



BY POST & EMAIL: norfolk@coroner.norfolk.gov.uk

Ms Jacqueline Lake LL.M
Senior Coroner for the Norfolk Area
69-75 Thorpe Road
Norwich
Norfolk NR1 1UA

1 March 2016

Dear Madam

Norfolk Coroner Report to Prevent Further Deaths dated 2 February 2016

Matters of Concern arising from Inquest into accident to AgustaWestland AW139 G-LBAL on the 13 March 2014

Thank you for the opportunity to respond to the concerns arising from the Inquest into the accident to AgustaWestland AW139 helicopter G-LBAL. The Civil Aviation Authority (CAA) fully understands and acknowledges the importance of identifying, wherever possible, appropriate measures to prevent further deaths and our role and responsibilities in applying these.

We have closely followed the circumstances surrounding this unfortunate accident and supported the Air Accidents Investigation Branch (AAIB) during their investigation. Their report was reviewed carefully and the findings are reflected in your concerns. In addition, and following other safety recommendations relating to both helicopter and aeroplane accidents, we have instigated a thorough review of the rules applicable to flights being performed under Instrument Flight Rules (IFR) outside controlled airspace through our Safety Review Committee. This will cover several of the issues raised in relation to this accident as well as the wider context of current and emerging practices and is scheduled to be completed by 30 September 2016.

In reviewing the concerns that have been detailed in your report, we will now provide an overview of measures that are being taken to address them. Some of these measures are part of a move from UK national aviation regulations to European regulations which for this type of helicopter and operation will come into force on 25 August 2016 in all Member States across Europe.

Measures to prevent further deaths

Flight operations

Before taking off, the pilot of a helicopter on a private flight must be satisfied of a number of matters including that—

- the flight can safely be made,
- the aircraft is in every way fit for the intended flight

- the helicopter is capable of safely taking off and reaching and maintaining a safe height, having regard to the performance of the helicopter in the conditions to be expected on the intended flight; and any obstructions at the place of departure.

In making this assessment, the commander must take account of any conditions or restrictions in the helicopter's flight manual. The regulations in place at the time of the accident pertaining to that flight were contained in the Air Navigation Order 2009 (ANO) and the Rules of the Air Regulations 2007.

In contrast to Commercial Air Transport (CAT) or Public Transport operations, private and aerial work flights are allowed more operational flexibility including a greater possible choice of take-off and landing sites. With that flexibility, however, comes the potential for increased risk and a need to exercise commensurate standards of airmanship, decision-making and hazard assessment. This is of particular importance when planning to depart IFR, in Instrument Meteorological Conditions (IMC) or at night, from a site where instrument procedures and aids are not available or established. Aerodrome Operating Minima (AOM) should be established for each location where a private aircraft is intended to be operated to or from under IFR using the recognised method of compliance. In this instance, the procedures detailed in the Joint Aviation Authorities (JAA) requirements JAR-OPS 3 were the expected standard for private helicopter operations as described in the UK Aeronautical Information Publication (AIP).

Recognising that interpreting and fully assimilating these requirements from the ANO is not immediately straightforward and in an effort to address this, we published a Safety Notice SN-2014/006 – *Private and Aerial Work Helicopter Operations - Guidance on Aerodrome Operating Minima for IFR Departures* shortly after the accident. This document provides explanation and guidance for private operators to help them establish their AOM and better understand the requirements. Nevertheless, the onus remains firmly on the pilot to ensure that any flight can be conducted safely.

As previously mentioned, in August this year operational rules in the ANO for flights of the sort in question will be replaced by rules in Commission Regulation (EU) No. 965/2012 – the Air Operations Regulation. The UK Rules of the Air 2007 have already been largely replaced by the European Standardised Rules of the Air (SERA). Although these new regulations cover the same obligations for the safe conduct of flight, their presentation and scope provide for an improved level of detail to the previous method.

In advance of this change, we are reviewing the contents of the Safety Notice and will re-issue it by the end of March with enhanced information and links to the Air Operations Regulation. This provide operators with a more logical and standard form of meeting their obligations and help the transition to the new regulations. At the same time, we will also update another Safety Notice regarding *"the Flight Planning and Safe Flight Execution"* to introduce additional risk assessments and safety strategies.

The results of our wider review into IFR outside controlled airspace will be used to address any shortcomings and provide a basis for working with other agencies such as the European Aviation Safety Agency (EASA) to progress any necessary changes in regulations or guidance. This review is scheduled to be completed by 30 September 2016. The improvements in technology and availability of IFR flight to a wider section of the general aviation community requires that traditional regulation be revisited and updated to ensure that necessary levels of safety are retained or improved.

Management of operations

The concerns in your report note that following the investigation into the previous helicopter accident affecting this operator, the Irish Air Accident Investigation Unit (AAIU) recommended that *"The UK CAA should consider the establishment of a special category for the operation of corporate aviation"*. In the responses to the AAIU, we accepted this recommendation and work

was started on developing such a category. However, at the same time a programme of work was being initiated in the JAA to establish requirements for such corporate type operations and a decision was made to consolidate resources on a European solution and not pursue a lone national one. In the meantime, we produced CAP 686 – *Corporate Code of Practice (Helicopters)* which sought to provide guidance and structure to operators of corporate helicopters. There was no obligation to comply with this guidance but it was considered as best practice. The JAA initiative transferred to EASA before being completed and has now emerged in the Air Operations Regulation. This requirement is in line with international standards and is probably the first such set of regulations adopted worldwide. As the development was extended with the change of responsibility, we updated CAP 686 in 2009 to bring it more into line with the developing regulations.

One of the driving elements of the JAA work was to establish a set of requirements for business or corporate flying to meet in order to provide an enhanced level of safety over pure private flying and closer to that of CAT but in a graduated and proportionate way. Unlike CAT, where passengers pay for a transport experience and expect high levels of safety, passengers and flight crew in business aviation can be obligated to fly under their terms of employment. This can introduce pressure to fly and poor decision making when otherwise they would not attempt it. As noted by the AAIB, this situation cannot be managed by regulation alone and we are actively involved with industry and international organisations to find more effective solutions. This will undoubtedly involve education and improved human factors training and to support this we are planning to hold a seminar later this year on safety culture for the commercial helicopter industry. Within the industry itself, this subject is also being addressed by the Corporate Aviation Safety Executive (CASE) with whom we work.

From 25 August 2016, operators of non-commercial complex aircraft, such as G-LBAL, will be required to make a declaration to the national Competent Authority (CAA for the UK) declaring that their organisation meets all the relevant requirements in the Air Operations Regulation. This is the first time that such measures have been applied under law and will require operators to meet stringent standards including having an accountable manager, an effective management system and procedures properly documented in their own operations manual detailing how all flights are to be managed and flown. The CAA will be required to conduct oversight of these organisations to ensure that they are compliant with the regulations. This is a level of contact that has not hitherto been required but is expected to help identify and better manage the risks in this sector of aviation. Although the new regulations will impose a higher level of effort for the operators, it is anticipated that this will also engender a more professional and safety conscious approach to their operations and an overall increase in safety.

Summary

We share the concerns raised within the AAIB and your reports together with other occurrences that have had similar causes. To that end, we are conducting a review of the rules appertaining to flight under IFR outside controlled airspace and will take any necessary action to improve the regulations and the safety of such operations. As previously noted, this review is scheduled to be completed by 30 September 2016.

We will renew our Safety Notices and update the associated AIP details to provide enhanced information for pilots and operators in advance of the transition to the European Air Operations Regulation. This is scheduled to be completed by the 31 March 2016.

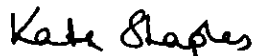
We believe that the new European regulations for operators of aircraft such as G-LBAL to be introduced in August 2016 will introduce a significant change to the way such operations are managed and overseen. The increased administrative burden of requirements will have an impact on such operations but it is anticipated that this will have a positive effect on safety and due to the required declaration process clearer identification of operators to the competent authorities providing the regulatory oversight.

Conclusion

The safety of aviation relies heavily on the conduct of operators and pilots to carry out their duties appropriately. Regulations provide a framework for safe operations but cannot guarantee that all flights will be achieved safely. Part of our Strategic Plan is to *"enhance aviation safety performance by pursuing targeted and continuous improvements in systems, culture, processes and capability"* and we will apply these principles in taking forward measures to prevent further deaths in circumstances such as those detailed in your report.

We believe that the measures discussed above will make significant improvements and help to achieve the aim.

Yours faithfully

A handwritten signature in black ink that reads "Kate Staples". The signature is written in a cursive, slightly slanted style.

Kate Staples
General Counsel and Secretary to the Civil Aviation Authority