SECRETARY OF STATE
MINISTRY OF DEFENCE
FLOOR 5, ZONE D, MAIN BUILDING
WHITEHALL LONDON SW1A 2HB

[redacted]

[redacted] 21 September 2023

Dear Sir Ernest,

Regulation 28: Report to Prevent Future Deaths

Thank you for your Regulation 28: Report to Prevent Future Deaths dated 28 July 2023 to the previous Defence Secretary following the Inquest into the very sad death of Marine Benjamin David McQueen (Ben). I note that you concluded his death was accidental and highlighted your concerns that an accident of this type could occur again without further action from the Ministry of Defence (MOD). I very much share your desire to prevent any such recurrence and I am grateful to you for bringing your findings to the attention of MOD Ministers.

Defence takes its responsibilities for the safety of its people most seriously. As you highlight in your report, 'from the evidence it is very clear that there has been a comprehensive and far-reaching review of policies, practices and organisational structures which will have very significantly reduced the risk of future fatalities' and the outstanding four discrete points demand MOD's full attention to ensure training remains realistic for the operational demands, yet as safe as reasonably practicable. In responding to your recommendations, I have drawn upon advice from the Military Diving Capability Cell (MDCC), the Institute of Naval Medicine (INM) and the Directorate of Defence Safety (DDS). I offer the following response on each matter of concern.

Matter of Concern 1. ***"A stand-by diver was present at the dive exercise and he was deployed to try to find and rescue Ben. However, the stand-by diver***

Lord Justice (Rtd) Sir Ernest Ryder KC
Nominated Judge Coroner
Pembroke College Oxford
St Aldate's
Oxford
OX1 1DW

[redacted]

had to surface having run out of breathable gas before Ben was found. A spare breathing apparatus cylinder was not carried in the safety boat for the stand-by diver (or other divers) to use in the event that the stand-by diver's main cylinder ran out".

Action should be taken. *"Carrying spare breathing apparatus cylinders in safety boats in addition to those carried by the stand-by diver where this is practicable. I am reassured that this is happening in practice in Ben's former unit, but I have a concern that this does not yet appear in policy guidance, and it is a safety concern that may need to be more widely shared in Defence".*

MOD Response.
The MOD has conducted a comprehensive examination of all MOD diving activities, reviewing the lateral freedoms in policy that allowed a dive supervisor to choose the most appropriate cylinder for the standby diver to conduct his duties (including the search for a lost diver). The conclusion was this shall be replaced with clearer direction. The following update to Policy (JSP 286) has now been conveyed to all stakeholders in a Dive Related Instruction (DRI), stating;

- '*When the standby diver is directed to wear Self Contained Air Diving Equipment (SCADE), the minimum main cylinder size must be the 12.2ltr variant*'.
- '*When SCADE is employed by the standby diver within un-marked swimming operations, consideration within the Dive Project Plan / Risk Assessment must be given as to the availability of a second Diving Life Support Equipment (DLSE) at immediate notice. The second DLSE should be located within the dive safety boat, however, if this is not practicable, then at the nearest safe location to the dive site'.*

This change in policy removes the potential for a dive supervisor to select a 7ltr dive cylinder as was the case with Ben and further reinforces the necessity where practicable to carry a spare dive set within the safety boats for any unforeseen circumstances. This clearer direction removes the residual risk you identify, without being over-prescriptive where the carriage of a second cylinder in certain diving activities may be impractical.

Matter of Concern 2. ***"The progression of the dive training in which Ben was engaged was safety critical. The progression of training was accelerated for several reasons, one of which was a visit by a high-ranking naval officer. The concern of the instructing staff was to polish the drills ahead of that visit and to take the pressure off the dive students by allowing them to practice the dive with relevant equipment ahead of the visit. This acceleration of safety-critical training in part because of such a visit was not appropriate."***
Action should be taken. *"As to avoiding visits by senior ranking Officers or VIP visitors to training courses leading to an acceleration of safety-critical training, I am reassured that action has been taken in Ben's former unit such that this should not recur in relation to the relevant diving training. But I have a concern as to whether this has been shared more widely amongst other military units."*

MOD Response.
The DDS is committed to taking a systemic approach to reviewing and updating the safety policy documents and renewing the management of Health and Safety in Defence. An Urgent Safety Notice has been cascaded across all Training Requirements Authorities and Training Delivery Authorities, to ensure that all Training Providers are clear on the requirement to protect our Service Personnel. The Defence Safety Authority as an independent regulator, investigator and assurer for Health, Safety and Environmental Protection (HS&EP) will continue to safeguard and uphold the message within the Urgent Safety Notice.

In the context of the recommendation, safety-critical training is defined as training involving risk to life activities, which should it not be conducted correctly, could result in death or serious injury. It is imperative that the delivery of safety critical training remains progressive and subject to a Safe System of Training throughout. Defence Organisations must ensure that for safety critical training the following three points are adhered to:

- Training establishments understand that safety critical training must not be accelerated or truncated solely to accommodate visits by VIPs or senior ranking Officers.

- Any change to the content, time, or resources available for safety critical training must be subject to an approved risk assessment by the Commander, Line Manager, or accountable person and;

- Pressure is not put on Commanders, Line Managers, or those delivering safety critical training to deviate from planned and endorsed training programmes.

To achieve this, all Training Activity Owners with responsibility for safety critical training have sought assurance from their Training Providers that this direction is understood and will be adhered to. Further, with continued direction and guidance from Talent Skills Learning and Development (TSLD) and DDS, both training policy (JSP 822) and health and safety policy (JSP 375) will undergo a formal review with updates to encapsulate this narrative and its application within training, to ensure enduring and coherent policy going forward.

While your recommendation relates specifically to safety critical training and senior ranking officers or VIP visits, the principle will extend to all forms of training and any reduction in time or supporting resources that could lead to a deviation from a Safe System of Training will be managed appropriately and detailed within both policies highlighted above.

Matter of Concern 3. ***"Ben was lifted unconscious from the seabed and Cardiopulmonary Resuscitation was immediately started. A defibrillator was also applied, but this was only available because it was carried by a Harbour Patrol vessel which came to assist. I am concerned that in such safety-***

critical military diving training, the dive support staff did not have available to them a defibrillator of their own either on the supporting safety boats or on land. This did not cause or contribute to Ben's death but could lead to future fatalities."

Action should be taken "*As to the availability of defibrillators, I was informed that they are present at some, but not all, dive sites used by Ben's former Unit. The risk assessment suggesting that defibrillators are not required because of the age/health profile of those attending the diving training appears to focus upon the risk of myocardial infarction (or similar) from a natural cause or routine exercise, rather than the risk of cardiac arrest / heart arrythmias caused by traumatic injury when conducting arduous military diving."*

MOD Response.
The past two fatalities within military diving have both occurred within the training environment as a result of drowning; 70-80% of diving fatalities are recorded as drowning, although this often obscures the contributing factors that occur prior to the drowning itself. It is clear, however, that the effective management of drowning events is a hugely important consideration in military diving medical provision.

The use of defibrillators in drowning casualties must balance any potential benefit against the risk of harm. Very few drowning cases present with shockable rhythms (less than 10% in a generalised, non-military population) and this number will be significantly less in the Service personnel population with its lower prevalence of underlying coronary heart disease. The use of a defibrillator with a low likelihood of reversing a cardiac arrest in a military drowning scenario must not impede high-quality CPR and effective ventilations and its use should be appropriately prioritised against other proven first aid measures. In practice, an interruption will be inevitable whilst applying a defibrillator to a wet casualty and conducting a rhythm assessment, and if used, this interruption must be minimised through heightened training on the system by competent users. Further, it should not place the responders at increased risk through inappropriate application of equipment that has been exposed to adverse environmental conditions and used in a wet maritime environment.

After consideration and consultation with INM and the MDCC, I am assured that all *ab initio* (high risk) dive training sites have a defibrillator available at immediate notice. Further, military subject matter experts in conjunction with their civilian and NATO counterparts will now undertake a review of best medical practice and evidence of the effective use of defibrillators and their application in a military maritime environment, specifically for a drowned victim.

Matter of Concern 4. ***"There is an inconsistency regarding the minimum safety pressure level for the relevant diver's breathing apparatus as between the maintenance manual for which DE&S is responsible and all other policy and safety guidance."***

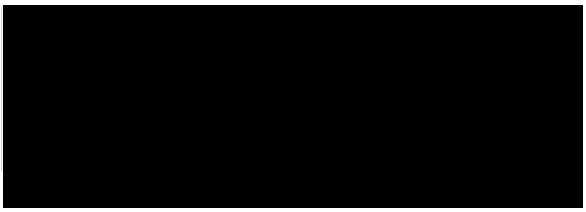
Action should be taken. *"As to the inconsistency regarding the minimum safety pressure level for the relevant diver's breathing apparatus, I was informed that the relevant operators would not need to consult the detailed maintenance manual such that confusion should not occur. Nevertheless, I consider that in the sphere of safety-critical dive training, there is an unnecessary residual risk in different figures being given for the minimum safety pressure level for a type of diver's breathing apparatus."*

MOD Response.
Recognising that the Divers Policy (JSP286) stipulated an increase in abort pressure to that given in the maintenance Policy (BR2807) as an added safety measure, MDCC and DE&S have now reviewed these Policies and aligned their figures. Direction has now cascaded across the dive community highlighting the changes within these Policies, stating the minimum abort pressure as 50 Bar. This change to the maintenance manual aligns across all diving systems within Defence for commonality and ease of reference, preventing any potential confusion.

In addition, the figures prescribed for tolerances to the minimum pressure to start a dive have also been updated by the Original Equipment Manufacturer (OEM), DE&S and MDCC, aligning within both policies. These tolerances have the added caveat that the figures are for 'operational planning purposes'. In training, all dives will commence with a minimum of 200 bar, regardless of how short dive durations may be, potentially allowing the divers more time to respond to safety issues.

I thank you for writing to MOD about these important matters. I hope that my response has demonstrated that the MOD has learned, and will continue to learn, lessons from the tragic death of Marine McQueen. I hope that Ben's family has drawn some comfort from the knowledge that action has been taken since the tragic accident and that your concerns are being addressed. I would also like to reassure the family that following Ben's death, the creation of the MDCC enables the management of diving across Defence, ensuring that all lessons are identified and shared, drawing from a broader community rather than single services leads alone, with their staunch focus on protecting the safety of our military divers and delivering against operational imperatives.

Yours sincerely,



THE RT HON GRANT SHAPPS MP