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27 January 2020

Dear Senior Coroner,

Thank you for your letter of 1 November 2019 in which you enclose a copy of your Regulation 28 Report following the Inquest into the death of Corporal Joshua Hoole.

My department greatly values coronial oversight and the opportunity to improve safety. The Ministry of Defence is committed to being a learning organisation and to supporting service personnel and their families, especially so where, tragically, a death occurs. We acknowledge, however, that your report raises a serious concern that lessons have not been learnt from past tragedies. In your report you raise 19 matters of concern, under six headings, and I will address these in the paragraphs below. I have highlighted where corrective action has been completed, and I have been given assurance that where there is still more to do, robust plans are in place to deliver what is required.

### **General**

*1. Failure to learn lessons following the 2013 death of 3 soldiers whilst on a training exercise in the Brecon Beacons.*

Having recently spent time with the families of the three soldiers who died in Brecon in 2013, the Commander Field Army has been rigorous in addressing the failure to learn lessons from this tragic event. Awareness of Joint Service Publication 539 - Heat Illness and Cold Injury: Prevention and Management (JSP 539), by commanders has improved since 2013 and since Cpl Hoole's death, but we continue to do more. All Commanding Officers (COs) are briefed on JSP 539 during pre-employment training and, to further raise its profile, actions are being taken to reinforce the importance of its content (See para 1a). A significant amount of work has recently been completed to address the training shortfall in the matter of risk assessments. Following a comprehensive Training Needs Analysis in October 2019, a plan is now in place to meet the immediate needs and to build safety risk management training into career training for all soldiers and officers (See para 1(b)). Reporting of incidents has been simplified, and a clear guide for commanders will accompany the launch of the new procedures in April 2020 (See para 1(c)). The mandatory requirement to take Wet Bulb Globe Temperature (WBGT) readings, in accordance with JSP539 (where there is an elevated risk of heat illness) before physical testing and loaded march training has now been included in policy, as has the need for it to inform a risk assessment (See para 1(d)). Below are more detailed answers to each of your listed concerns under this heading.

**Mrs Hunt**  
**Senior Coroner for Birmingham and Solihull Areas**  
**50 Newton Street**  
**Birmingham**  
**B4 6NE**

a. *Commanding officers were unaware of the JSP539 and there was no clear system in place either to disseminate information or to check those commanding had the requisite knowledge.*

All COs attend a Commanding Officers' Designate Course as part of their pre-employment training. The importance of heat illness and the content of JSP 539 is included on this course. JSP 539, the Commanders' Guide to Heat Illness and Cold Injury, and the Heat Illness and Cold Injury Field Guide are all accessible on MODNet, the Army Knowledge Exchange and Defence Connect, which is accessed through the Defence Gateway. To improve awareness further, work has been initiated to explore the utility of a CO's electronic handbook which will seek to signpost COs to relevant policy documents.

Army Briefing Notes are produced and promulgated each time new policy is disseminated. To assure dissemination of policy, the Audit and Inspection regime includes annual inspections to check units are using the most up-to-date policy. The question set for the annual Physical Development audit is being amended to specifically include the key heat prevention publications of JSP 539, Army Command Standing Order 3216 - Management of Safety and Environmental Protection (ACSO 3216), and AGAI Volume 1 Chapter 7 - Physical Training (AGAI Vol 1 Ch 7). Director General Defence Medical Services (DG DMS) is completing the re-writing of JSP 539. The plan is to separate policy on how to prevent heat illness (JSP 375 - Management of Health and Safety in Defence) and how to treat it (JSP 539) and this will be complete by December 2020; I have included more detail in the JSP section below (see para 3).

In February 2020, the Commander Field Army will use his annual conference to brief all COs on heat illness and JSP 539. He will also write to his Commanding Officers once JSP 539 has been revised to emphasise the importance of management of heat illness and other safety related issues.

b. *Commanding officers had not been trained on completing risk assessments.*

You highlighted your concerns regarding Risk Assessments following the deaths in Brecon and this shortfall was readily apparent in the circumstances surrounding Cpl Hoole's death. The Army has now addressed this matter and commissioned a comprehensive Training Needs Analysis. The report on Safety Risk Management was published in October 2019 and training for the Army will be rolled out in 3 phases:

a. Phase 1: Risk Assessment Training. A Train the Trainer course has been developed by the Army Safety Centre and pilot courses have already been delivered to qualify Army Force Protection Advisors to deliver risk assessment training. A mass training event will take place at Tidworth Garrison Theatre on 29 January 2020. The event will train up to 120 Army personnel on how to deliver risk assessment training. Under the direction of the Deputy Chief Safety (Army) the trainers will then deliver distributed training across the Army with the aim of training the majority of the target audience (planning and training staff, COs, directing staff, activity directors) by the end of March 2020. The trainers will continue to provide a rolling programme of risk assessment training throughout 2020 to catch those unavailable for the initial tranche.

b. Phase 2: Surge Safety Risk Management Training. The delivery of surge training is a recommendation from the Training Needs Analysis report. The means of delivery and the timeline to deliver are being scoped and a proposed delivery schedule will be completed by the end of February 2020.

c. Phase 3: Steady State Training. The steady state will see Safety Risk Management Training embedded into career courses to deliver the right training at the right point in a soldier's and officer's career with each course building on the last. It is anticipated that it could take up to 2 years to fully integrate the training into career courses. The surge training will remain in place until the steady state solution has been implemented.

c. *The system for reporting heat illness cases was disjointed and cases were not reported giving incorrect data.*

The disjointed reporting system identified in your PFDR following the Brecon Inquest was highlighted as an unresolved issue by the Army Inspector in his Thematic Review of the Army's Application of Heat Illness Policy (November 2018). In 2019, a major reform of Health, Safety and Environment Protection (HSEP) policy and governance in the MOD resulted in the creation of the Defence Safety and Environment Committee (DSEC), chaired by the MOD's Permanent Secretary. More recently, the Deputy Chief of the General Staff (DCGS) raised the matter to the DSEC Working Group directing that the MOD conduct a detailed review of the Management Information to improve the way it reports and records all incidents including those involving heat illness; this work is ongoing and will be updated at the next DSEC (23 March 2020). DCGS remains closely engaged with this work with the MOD's Director of Health, Safety and Environment Protection and the Vice Chief of the Defence Staff.

The MOD is therefore focussed on improving both how and what data is reported and recorded, which will lead to better collation and interpretation, improved trend analysis, and better Management Information that can be presented to the DSEC for Departmental policy setting.

Within the Army, and in consultation with the Royal Navy and Royal Air Force as users of the existing Incident Notification System (INS) there has been progress on improving the coordination of reporting. A common (tri-service) suite of reporting and investigation forms has been developed, and the rollout of these new forms will be accompanied by a Commander's Guide to Reporting and Investigations; both will be issued by 1 April 2020. Future work is now focussed on designing an app-based reporting mechanism utilising the Defence Gateway portal, which will permit personnel to report using smart phones/tablets etc. A timescale for this future work is not yet confirmed.

d. *There was no system in place to ensure WBGT readings were taken before training exercises.*

Good progress has been made by the Army with the use of WBGT monitors. A Defence Information Notice (2019DIN06-022) was published in September 2019, clarifying the use of WBGT monitors and providing clearer guidance on how to site the WBGT correctly, how to take readings before the start of an activity, and how these should inform the risk assessment. Both Military Annual Training Test 2 (MATT 2) guidance and Army General Administrative Instruction Volume 1 Chapter 7 (AGAI Vol 1 Ch 7) have been amended to include specific direction that the WBGT readings must form part of the Risk Assessment process. A revised version of MATT 2 was published on 18 December 2019 and AGAI Vol 1 Ch 7 released in January 2020. The Institute of Naval Medicine's Thermal Burden Project is due to deliver its findings by 31 January 2020. This will generate new evidence-based tables to assist Commanders in making safe decisions for work processes of up to four hours' duration, where WBGT is used to define a maximum safe work/rest duration.

## JSP 539

*2. I heard evidence at the inquest that Commanders were unaware of the provision of JSP539 and how they should apply to an annual fitness test (AFT). Several said they have not been trained on the publication and those that had seen it confirmed they did not understand the full effects of it and had not been trained on it.*

It is the instructions contained in MATT 2 and AGAI Vol 1 Ch 7 that provide commanders on the ground with the necessary information and guidance on how to safely conduct an AFT. JSP 539 is the top level, overarching, publication and MATT 2 and AGAI Vol 1 Ch 7 are complementary single service policy documents that provide additional information to commanders. MATT 2 and AGAI Vol 1 Ch 7 make specific references to direction and guidance contained in JSP 539. In order to increase awareness of JSP 539, the Army is conducting a review of the Unit Fitness Training Officer course (training) and the Physical Development Audit (assurance) to ensure that both include an increased focus on JSP 539 and WBGT Monitor readings. This review will be complete by 30 March 2020. The training chapter in a new ACSO on Heat Illness Prevention contains the requirement to conduct education and briefings at all events where there is a risk of heat illness. It is on final circulation before scheduled publication on 31 January 2020.

*3. Evidence at the inquest confirmed that the version of JSP539 in place at the time was difficult to read and understand. The latest version remains long and complex and difficult to understand. There should be consideration to providing commanders with shortened advice on the key messages from the publication – an aide memoire or fact sheets for example – to allow them to understand at a glance the messages being given.*

A Field Guide was produced in October 2019 entitled 'Heat Illness and Cold Injury'. This provides commanders with a short reference guide to assist in the understanding of climatic injuries. A comprehensive review of JSP 539 has been completed and the Joint Medical Group (JMG) discussed the document at the Heat Illness Working Group on 18 July 2019. Members of the JMG agreed that the JSP was long and not the easiest to read. The decision was taken to disaggregate the document. Advice and guidance on the prevention of heat injury will be removed and inserted as a new chapter in JSP 375 - Management of Health and Safety in Defence, whilst the more clinically focussed medical care required for heat and cold injuries will remain in JSP 539. This work will be completed by 31 December 2020. The publication of the Institute of Naval Medicine's Thermal Burden Project will further inform the next iteration of JSP 539 and the new chapter in JSP 375.

*4. The current JSP539 states at Annex A page 2A that the activity should be "paused" if there is a suspected case of heat illness. MATT 2 states the activity should be stopped. The publications need to be consistent with each other and the guide should be clearer.*

There is, in fact, no inconsistency. JSP 539 covers a much broader range of activities, including military operations, where it might not be necessary or appropriate to stop activity, and where a pause would be appropriate in the event of a heat illness incident. To cease all activity in an operational context would likely pose a much greater threat to service personnel. In the case of a physical training activity, such as an AFT, there is no similar operational imperative and so, at the first indication of a heat illness incident, the activity is to be 'terminated' as directed in MATT 2. In the training context, as stated above, it is MATT 2 that should be followed by those in charge.

5. *The current JSP539 has several annex "A's" which could be confusing if commanders reference the wrong annex.*

The disaggregation of JSP 539, and the creation of a separate chapter in JSP 375 will provide the opportunity to remove any confusion over the labelling of annexes in JSP 539.

6. *Individual risk factors were an important part of understanding how a soldier would react to a situation and how best to mitigate any associated risk. At present there is no clear system in place to ensure those conducting activities have the necessary information about an individual to enable them to carry out an appropriate risk assessment.*

JSP 539 includes guidance on the individual factors to be considered in relation to heat. The new ACSO 3222 Army Heat illness Prevention, will provide additional direction specific to Army requirements. This will include a check list of individual factors for use by commanders prior to the activity, and specific reference to heat illness risk assessments (Annex C to ACSO 3222).

7. *The current JSP 539 does not set out explicitly that it is the role of the medic on an activity to pass on medical information.*

The recently updated MATT 2 and AGAI Vol 1 Ch 7 now include direction that medics are to communicate medical details of incidents to the Officer in Charge of physical training events. JSP 539 will also include this explicit instruction in its new amended iteration.

8. *The AFT is being phased out and new tests have been introduced namely GCC (Ground Close Combat) and RFT (Role Fitness Test). The current JSP 539 does not provide guidance for the acceptable work rates for these activities yet the activities have already been introduced. JSP539 is therefore inconsistent with the new MATT2.*

Army Briefing Note (ABN) 076/19 gives interim direction and guidance with regards to GCC and RFT testing thresholds until JSP 539 is subsequently updated. The conclusion of the Institute of Naval Medicine's Thermal Burden Project will permit further detailed guidance and work rates to be established for a range of activities in a range of different dress states. This will include specific guidance for the GCC and RFT.

9. *The two cases of heat illness in the AFT were not formally reported in accordance with JSP539. There needs to be a robust system in place to ensure cases are properly referred and recorded.*

See response at para 1(c).

## **Military Annual Training Test 2**

The MATT 2 guidance has been re-issued to include your helpful suggested amendments. The Physical Development Audit will include a new question set from January 2020 that will assure the correct application of the guidance in MATT 2 and will confirm that risk assessments for these activities are being produced to the right standard. Below are more specific answers to your concerns.

10. *MATT 2 pages 1.1-1.3 fail to refer to JSP539 as a relevant publication.*  
MATT 2 Policy has been amended to provide specific reference to JSP 539.

11. *At pages 2.7/2.8 it does not mention the need to use a WBGT.*  
MATT 2 has been amended and now directs that WBGT readings are to be taken and recorded as part of the Risk Assessment process prior to all testing in accordance with JSP539 (where there is an elevated risk of heat illness).

12. *Currently MATT2 states the medic on a fitness test is to be MATT3 trained. Given that these medics only receive basic training as per MATT3, consideration needs to be given to have a better qualified medic who can properly identify the signs and symptoms of Heat Illness. The Inquest was told by those who were MATT3 or team medic trained did not feel confident to diagnose Heat Illness and deferred to the Combat Medical Technician (CMT).*

The views of the Defence Consultant Advisor on Pre-Hospital Care (DCA PHEC) were sought on the current provision of MATT 3 trained First Aid NCOs to support AFTs. The DCA PHEC considers this to be sufficient but did stress that heat illness – recognising the symptoms and being able to treat any casualties – must be given sufficient focus during annual MATT 3 training of those personnel. I hope that this deals with your concern, albeit by a different route. He reiterated that MATT 2 must make clear that any physical activity is to be terminated once a heat illness casualty is suspected or identified.

13. *MATT 2 states that commanders should use a generic risk assessment as a starting point to risk assess a particular activity. However, there is no generic risk assessment within MATT 2. Fitness tests are usually run over pre-set courses so it would be sensible to have generic risk assessments for each venue with clear instructions that they need to be tailored to the day and time of the activity and the prevailing environmental factors.*

MATT 2 and AGAI Vol 1 Ch 7 have been amended to give clear direction that units are to produce generic risk assessments for all physical testing and assessment activity. Generic Risk Assessments will be used as part of the forward planning of the activity. However, on the day of the activity, the Risk Assessment must be reviewed and amended as appropriate to the specific site and conditions.

The Physical Development audit question set will be amended by 30 March 2020 to include a specific check on generic risk assessments, and units will be monitored for compliance.

## **Training**

14. *Witnesses at the inquest stated they were unaware of publications and had not received adequate training on those publications they were aware of. There needs to be a clear system of training for key tasks and updated publications. There needs to be measures in place to ensure all commanders are provided with the necessary information and a mechanism for annual updates and monitoring of awareness and training.*

Headquarters Royal Army Physical Training Corps, as the Training Requirements Authority is conducting a review of the content of the Unit Fitness Training Officer course. This review will ensure that all relevant publications are included in the

course and that all attendees receive the required level of training. This review will be complete by 30 March 2020. In addition, the Physical Development Audit Self-Assessment has been updated to include specific detail on JSP 539 and

WBGT Monitors and their readings. The Training Chapter in the new ACSO on Heat Illness Prevention contains the direction to conduct briefings and education at all events where there is a risk of heat illness.

In addition, I have directed the Minister for Defence Personnel and Veterans to review the current education provided to Training Officers to ensure that they are qualified with the correct knowledge, skills and experience to carry out their responsibilities. This review will be initiated soonest and the Defence Inquest Unit will update you on the progress in due course.

### **Wet Bulb Globe Temperature Monitor**

An Aide Memoire has been produced for use of the QT34 WBGT monitor and instruction labels ensuring the correct siting of the monitor have been distributed. This was completed in October 2019. In support, on 7 October 2019, the Physical Development audit was updated to include the requirement to assure that the labels are affixed and the aide memoire is held with every monitor. The audit also now assures correct siting of the monitors. The QT34 YouTube user guide has been edited to include direction on placing the monitor in direct sunlight and is now available on MODNet giving easy access to all Defence users. The routine and continual professional development courses for Army Physical Training Instructors includes a briefing on updated policy and guidance. Attendance on these courses is required to ensure currency and competency and is recorded in Physical Training Instructors' individual training log books. Below are more specific answers to your concerns:

*15. It was established by the Coroner's appointed expert that the WBGT at Dering Lines was in the wrong place on the 19/07/16 leading to an incorrect reading. A PFDR was raised at the time to address this, however the inquest heard that the steps said to have taken place in the response have not been done. Not all WBGTs have warning/instruction stickers attached, and the YouTube instructional video does not specify that the WBGT should be in sunlight. In addition, the WBGT update does not specify it should be in sunlight.*  
*and*

*16. Each venue with a WBGT needs to have a clear policy for its placement depending on the time of year and day.*

On 11 October 2019, a Safety Notice Via Email (Ref 00658) was distributed to all Safety points of contact across Defence directing that any QT34 WBGT monitors being used outdoors must not be shaded in any way from sunlight. Stickers must be placed to this effect on every monitor and all must ensure that an up to date QT34 User Aide Memoire published in September 2019 was to be kept with every monitor.

Prior to 30 October 2019, a label and updated Aide Memoire was posted out for every registered QT34 by the Operational Infrastructure (OI) Delivery Team. On 7 November 2019, the Physical Development Audit was updated to include a check that labels were affixed to, and Aide Memoires held with, every QT34, and that units reviewed the siting of the monitor. Direction has also been included within the new ACSO 3216 - Heat Illness Prevention to be published on 31 January 2020.

The Operational Infrastructure Delivery Team has updated all Army Equipment Support Publications (AESPs) and technical documentation to reflect this direction. Additionally, an article highlighting the changes has been written for publishing in the next edition of KiT magazine in March 2020. (Published quarterly KiT Magazine is produced on behalf of Director Land Equipment and provides updates on management of equipment and vehicles).

17. *The YouTube video does not play on MOD laptops.*

The User Guide video has now been edited to include direction that when used for taking outside WBGT readings, monitors are to be placed in direct sunlight. The new video does now play on MODNet and an access link has been widely circulated. It can be accessed through Defence Connect, Defence Net and the Army Knowledge Exchange (AKX).

18. *No further training has been provided for gym staff.*

Refresher training for staff delivering Physical Training is provided by the Army School of Physical Training and it is directed within the Annual Deficit Training (ADT) Directive. The ADT Directive mandates Continual Professional Development activities through courses and distance learning; these are recorded and assured through Regional Command Physical Development PD branches.

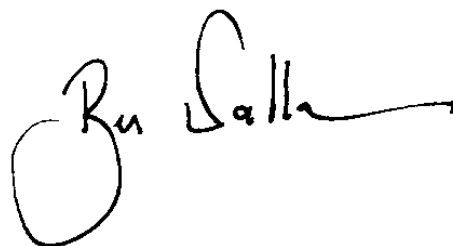
Physical Training Instructors (PTIs) now complete a personal PTI Log book of their training and delivery, which contains detail of the additional training they have completed and the refresher training they have received as a result of any changes to current policy.

### **Risk Assessment**

19. *The senior commanders at the inquest confirmed they had not received training on the production of risk assessments for the activities they were conducting. There needs to be a robust approach to training and management of risk assessments ensuring those who are required to complete them have the necessary skills and training.*

I refer you to my response to concern para 1b above.

I would like to thank you for clearly identifying serious failings – some of them very serious – at the end of the very thorough inquest which you conducted into the death of Corporal Joshua Hoole. I acknowledge those failings and I regret them very much. The safety of service personnel is at the heart of what the Ministry of Defence does, and I am determined to ensure that lessons are learned from the tragic death of Cpl Hoole on 19 July 2016.

A handwritten signature in black ink, appearing to read 'Ben Wallace', with a large circular flourish on the left side.

**THE RT HON BEN WALLACE MP**