cohesion and bench marking the Coy's abilities prior to an arduous deployment amongst them. It is also likely with all three Coy AAPTIs committed to the AFT there was no other organised PT soldiers could have taken part in that morning. The SI concluded that the unit misunderstood the BATUK requirements for completing the AFT. Some soldiers, including Rfn Evans, were in date and did not need to complete the AFT in order to deploy. **Soldier AA**

Policy Documents

1.4.78 **Coherency of policy**. The SI examined in detail all relevant policy documents governing the conduct of PD. The SI found the policy was coherent across the documents with almost all relevant detail being held in the MATT 2 Protocol and no direct contradictions identified. The SI noted the following:

a. **The Unit Fitness Training Officers' Aide Memoire – A Guide to Physical Fitness (dated 2010)**. The guide is out of date as it contains guidance on preparing for the Afghan Campaign. This information was superseded by the A2020 FORM Fitness Doctrine published in Jan 14. The DLE online training package was also extremely difficult to find as it has to be accessed through the ASPT portal, yet there is no direction given to that effect for potential UFTOs. **Soldier V**

b. **JSP539**. JSP 539 asserts that no soldiers based in the UK or Northern Europe can be considered acclimatised, which the SI found confusing. JSP 539 also directs that following a heat casualty a dynamic RA should be conducted before the activity continues. This is not reflected in the MATT 2 Protocol. **Exhibit 46**

c. **AGAI, Volume 1, Chapter 7**.

(1) AGAI, Vol 1, Ch 7 states "*that owing to the temperate climate within the UK, it is extremely difficult for UK based personnel to realistically acclimatize properly, and [they] are therefore, at an increased risk of heat injury*". It makes no mention of soldiers based in Northern Europe being at similar risk as identified in JSP 539. **Exhibit 42**

(2) AGAI Vol 1, Ch 7 does not include guidance on the requirement of the RAPTCI to coach/develop/mentor AAPTIs.

d. **CO 5 RIFLES PD Directive (Sep 14 and Mar 15 versions)**. On the day of the AFT the most recent version of the Directive was the Mar 15 version, however, as publishing this version had been delayed, the SI could not be certain which version members of the Bn were using at the time. The document is based on the template in AGAI Vol 1, Ch 7. The COs directive contains references that are now obsolete eg CLF Physical Development Directive. The SI also noted the Directive states that the RAPTCI is responsible for the 'development of sub-unit AAPTIs'. **Exhibit 101** **Exhibit 83** **Exhibit 83**

e. **The MATT 2 Protocol** contains a number of contradictions or areas that are open to misinterpretation, such as:

(1) **First Aid NCO**. A First Aid NCO is to be nominated. The nominated person should be a CMT, but if a CMT is not available then a TM can suffice. It is not clear why a CMT is needed if a TM is acceptable. There is also no guidance on what mitigation should be put in place if the TM is used or where the First Aid NCO should be during the test (in the

vehicle or marching with the main body).

(2) **Off-road section**. The off-road element is included to represent the likelihood of troops moving cross-county during a mission and also to reduce the stress on the lower limbs and prevent injury. Paragraph 2 states the standards are "*a 12.8km loaded march (at least 4.8km **to be off tarmac/metalled roads)***". In contrast Paragraph 6 of the mandatory brief states that "*The route is 8 miles, of which 3 should be off-road **where possible***". It is unclear whether the off-road element is essential or desirable. The SI noted that the need for an off-road section is at odds with the capabilities of the civilian vehicles typically used as SV's within units. Anecdotally it is quite commonplace for an AFT route not to include a 3 mile off-road section due to local conditions. **Exhibit 13** **Exhibit 13**

(3) **Safety Vehicle**. The positioning of the SV within the AFT route is mentioned in four separate places within the MATT 2 Protocol. This information is subtly different. The first two references imply that the SV must be able to reach the participants anywhere along the route but does not need to be collocated with them. The third and fourth direct that the SV must be collocated with the participants (within 50-75m) throughout the entire route. **Exhibit 13**

(4) **Safety stores**. It is stated that the SV will carry "*additional water and First Aid equipment*". It does not specify what that additional equipment is to be. **Exhibit 13**

(5) **Sweeper**. The "sweeper" is responsible for keeping the OIC and First Aid NCO informed of casualties or stragglers who require assistance The SI noted that 'sweepers' should be empowered to remove casualties or stragglers without having to seek authority from the OIC in the first place. **Exhibit 13**

Conclusion. The SI **observed** that there is a lot of policy governing PD. It is not necessarily easy to find, clearly written or up to date. There is also a lack of signposting as to what is essential reading for those assuming positions such as UFTO.

1.4.79 **Recommendation. The SI recommends that DTrg(A) should review the key policy documents governing PD to address the anomalies identified by the SI and ensure that the policy documents are up to date and clearly written in order to provide unambiguous guidance to Commanders. The review should seek to address the shortcomings in understanding the importance of RA and the evolving DH process.**

Duty Holding

1.4.80 **Duty Holding**. The SI examined the system of Duty Holding (DH) and its relevance to the incident.

1.4.81 **What it is**. DH is formalising the 'assurance' (see Para 1.4.83a) of an activity and the people conducting it; at the 'delivery level' this equates to full and effective command and control of the activity. Attempting to undertake an activity outside of the safe operating envelope, for whatever reason, must prompt the Duty Holder to question whether or not the activity is safe.

1.4.82 **Legal Status**. Employers and employees have duties under the Health and Safety at Work Act 1974, and also owe each other a duty of care under common law. This is further expanded upon in the Secretary of State for Defence's Health, Safety and Environmental Protection Policy Statement of Aug 14 and JSP 815[37] which currently states that '*both the employer and employees have duties under the HS&EP legislation; the duty of the employer is devolved in his Area of Responsibility (AoR) on each commanding officer or manager; it may be referred to as a 'duty of care.* In addition to this, and within JSP 815, Defence has created a DH construct to focus on the ownership and management of Risk to Life (RtL) activities and the accountability that arises. Where appointed, a Duty Holder has a personal duty of care for people who, by virtue of their involvement in activities, come within his Area of Responsibility (AoR) and for the public who may be affected by activities in his AoR. A Duty Holder is accountable for ensuring that RtL from activities in his AoR are reduced to ALARP and are Tolerable to him / her. The list of RtL activities are referenced in a footnote in Army HQ Operations Order 14/002 dated 28 Feb 14, and include all elements of Physical Development. At the time of the incident 5 RIFLES were unaware that an AFT was considered an RtL activity, either as a result of a staff work oversight or a gap in the understanding of what was required for DH. **Soldier AA**

1.4.83 **Army adopts DH**. The Army introduced the concept of DH on 28 Feb 14 and adopted it as a live practice on 01 Apr 14. The aim was to introduce more rigour into the process of assuring that military training activities were being conducted in a safe system of training (SST). At the Commanding Office / Delivery Duty Holder (DDH) level this translates to him assuring himself that all Rtl activities are being conducted by safe persons, in a safe place, with safe equipment and safe practices. **Exhibit 87**

a. **The Assurance process**. Assurance is the process for providing confidence in respect of compliance with policies. Within units considerable assurance activity is already undertaken as day-to-day business. The DH model is purely a reinforcement of the assurance process where RtL activity is taking place. This will seek to ensure that the persons under the control of the DDH conducting RtL activity are compliant with the appropriate 'safe system'. Alternatively, if not compliant with the 'safe system', persons can only undertake the activity having sought SME advice and dispensation and are thus aware of any additional risks and the controls necessary.

b. **What is the assurance process?** At the unit level, ensuring that RtL activity is conducted in accordance with the 'safe system' should focus on the activity being conducted by Suitably Qualified and Experienced Persons (this includes them being suitably current and mature); being conducted in accordance with up to date policies and procedures; being conducted in a manner that the equipment was designed for use (ie within its safe envelope and as per the training for its safe use) and in a place commensurate with the designed use. Other areas that warrant careful consideration include the provision of appropriate supervision and equipment that is known to be fully compliant with statutory inspection and maintenance.

c. **What are the elements of a successful assurance regime?** Successful assurance regimes include a clear chain of command and robust questioning in respect of the presence or otherwise of the 'safe system'. All this needs to be recorded such that it is fully auditable. Unit DH procedures should be developed

[37] JSP 815 is the Defence Health, Safety and Environmental Protection Publication.

and these will be reviewed as part of the Unit's SHE audit.

1.4.84 **Safe Persons**. These are persons who have received the appropriate information, instruction, training and supervision to carry out a specific task correctly and safely. A competent person within the SST is deemed Competent by virtue of qualifications, currency, expertise and maturity. **Exhibit 88**

1.4.85 **Safe Practices**. Practices conducted strictly in accordance with drills, procedures and instructions laid down by the Service authorities. Safe Practice includes following correct procedures, the provision of effective supervision and delivery of effective training, the briefing of all warnings, cautions and controls together with the use of appropriate Personal Protective Equipment. **Exhibit 88**

1.4.86 **Duty Holding in 5 RIFLES**. CO 5 RIFLES is the nominated DDH for 5 RIFLES. This generic nomination is contained in Army OPORD 14/002. He has received two separate pieces of training; a lecture on his Commanding Officers Designate Course (CODC)[38] prior to assuming command and an on-line course once in post. Both pieces of training major on implementation of DH policy but not on how to enact the DH process and procedures. Neither include a definition of RtL. 5 RIFLES was on Op HERRICK when DH was introduced across the Army and so it fell to the current CO to establish a DH process when he assumed command. Both he and the Unit Second-in-Command (who has no formal DH training) developed a process largely based on common sense and following discussions with other Commanding Officers within 20 Armd Inf Bde, as there were no examples of best practice to use as a template. The process was promulgated in CO 5 RIFLES PD Directive dated 5 Mar 15 and 5 RIFLES Operational Plan 001 dated 27 Apr 15. By Jun 15 this process would best be described as immature. **Exhibit 87** **Soldier AA** **Soldier AA** **Exhibit 83** **Exhibit 80**

1.4.87 **Duty Holding Process with regards to an AFT**. The process required for the AFT as a Rtl activity is fairly straight forward[39]. A suitably qualified person ensures that a safe system of training is in place for the activity, supported by a RA to identify and mitigate any areas of the activity that, were additional control measures not applied, would take it outside of the SST. The qualified individual delivers the plan to the CO/DDH who then assures himself that the plan conforms to the SST and if so approves it. As a routine activity this would then be placed on the Bn RtL register. During the execution of the activity if something happens to take the activity outside of the SST then the OIC is required to conduct a dynamic RA to determine whether the activity should continue, applying additional controls, or not. The dynamic RA is then to be written up on return to camp and retained for audit purposes.

1.4.88 **Duty Holding Process for AFT on 18 Jun 15**. The SI examined the DH process within 5 RIFLES with regards to the AFT and noted:

a. **SST not in place**. The OIC was a competent person by virtue of his qualifications, currency, experience and maturity; however, as he was not subjected to any / or effective supervision he cannot be deemed to be a safe person. Furthermore, as the AFT was not delivered strictly in accordance with the MATT 2 Protocol the safe practices element of the SST was also not in place. **Exhibit 88** **Exhibit 88**

b. **RA**. The RA had not been reviewed by a qualified individual or his line **Exhibit 64**

[38] The Command Officers Designate Course is a pre-employment course aimed at preparing thise selected to command battalions/regiments of the British Army for their appointment.
[39] CESO (A) Powerpoint presentation on Duty Holding.

manager.

c. **DDH**. The DDH was not aware (at the time of the incident) that an AFT was an RtL activity (see para 1.4.82 above) and therefore did not formally assure himself that the AFT did comply with the SST. The SI noted that the DDH is reliant upon his SMEs to advise him of the detail pertaining to each RtL activity and how it relates to the SST. Should this communication breakdown (because the SME post is gapped) then the DDH relies upon 2nd Party assurance to provide him the detail. CO 5 RIFLES participates in Bn PD four times a week and judged this to be a sufficient managerial check of the quality of delivery of a non RtL activity. Indeed he completed an AFT in Mar 15, which based upon his previous AFT experiences over a 20 year career, past the 'safely run' test.

d. **OIC**. OIC did not conduct a dynamic RA when the situation changed on the ground.

1.4.89 **Reasons for the immature DH process**. The DH process in 5 RIFLES at the time of Rfn Evans death was immature. The SI noted the following possible reasons for this:

a. CESO(A) on behalf of Army HQ provided Army wide initial DH direction, guidance and education. The policy was lacking in detail (including the definition of RtL), which may have contributed to a general lack of awareness, understanding and implementation of the process. **Exhibit 87 Soldier AA**

b. The lecture on CODC and the on-line training package focus on implementation of policy and not enactment of process and procedures to meet the requirements of the policy. **Exhibit 89 Exhibit 90**

c. The DH process is not reflected in PD documents such as AGAI Vol 1, Ch 7 and MATT 2 Protocol.

d. The DH process was only included in ASPT Annual Deficit Training package[40] from 01 Apr 15. **Exhibit 91**

e. Gapping the RAPTCI for nearly a year removed the qualified person from 5 RIFLES and with it the person responsible for supervising the AAPTIs and assuring the DDH that PD complied with the SST. **Exhibit 6 Exhibit 83**

f. External assurance had not picked up on the shortcomings in either the RAs or the conduct of RtL activities by AAPTIs. **Exhibit 92**

Conclusion. The SI concluded that the immature DH process within 5 RIFLES was not a factor in the death of Rfn Evans, but could conceivably contribute to an accident in the future and therefore is **an Other Factor**.

1.4.90 **Recommendation**. **The SI recommends that CESO(A) reviews and, where necessary, revises the training package relating to the DH process to ensure maximum understanding and awareness of the relevant responsibilities, processes and procedures.**

[40] Training Packages delivered on-line and at PD seminars whose purpose is to ensure all RAPTCI's remain up to date with emerging policies and procedures.

Policy

1.4.91 **Knowledge of Policy**. During the course of the SI it became clear that 5 RIFLES were not aware of a key policy document (2015DIN07-081MATT Policy Update) that had been updated and reissued. **Exhibit 84**

1.4.92 **New Policy**. New policy and policy updates are promulgated via Defence Instructions and Notices (DINs). All DINs are recorded on the monthly DIN Digest which is accessible from both the MOD and Army homepages on DII under the Reference tab.

1.4.93 **Guidance on DINs**. Guidance for the writing and reading of DINs is contained with 2010DIN05-014 Defence Instructions and Notices (DINs) – A Guide For Readers and Writers. Para II of 2010DIN05-014 states that "*All Service and civilian personnel should look at the monthly DIN Digest*". Given availability of IT and the technical nature of some DIN content, this is simply not realistic. **Exhibit 95**

1.4.94 **Dissemination of Policy**. The MOD operates through a hierarchical system and information is 'pushed' from top to bottom. In terms of DINs, information is 'pushed' to 5 RIFLES in the following ways: **Exhibit 93 Soldier P Soldier V**

a. **3 (UK) Div Fortnightly Update**. Update contains a section on newly published DINs.

b. **20 Armd Inf Bde Consolidated Orders**. Update contains a section on newly published DINs.

c. **Subject Matter Experts**. Specialists[41] (external to the unit) trawl newly published DINs and forward those relevant to their field via an established distribution list.

1.4.95 **Volume and Content of DINs**. In 2015 there were 859 DINs published – an average of 71 per month. The DIN Digest for each month consists of a table divided up by "channels" eg Personnel, Security and Intelligence, Defence Policy and Operations etc. Each DIN has a line listing its reference, title, the sponsor branch and a contact and the target audience. The SI reviewed a sample of digests and noted that many were mistargeted (for audience), poorly written or titled and simply too long and jargon heavy. The SI concluded that the staffing and review process in place prior to the publication of DINs needs to be more robust.

1.4.96 **5 RIFLES**. 5 RIFLES was, as stated in para 1.4.52 above, running hot. The Second-in-Command receives 50-120 emails a day (some of which are the DINs 'pushed' down from superior headquarters) of which 25-50 require some level of action. The CO receives 20-50 emails per day and expects to read 20-40 documents each week. Whilst the information management system within 5 RIFLES was robust at 'pushing' information downwards, they had no mechanism to verify that they were receiving everything they should. **Exhibit 93** **Soldier AA**

1.4.97 **Conclusion**. The SI **observed** that, given the volume of emails to be read,

[41] Examples being the Brigade Master Driver (expert on all motor transport issues), Staff Officer Physical Development (Based in 3 Division and responsible for providing guidance to the Divisional Commander on all aspects of Physical Development), Yeoman of Signals (expert on all communications related subjects).

the poor composition and targeting of DINs and the reliance on the correct information being 'pushed' to them it is not surprising that the MATT 2 Policy Update was missed by the unit.

1.4.98 **Recommendations. The SI recommends that:**

a. **Director Defence Communications (DDC) should review their staffing processes for the approval and publication of DINs in order to ensure they are correctly titled, clearly and simply written and targeted at the appropriate audience.**

b. **DDC should review the format and distribution of the DIN Digest and, where necessary revise it, to ensure the content descriptions are easily identifiable by the target audience.**

Summary of Findings

Cause

1.4.99 The Cause of Rfn Evans' death was 'Sudden cardiac arrhythmic death with a morphologically normal heart of uncertain aetiology'. 1.4.10

Possible Contributory Factors

1.4.100 The SI identified one factor that may have made the incident more likely. The autopsy report states that the AFT may have been a 'precipitant' of the physiological events that triggered the fatal arrhythmia in the context of an occult cardiac disease. Given that fatal arrhythmia in this age group most frequently occurs during, or immediately following, periods of strenuous physical activity, the AFT cannot be ruled out as a contributory factor in his death. It should be emphasised however that the AFT did not cause Rfn Evans' death and the cardiac arrest could not be foreseen or prevented. 1.4.18

a. CF 1 – The strenuous exercise inherent in the AFT may have triggered the cardiac arrhythmia.

Other Factors

1.4.101 The SI identified 11 other factors that, whilst not causal or contributory in this incident, may cause or contribute to a future incident.

a. OF 1 – The lack of an AED carried on an AFT. 1.4.29

b. OF 2 – The lack of awareness of participants' fitness levels by the OIC. 1.4.37g(3)(b)

c. OF 3 – The lack of a nominated First Aid NCO and medical kit. 1.4.40.b

d. OF 4 – Standard of Pre-AFT briefs and administration below par. 1.4.40.c

e. OF 5 – Inability of the SV to provide support along the whole route of the AFT. 1.4.40.d

f. OF 6 – Lack of a communications plan and a robust emergency response plan. 1.4.41.c

g. OF 7 – Inability of the SV to follow troops at the correct distance had adverse effect on Command and Control. 1.4.41.d

h. OF 8 – Knowledge of the availability of medical facilities. 1.4.44.d

i. OF 9 – Not considering the advice and guidance given in MATT 2 Protocol and JSP 539 when dealing with a potential heat casualty. 1.4.44.h

j. OF 10 – Short notice trawls requiring a rapid build-up of fitness concurrently with courses of medication and issue of approved environmental clothing and equipment may present risk. 1.4.72

k. OF 11 – Immature DH process within 5 RIFLES. 1.4.89

Observations

1.4.102 The SI made 12 observations:

a. OBS 1 – Medical cover is inconsistent across the three services for the same activity.	1.4.26
b. OBS 2 – MATT 2 Protocol does not specify the type of First Aid equipment to be carried.	1.4.27
c. OBS 3 – Undefined start and finish point for the AFT.	1.4.37.d
d. OBS 4 – JSP 539 description of soldiers based in UK and NW Europe being un-acclimatised is only a footnote and likely to be missed.	1.4.37.g.(1)
e. OBS 5 – Lack of off-road section within AFT route.	1.4.40.a
f. OBS 6 – Staff churn leading to issues being missed or poorly prioritised.	1.4.48
g. OBS 7 - The compilation of PD RAs within 5 RIFLES was sub-optimal at the time of the incident (but have now been rectified). This problem was not identified by internal and/or external PD assurance.	1.4.57
h. OBS 8 - The mechanism for internal PD assurance was missing from 5 RIFLES for the best part of a year. A situation exacerbated by the staff churn and the belief that PD is a safe activity. Therefore the Command focus was directed towards those activities (such as Finance, Warrior Training, Equipment Care and Live Firing) that carry greater risk to life or unit reputation.	1.4.59
i. OBS 9 - The lengthy gap between external PD Inspections, the turnover of 20 Armd Inf Bde Senior Physical Training Instructor and the transfer of 20 Armd Inf Bde from 1 (UK) Div to 3 (UK) Division all contributed to the failure to identify issues with the governance and delivery of PD within 5 RIFLES.	1.4.61
j. OBS 10 - The priority afforded to PD and other non health and safety related RA Training was inadequate, especially when PD is now seen as a RtL activity.	1.4.63
k. OBS 11 – Policy documents in need of review and update.	1.4.78
l. OBS 12 – There was information overload in 5 RIFLES given the volume of emails to be read, the poor composition and targeting of DINs and the reliance on the correct information being 'pushed' to them.	1.4.97

PART 1.5 – RECOMMENDATIONS

Recommendations		Analysis Reference
1.5.1.	**Introduction**. The following recommendations are made:	
1.5.2.	**Army HQ:**	
	a. DTrg(A) reviews training provided by ASPT with regards to the operation of WBGT. A DSA urgent safety notice was promulgated on 6 Aug 15.	1.4.39 c
	b. DTrg(A) produces policy on the division of responsibility between a unit's chain of command who are participating in an event and event OICs.	1.4.43
	c. DTrg(A) should consider amending the policy of suspending assurance visits due to operational commitments in order to take into account that units deployed will always leave a rear party behind at their base locations.	1.4.62
	d. DTrg(A) reviews and revises delivery of PD and other non health and safety related RA training in order to ensure a safe system of training.	1.4.64 a
	e. DTrg(A) attaches to the UFTO and RAPTCI positions (or equivalent in smaller units) a requirement for a PD RA competency in the same way that the Quartermaster position is labelled as the Unit Safety Advisor.	1.4.64 b
	f. DTrg(A) reviews and revises the protocol for PD inspections to ensure RAs are reviewed against actual activity, which is considered good practice.	1.4.66
	g. ADOC ACOS Ops should establish a process by which the implications of deploying overseas a unit outwith its readiness state are assessed and the accompanying risk registered at the appropriate level.	1.4.73
	h. DTrg(A) reviews the key policy documents governing PD to address the anomalies identified by the SI and ensure that the policy documents are up to date and clearly written in order to provide unambiguous guidance to Commanders. The review should seek to address the shortcomings in understanding the importance of RA and the evolving DH process.	1.4.79
	i. CESO(A) reviews and, where necessary, revises the training package related to the DH process to ensure maximum understanding and awareness of the relevant responsibilities, processes and procedures.	1.4.89
1.5.3.	**Headquarters of the Surgeon General:**	
	a. The Surgeon General should Implement a standing review to monitor advances in the detection of occult cardiac diseases	1.4.19

	with a view to improving cardiac disease detection prior to and during a service persons career.	
	b. The Surgeon General should review and, if necessary, revise the appropriate level of medical cover and First Aid equipment required for the vocational and operational fitness assessments and tests undertaken across Defence. This review should take into account the efficacy and feasibility of providing AEDs for such activities.	1.4.30
1.5.4.	**The Heat Injuries Working Group:**	
	a. The Heat Injuries Woking Group should provide guidance in JSP 539 on how the WBGT Threshold values may be used for activities lasting in excess of 1 hour.	1.4.39 a
	b. The Heat Injuries Working Group should define "acclimatised" and "non-acclimatised" more fully to enable the benchmark to be established.	1.4.39 b
1.5.4	**Directorate of Defence Communications:**	
	a. COS DDC should review the staffing processes for the approval and publication of DINs in order to ensure they are correctly titled, clearly and simply written and targeted at the appropriate audience.	1.4.97. a
	b. COS DDC should review the format and distribution of the DIN Digest and, where necessary revise it, to ensure the content descriptions are easily identifiable by the target audience.	1.4.97. b
1.5.5	**5 RIFLES:**	
	a. CO 5 RIFLES should ensure that AFT policy and procedures are fully understood and implemented by his PD Staff. This should include a review of the route used, safety communications, employment of the SV, emergency response plan and availability of medical facilities. Where risk is identified and mitigation used it should be reflected in the AFT RA.	1.4.46
	b. CO 5 RIFLES reviews PD RAs to ensure they are fit for purpose and establish a robust management system to monitor and review them periodically. The SI understands that this process is underway.	1.4.58
	c. CO 5 RIFLES amends RAPTCI TORs to include coaching and mentoring AAPTIs.	1.4.60. a
	d. CO 5 RIFLES establishes a robust assurance process to ensure that the delivery of PD is in accordance with AGAI Volume 1, Chapter 7.	1.4.60. b

PART 1.6 – CONVENING AUTHORITY COMMENTS

1.6.1 On 18 Jun 2015, Rifleman Mathew Evans collapsed and died having completed 7.3 miles of an 8.0 mile Annual Fitness Test (AFT) in the vicinity of Alanbrooke Barracks, Paderborn, Germany. It is concluded that his tragic death was caused by a Sudden Cardiac Arrhythmia (with a morphologically normal heart of uncertain Aetiology) which, for the purpose of this Service Inquiry (SI), can be referred to as 'natural causes'. This finding does not diminish the need to ensure we learn all that we can from the circumstances that day and how best we can deliver this type of standardised and routine physical training across Defence in future. While many of the observations contained within the report would not have affected the outcome on this occasion, the SI offers an extremely useful insight for Commanders at all levels, and in all Services, into the inherent risk in even the most straightforward training events. This report should prompt personnel to consider how such events are being conducted within their own organisations and, for Commanders, how their own Units would fare had they found themselves in a similar situation. I would wish to emphasise at the outset that it is my belief that none of the factors identified within this report made Mathew Evans' death more likely or had any substantial impact on the final outcome. Furthermore, it is my opinion that the SI Panel did not identify any safety-related failings on the part of any of the individuals directly or indirectly involved that would warrant further investigation. I make this point to emphasise that the purpose of this type of SI is not to suggest criticism, but to identify recommendations to enhance the safety of similar events in future.

1.6.2 This thorough investigation has identified one possible 'Contributory factor', 11 'Other factors' and made 12 'Observations'. With the exception of the single possible Contributory factor, I fully support its findings. Based on HM Coroner's statement detailing the cause of death, the SI Panel has not unreasonably elected to identify the strenuous exercise inherent in the AFT as a possible Contributory factor (as a trigger to the heart failure). To preserve the SI Panel's independence, I do not comment on such matters until the end of the process in order to ensure that my own view does not influence their investigation. As a result, I am not questioning either the SI Panel's judgement or the Coroner's findings. However, in this context, it is my opinion that Rifleman Evans' death could have been caused by a whole range of trigger or precipitant events outwith the AFT itself. Consequently, it is potentially misleading to identify the strenuous exercise inherent in the AFT as possibly Contributory. I make this point because I would not wish to attach unwarranted significance to the actual AFT itself and I consider the test to be fit for purpose when conducted in accordance with the Military Annual Training Tests (MATT) 2 Protocol.

1.6.3 It was clear throughout the SI interview process that soldiers within the Unit did not regard the AFT as representing a Risk to Life activity. I agree with this assertion; however, from a pan Defence perspective, we should be aware that in the last 3 years, 3 people in similar circumstances (2 x Army and 1 RN) have died during similar types of physical activity. To reinforce this observation, 10% of all deaths in the UK Armed Forces are caused by cardiovascular related problems and most of these occur either during or after some form of strenuous activity. From my perspective, the most important lesson to emerge from this SI is that the guidance provided to Commanders within the MATT Protocol 2 has been designed by the Army to make the AFT a Safe System of Training. The Protocol takes into account the most likely hazards that have the potential to emerge during the conduct of the test. If the Protocol is adhered to, the most likely risks will be avoided, or be appropriately mitigated or effectively managed should they materialise during the course of the event. One of the primary roles of the Unit CO, as Delivery Duty Holder (DDH), is to satisfy himself that such Protocols are being adhered to, and are being actively managed by suitably trained and experienced personnel within the Unit. He should be satisfied that if there are any reasons why the MATT 2 Protocol cannot be adhered to given local circumstances, they feature in the Risk assessment. Where deviation is necessary, a reasonable mitigation should be identified that addresses any Unit specific risks. The final task of the DDH should

be to ensure that those conducting the activity on the day, from the OIC through to the medics and Safety Vehicle drivers for example, understand the requirement to, and are capable of, conducting dynamic risk assessments and responding appropriately should events deviate from the plan for unforeseen reasons during the course of this type of training event.

1.6.4 Many of the 'Other Factors' identified by the SI Panel will be applicable to all 3 Services. Therefore, I will comment on the most pertinent of the 11 'Other Factors' identified, particularly where the DSA has seen similar issues in other Inquiries. The first is the constant risk posed by Heat Injury, particularly in a widely variable climate as found in Germany. The first casualty on the day was potentially a heat injury, which should have triggered some kind of dynamic consideration of the advice in JSP 539 with regard to the continuation of the AFT. Next, the incident once again demonstrated our widespread reliance on personal mobile phone coverage for contingency purposes. Further, the Safety Vehicle was unable to follow the full route of the AFT, in a deviation from the guidance in the MATT 2 Protocol, and this should therefore have featured in the Unit's own Risk Assessment and led to an appropriately considered mitigation, or the selection of a more appropriate route for the test. Finally, I would highlight that in recent investigations into similar cases, in the minutes leading up to collapse, individuals have shown physical signs of a problem but have understandably been poor judges of their own state, even when questioned. Accordingly, supervisors should not hesitate to stop and examine an individual who they consider to be showing uncharacteristic signs of difficulty or distress.

1.6.5 The SI also concludes that Rifleman Evans' condition could not have been recognised by either himself or the Army at any stage during his selection and training. Indeed, the Army has more rigorous cardiac screening than the other 2 Services, except in the case of a small number of specialist branches, and this is something that the Surgeon General may wish to look at. It is also worth noting that once Rifleman Evans collapsed, although there was no qualified medical support immediately available for the AFT, he received both timely and competent care including CPR from his colleagues before the arrival of qualified military (6 minutes after collapse) and German civilian paramedic staffs (10 minutes after collapse). An Automated External Defibrillator (AED) was not available until the arrival of the German Paramedics and by this point he did not have a shockable rhythm; however it is not known whether or not he did immediately after his collapse. The MATT 2 Protocol directs that the Safety Vehicle has First Aid equipment but does not mention an AED as part of the contents. Overall, it is highly unlikely that Rifleman Evans could have received better treatment than he did in the circumstances following his collapse. However, I fully support the Panel's recommendation that the Surgeon General considers the policy for the availability of AEDs during this type of activity as this could save lives in the future.

1.6.6 In summary, this was to be a routine fitness test for the Unit at their home barracks ahead of a deployment. Unforeseen to anyone, Rifleman Evans' underlying heart condition was likely triggered by the strenuous activity of the AFT. Once he had collapsed, he received appropriate and timely treatment but could not be saved. While the factors identified may not have been causal or contributory, the recommendations to emerge from this tragedy are important. Commanders and organisers of this type of training and testing should make sure that their planning, briefing, risk assessments and contingency mitigations are rigorous enough to cope with such unforeseen events. Moreover, DDHs should have assurance mechanisms in place that allow them to dip down into this type of training activity and make sure it is being delivered to the required standard and in an appropriate way. Unfortunately I have no doubt that similar incidents involving natural causes will happen again in future. We should ensure we now do all we can to be prepared.

Director General Defence Safety Authority

