cardiac disease detection prior to and during a service person's career.**

Basic Life Support

1.4.20 Rfn Evans initially received immediate Basic Life Support (BLS) from a number of Rfn and JNCOs who were in close proximity when he collapsed and became unconscious. Approximately six minutes after his collapse a Combat Medical Technician (CMT) and Primary Health Care Nurse from Alanbrooke Barracks arrived at the scene and took over the BLS. They continued with the treatment until the German Paramedics arrived approximately 5 minutes later at 0922 hrs. A statement from a passing German Nurse confirms that the CPR was being conducted appropriately and a German Paramedic attending the incident noted that those involved in the BLS conducted themselves absolutely correctly and their actions were well coordinated. **Soldier G**
Soldier H
Soldier J
Soldier M
Exhibit 21
Exhibit 105
Exhibit 23

1.4.21 The SI considered whether anything else could have been done on the day or prior that would have resulted in a different outcome. This analysis considers the

¹⁶ Except for Aircrew and Air Traffic Controllers.

¹⁷ Except for Aircrew, Air Traffic Controllers and Divers.

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medical qualifications required to comply with the safety protocol for the AFT and the medical equipment carried.

1.4.22 The MATT 2 Protocol, in place at the time of the AFT, states that "*ideally the First Aid NCO should be a Combat Medical Technician (CMT) or equivalent. Subject to the Risk Assessment, Team Medics (TM) may be used when CMTs are not available*".

Exhibit 13

1.4.23 A CMT2 course is 50 weeks long, followed by a year in a Medical Regiment gaining experience and then an upgrade course¹⁸ to become a CMT1. The Army is currently undermanned in CMTs by 40% at OR¹⁹4, 30% at OR6 and 25% at OR7, but according to Director of Manning Army (DMA) "extremely healthy" at OR3. The DMA has assessed that in the coming years this imbalance will redress itself. On 18 Jun 15, 5 RIFLES had only 50% of their CMT liability entitlement, all of whom were tasked elsewhere.

Exhibit 27

Exhibit 28
Exhibit 29

1.4.24 The TM course was created in 2006 and introduced as an Urgent Operational Requirement for Op HERRICK to mitigate the increasing levels of battlefield casualties. The TM course is two and a half days long and was formally delivered from 01 Apr 11. Having recently returned from Op HERRICK, B Coy had a number of personnel qualified as a TM. However, for the AFT on 18 Jun 15 none of those TMs were nominated to be the First Aid NCO (this subject is addressed further in para 1.4.41 b). When Rfn Evans collapsed none of the personnel providing Basic Life Support (BLS) were TMs.

Exhibit 27
Exhibit 106
Exhibit 106

Exhibit 63

1.4.25 MATT 3 (version 7 dated Apr 15) is the module which teaches Battlefield Casualty Drills including BLS. On 18 Jun 15, Rfn Evans initially received BLS from personnel with the MATT 3 competency. The treatment given was commended by the GE Paramedics who attended the scene.

Exhibit 30
Exhibit 107
Exhibit 23

1.4.26 In Annex A of the MATT 2 Protocol (which provides direction and guidance for the conduct of the equivalent RM Combat Fitness Test (CFT)) there is no mandated requirement for a safety medic, simply that the sweeper²⁰ '*is competent in administering first aid to anyone suffering from illness or injury*'. RAF Leaflet 405 provides direction and guidance for the conduct of the equivalent RAF Loaded March Test. It states the requirement is for the nominated first aider to be '*a minimum of Individual Readiness Training*²¹ (IRT) qualified. For large groups the medical centre is to provide a trained medic'. The responsibility of the nominated first aider or medic is to '*provide first aid to injured personnel*'. The SI was not able to determine the rationale for the variance in acceptable levels of medical skills to meet the safety requirements of an Army AFT as mandated in the MATT 2 Protocol and made **the observation** that the approach to medical cover is inconsistent across the 3 services for the same activity.

Exhibit 32

Exhibit 33

Exhibit 31

1.4.27 The Army MATT 2 Protocol directs that a Safety Vehicle (SV) equipped with First Aid equipment is required. The policy does not mention that an Automated External Defibrillator (AED) should be carried. The SI **observed** that the content of First Aid equipment is not specified.

Exhibit 13

¹⁸ Upgrade course is 7 weeks long.

¹⁹ OR is an abbreviation for Other Rank. The number refers to the rank of the person; 3 being a Lance Corporal, 4 being a Corporal, 6 being a Sergeant and 7 is a Colour Sergeant. There is no OR 5 rank in the British Army.

²⁰ A sweeper is an NCO or PTI who is/are responsible for keeping the OIC and First Aid NCO informed of any casualties or stragglers who require assistance.

²¹ IRT is the RAF equivalent of the Army MATT system and in this case is equal to MATT 3.

1.4.28 The Pathologist determined that Rfn Evans had a 'Sudden cardiac arrhythmic death'. The SI understands that only when the type of arrhythmia is the 'right' (or suitable) type will an electrical shock from an external source have the possibility of restoring a normal heart rhythm. It is not known whether Rfn Evans ever had such a heart rhythm, after his collapse, that would have responded to an electrical shock. However, certainly when the German Paramedics arrived (8 – 10 minutes after Rfn Evans collapse), equipped with an AED it appears that he did not have a shockable rhythm and therefore the Paramedics and doctor on scene managed him accordingly.

Exhibit 21

Exhibit 23

1.4.29 In the case of sudden cardiac arrhythmia (as opposed to a heart attack) Clinical Research suggests that a victim's chance of survival decreases by 7 – 10% each minute that a defibrillator is not used. The SI understand that shockable rhythms have also been shown to persist untreated for 12 or more minutes. Whether Rfn Evans ever had a shockable rhythm cannot be determined and therefore the SI was unable to speculate on the outcome had an AED been immediately to hand. The SI observed that time is critical to successful defibrillation and concluded that the lack of AED to be an **Other Factor**.

Exhibit 37

Exhibit 38

1.4.30 **Recommendation.** The SI recommends that the Surgeon General's Medical Director reviews and, if necessary, revises the appropriate level of medical cover and First Aid equipment required for the vocational²² and operational²³ fitness assessments and tests undertaken across Defence. This review should take into account the efficacy and feasibility of providing AEDs for such activities.

1.4.31 **Summary:** Rfn Evans was given immediate medical treatment upon his collapse by soldiers with a BLS qualification. He received medical support from a CMT within 6 minutes and from paramedics within 10 minutes. Neither the Pathologist's Report nor the German Paramedic statement make adverse comments upon the manner or quality of the BLS provided and therefore the SI concluded that the provision of BLS was **not a factor**.

Analysis of Factors – Section 2

AFT

1.4.32 **Purpose of the AFT.** The AFT is a test of basic vocational fitness. It aims to 'measure basic physical capacity using a Loaded March'. This is achieved by getting soldiers to carry their weapon and equipment at speed over a distance as part of a squad. This represents the kind of rapid, dismounted tactical move soldiers may need to conduct in an operational environment. It is gender and age free (ie there is no differentiation in standards between men and women or by age). The test is part of MATT 2. It is a test rather than an assessment; ie Pass or Fail.

Exhibit 13

²² Vocational fitness is that fitness required to perform a specific job safely and effectively under normal operating conditions. Assessments and tests include the Personal Fitness Assessment, AFT, CFT and LM.

²³ Operational fitness is focussed directly upon the operational role of a unit and / or formation. Tests include the Operational Fitness Tests and the Royal Marine '30 miler'.

1.4.33 **Who conducts the AFT.** For the purpose of MATTs personnel are divided into three categories. All medically-fit²⁴ Army Personnel under the age of 50 in the Level 1²⁵ category for MATTs must complete the test annually. Level 1 refers to Regular and Reserve personnel in regular deployable units such as 5 RIFLES. The same test is also conducted by all personnel of 3 Commando Brigade, Royal Marines and the RAF Regiment. The former refers to it as the 'Combat Fitness Test' whilst the latter refer to it as the 'Loaded March'. Whilst the distance and timings are the same for all three services there are differences in safety procedures, such as the medical requirements and the presence of a SV.

Exhibit 13

Exhibit 13

Exhibit 32

Exhibit 43

1.4.34 **What does the AFT consist of?** The AFT is an 8 mile march completed as a squad in not less than 1 hrs 55 mins and not more than 2 hrs. The weight carried is dependent upon Arm/Service. See Table 1.

Exhibit 13

Arm/Service	Total Load
Infantry (Including Royal Marines in 3 Commando Brigade and RAF Regiment)	25kg
All Arms Para/Commando trained personnel serving in Para/Commando units.	
Small Arms School Corps	
RAPTC attached to these units	
The Household Cavalry & Royal Armoured Corps	20kg
Combat Support Units	
RAPTC attached to these units	
All remaining units	15kg
RAPTC attached to these units	

Table 1 - Table showing weights to be carried by Arm

Rfn Evans as an infantry soldier was required to conduct the test carrying 25kg.

Relevant Policy Documents

1.4.35 The Army AFT is governed by the 3 key policy documents listed below. JSP 539 (Climatic Illness and Injury in The Armed Forces: Force Protection and Initial Medical Treatment) is also an important supporting document which provides direction and guidance on the prevention and treatment of hot and cold weather casualties.

- a. **MATT 2 Fitness - Section 2 dated Apr 15.** MATT 2 Fitness (already

Exhibit 13

²⁴ All personnel in the Army have a medical grading with Fully Effective (FE) being someone who is fully fit. Soldiers may have gradings of temporary or permanent limited-deployability or non-deployable. The nature of the injury or condition causing this status may preclude taking part in the AFT.

²⁵ Personnel in the Level 1 category must pass 1 x AFT and 2 x Personal Fitness Assessments per annum. Personal Fitness Assessment comprises a run (not in boots), sit ups and press-ups.

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referred to in Para 1.4.32) is the document which covers policy and the protocols for both the Personal Fitness Assessment and the AFT. MATT policy is owned by Director Training (Army). Section 2 refers to the AFT and will be referred to throughout this report as the MATT 2 Protocol. It has three parts; the protocol itself detailing how the test is to be run, a brief for the conducting staff with a specific safety role and the procedural brief to be read to everyone. All Physical Training Instructors (PTI) are instructed on the use of this document during their PTI qualifying courses. A copy of the protocol was available in the gym which PTI 1 referred to in the planning stages of the AFT.

**Exhibit 96
Soldier P
PTI 1**

b. **AGAI Volume 1, Chapter 7 Physical Training dated Mar 14.** This is the over-arching policy for Physical Training in the Army. It stipulates that the AFT is an annual test. It also states the MATT 2 Protocol is "*the authoritative document for all mandatory PT related tests and assessment standards to be achieved by all Regular and Army Reserve personnel annually*".

Exhibit 42

c. **Queen's Regulations for the Army dated 1975.** Para 5.022 (updated Mar 11) of Queen's Regulations stipulates safety precautions for marching troops.

Exhibit 44

Conclusion: The SI reviewed the documents and found clear linkage between them. They found no conflicts in the information contained within the documents, although there were several anomalies and ambiguities (see para 1.4.81).

Conduct of AFT on 18 Jun 15

1.4.36 **Introduction.** The SI examined the conduct of the AFT to determine whether it was in line with policy.

1.4.37 **Policy Compliance.** The conduct of the AFT consists of the planning, preparation and running of the event. The following areas were highlighted as being compliant with the MATT 2 Protocol and/or other relevant policy.

a. **Breakfast.** As a result of lessons identified from previous incidents, early breakfasts were to be booked on days when an AFT was scheduled. This enabled every soldier to have the opportunity to eat prior to arduous exercise. An early breakfast was booked and available on 18 Jun 15. It is known that Rfn Evans had a full English breakfast at around 0630 - 0645 hrs with 2 fellow Rfn.

Exhibit 45

**Exhibit 18
Soldier U**

b. **Hydration:** Soldiers are taught the importance of hydration during basic training and therefore every soldier knew they needed to drink water before the test. PTI 2 (now OIC of the AFT) explained that during the initial briefing he asked if everyone had taken on water. The OIC stated that all participants confirmed they had drunk water. There were water stops on the route at the 2, 4 and 6 mile points where soldiers had the opportunity to drink water carried in their equipment. The pathologist's report does not identify dehydration as a factor in Rfn Evans' death.

Exhibit 110

**PTI 2
PTI 2
PTI 2
Exhibit 1**

c. **Weight carried.** The soldiers' kit was weighed at the Coy lines by a mixture of PTIs and NCOs from within the Coy. Rfn Evans' kit was weighed under the supervision of Sldr P on return to barracks and was found to be 25kg.

**Soldier F
PTI 2
Soldier J**

d. **Distance Covered.** Through interviews the SI established the route followed by B Coy on 18 Jun 15 and it is shown in Figure 1.4.1 below. The

Exhibit 48, 49,

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route was later confirmed by analysis of PTI 2's GPS. Neither the start nor finish points are clearly identified by markers, markings on the ground or on a map. On the day the AFT started and finished at the gym, having been cut short as a result of Rfn Evans' collapse. PTI 2 has stated that it was his intent to complete the remaining distance in Camp. This intent is supported by a number of the exercising troops who commented that a loop inside camp was a feature in previous AFTs. The SI **observed** that in their experience it was unusual not to have a fixed start and finish point for an AFT. Without a fixed start point it is difficult to determine a finish point and therefore impossible to ensure a standard route is followed each time.

50,51
PTI 2
PTI 1
Exhibit 22

PTI 2
Soldier L
Soldier A



Fig 1.4.1 – Actual AFT Route, data downloaded from PTI 2 GPS

e. **Pace.** Detailed analysis of the contents of PTI 2's GPS has shown that the pace maintained was correct for completion in 1 hr 55 mins as shown in table 2 below.

Exhibit 22

Leg	Distance (miles)	Time Hr:Min:Sec	Pace (minutes per mile) Min:Sec
1	2.09	00:28:11	13:29
Water-stop 1	N/A	00:01:39	N/A
2	1.92	00:25:55	13:30
Water-stop 2	N/A	00:01:46	N/A
3	1.92	00:26:02	13:34
Water-stop 3	N/A	00:02:08	N/A
4	1.23	00:18:23	14:57
Overall	7.16	01:44:04	14:32

Table 2 - Table showing actual pace of AFT

In order to come in at 1 hr 55 mins, the group would need to average 14 mins 23 secs per mile (4.2 mph), which translates to an average marching pace of 13 mins and 40 secs per mile (4.4 mph), plus three two minute water stops. This is the exact pace PTI 2 was aiming for. The pace of the AFT over the first 3 legs was marginally quick but not sufficiently so to be a cause for concern. The reasons for the slower pace on the last leg are not certain. PTI 2 stated it was his intent to take the last 2 miles a little slower - presumably to ensure the Coy completed the event in good order. The influence of other factors such as slowing down to avoid pedestrians along the route cannot be discounted. The SI noted that had the AFT continued at this pace it would have come in at 1 hr 55 mins.

PTI 2

PTI 2

f. **Suitably Qualified Directing Staff and Instructor Numbers.** Both PTIs who had a role in running the event were suitably qualified, as was the third PTI who acted as a sweeper²⁶. AGAI Vol 1 Ch 7 recommends a ratio of PTIs to exercising troops of 1:15. This is advisory and should be considered as part of the risk assessment. For this event there were 44 men on the march, of which three were PTIs. Although there is no evidence of instructor ratios being considered in the risk assessment, this places the ratios within advised levels.

Exhibit 52
Exhibit 53
Exhibit 42

g. **Wet Bulb Globe Thermometer.** The Wet Bulb Globe Thermometer (WBGT) Heat Stress Monitor is a tool used to inform risk management procedures during training and operations via the measurement of air temperature, wind speed and humidity. The readings (given in °C) are compared against the matrix in JSP 539. On the morning of the event a reading was obtained from the WBGT at Alanbrooke Barracks. JSP 539 advises that this reading should be used as one factor amongst others in the daily risk assessment carried out to ensure it is safe, and remains safe (throughout the duration of the event), to conduct the activity.

Exhibit 46
Exhibit 17

Exhibit 15

(1) **Permissible work rates.** JSP 539 provides detailed guidance on the thresholds below which activity of acclimatised and un-acclimatised

Exhibit 46

²⁶ A sweeper is an NCO or PTI who is/are responsible for keeping the OIC and First Aid NCO informed of any casualties or stragglers who require assistance.