[redacted]

Civil Aviation Authority

Mr A P Walsh
H M Area Coroner
H M Coroner's Court
Paderborn House
Howell Croft North
Bolton BL1 1QY

4 September 2015
Your ref: APW/CLW/03248-2014

Dear Mr Walsh

DAVINA TAVENER DECEASED

I refer to your letter of 3 July to Dame Deirdre Hutton, on whose behalf I am responding. I must apologise for missing your 28 August deadline, and the need for [redacted] to chase this up. Your letter referred to your report to prevent future deaths under paragraph 7, schedule 5, of the Coroners and Justice Act 2009 and Regulations 28 and 29 of the Coroners (Investigations) Regulations 2013. The report followed upon the conclusion of the Inquest, on 15 June, into the death of Davina Tavener.

Your report raised a number of Matters of Concern from the Inquest evidence and you requested the CAA, the Irish Aviation Authority and the European Aviation Safety Authority (EASA) to consider those concerns and carry out a review with regard to the following:

1. The Regulations in relation to mandatory and compulsory medical equipment to be carried on aircraft operating both within Europe and out of bases in Europe;

2. The medical equipment to be carried on aircraft as a mandatory and compulsory provision with specific reference to airway adjuncts, suction equipment, bag-valve-mask equipment and a defibrillator; and

3. The compliance by airlines under the control of the competent national authority, namely the Civil Aviation Authority in the United Kingdom and the Irish Aviation Authority in Ireland, to address any changes in the mandatory and compulsory provision of medical equipment to be carried on aircraft.

Under the heading "Action should be taken" at section 6 of the Report, you state your opinion that urgent action should be taken to prevent future deaths, and your belief that I and my organisation have the power to take such action. Our response is required to contain details of action taken or proposed to be taken, setting out the timetable for action, or otherwise explain why no action is proposed.

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It should be noted, as recorded at section 5(1) of your report on the evidence given at the Inquest, that EASA is responsible for the regulations relating to equipment to be carried on aircraft operating in Europe, and that competent national authorities, such as the CAA and IAA, are responsible for oversight of compliance. Those regulations do not require aircraft to carry the equipment in question and the minimum requirement is to carry the equipment that Ryanair carried on the subject flight. It was accepted that Ryanair was operating within the regulations on that flight. The details of the regulatory framework were set out in [redacted] response of 10 March 2015 to your request for information for the Inquest, so will not be repeated here.

In terms of possible changes to the current regulations on compulsory carriage of defibrillators, the CAA's current view as set out on its Aviation Health Unit website, is that cases of sudden cardiac arrest are very rare when compared to the number of passengers carried. The evidence from those airlines that have been carrying them on a voluntary basis is that although a few lives are saved, in most cases the use of a defibrillator is not successful. This is partly because some of the cases are not due to ventricular fibrillation (the most common cause of cardiac arrest) and therefore a defibrillator will not be able to restore a normal rhythm. Also even if a normal heart rhythm can be restored, the cause of the abnormal rhythm – such as a heart attack – cannot be treated until the person gets to hospital and this can take several hours.

Although defibrillators are now more commonly found in public places, they are not a legal requirement even in places where large numbers of people gather. There is no evidence that airline passengers are at increased risk of sudden cardiac arrest and most authorities do not consider that it would be justified to make it compulsory for all aircraft to carry defibrillators.

Some airlines do carry defibrillators on a voluntary basis – particularly those operating on long haul sectors or mixed long haul and short haul sectors. The EASA regulations require operators to consider carrying them, depending on the type of their operations and other factors, such as passenger demographics (age etc). In the case of an airline operating only short haul routes, with flight durations of typically up to 3-4 hours (but often much shorter), the likelihood of a passenger who was well at the time of boarding having a significant medical event during the flight, let alone a cardiac arrest, is exceptionally small.

Your report notes at Section 5(vi) that "the saving of a single life would justify the availability of equipment on all Aircraft for use as and when a medical emergency arises." Tragic as this incident was, the mandating of any health or safety requirement will always be subject to some form of cost benefit analysis by whichever regulatory body seeks to introduce it. While defibrillators themselves are relatively cheap, there are significant additional costs associated with initial and continuation training for the crew in using them – reliance cannot be placed on there being a trained health professional or first aider on board at the time of the incident – and of specialist expertise in advising on the defibrillator programme, particularly the review of incidents where the defibrillator has been applied.

With reference to the request at Section 5(2)(i) and (ii) of your report, we consider that a change in EASA regulations to *mandate* the general carriage of this equipment would currently be difficult to justify. We acknowledge however the importance of keeping the evidence of such incidents under review, and sharing such information and data as we receive with our EASA colleagues. We also recognise that there is scope, given current voluntary carriage by some airlines, and EASA requirements to consider carriage, to further look at the efficacy and success rate where this occurs and whether other airlines should be challenged to take action voluntarily. We would propose therefore to raise this issue at the CAA/industry forum for such discussions, the Flight Operations Liaison Group. Here we could obtain an industry view on the issue, and in particular whether operators should review their risk assessments with regard to medical kits and defibrillators.

It would be for EASA to consider the need for any change in the Regulations which apply to EU operators and for ICAO to consider this in relation to non-European operators. In either case, this

would require significant international agreement that a change should be mandated. While the UK cannot act alone in terms of legal change, if, through working with industry it could be shown that there was an evidence based case for a change in the legislation, the CAA would support this. With reference to Section 5(2)(iii) of your report, it would of course be CAA's role in the UK to ensure regulatory compliance with any new legislative requirements.

Yours sincerely

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Head Safety & Airspace Legal Team