

## ANGELA BROCKLEHURST – HM ASSISTANT CORONER FOR THE CORONER AREA OF WEST YORKSHIRE

# INVESTIGATION INTO THE DEATH OF MR SHAUN CROSSFIELD CIVIL AVIATION AUTHORITY RESPONSE TO A REPORT ON ACTION TO PREVENT OTHER DEATHS PURSUANT TO REGULATIONS 28 & 29 OF THE CORONERS (INVESTIGATIONS) REGULATIONS 2013

### **Introduction**

The UK Civil Aviation Authority ('CAA') would first like to express its sincere condolences to the family and friends of Mr Crossfield.

The CAA is a public corporation, established by Parliament in 1972 as an independent specialist aviation regulator. The CAA works so that:

- the aviation industry meets the highest safety standards,
- consumers have choice, value for money, are protected and treated fairly when they fly,
- through efficient use of airspace, the environmental impact of aviation on local communities is effectively managed and CO<sub>2</sub> emissions are reduced,
- the aviation industry manages security risks effectively.

The CAA has carefully considered the Regulation 28 Report to prevent future deaths issued by the Assistant Coroner for West Yorkshire ('the Report'), including the following recommendation that is considered relevant to its role and functions:

The Deceased prior to commencing his flight had repaired both propeller blades on his aircraft himself, which had previously been damaged, and during his flight the left hand control line came into contact with an uneven repaired section of the propeller. The propeller was turning under power at that time causing the line to be entrapped and partially severed. The tension upon the control line instigated a rapid and dynamic turn leading to a spiral dive from which the deceased was unable to recover before impacting upon the ground. It appears to be the case that no regulatory authority is available to control the quality or airworthiness of the class BGD Luna 2 Paraglider flown by the deceased. The absence of such quality control and licensing for use and registration of such aircraft does provide the opportunity for future deaths to occur. Had a mandatory inspection and certification of fitness been carried out and imposed by qualified inspectors, in all likelihood such a death as suffered by the deceased may not have occurred.

The CAA was not an Interested Person at this inquest. As such, it did not have access to the evidence. When preparing this response, with a view to future action, the CAA has relied on the information contained in the Report, together with information shared between the CAA and the British Hang Gliding and Paragliding Association ('BHPA'), including the accident report GBR-2022-27371 prepared by the BHPA.

#### Background to the CAA's Regulation of the General Aviation Sector

'General Aviation' is considered to incorporate all civil aviation in the UK other than scheduled commercial air transport. Within the CAA, the General Aviation Unit regulates non-complex aircraft including microlights, amateur built and historic aircraft, balloons, gliders, piston twins and singles up to 5,700kg maximum take-off weight and single pilot helicopters up to 3,175kg. The General Aviation Unit is broadly focussed on the regulation of private transport, sport, and recreational flying, including civilian air display flying, though it does also include some commercial activity, such as certain flight training, aerial work activity, and passenger flying in certain historic aircraft.

The CAA's statutory functions in relation to General Aviation activities are set out in various pieces of legislation: including the Civil Aviation Act 2012, various assimilated regulations, as well as in secondary legislation, principally, the Air Navigation Order 2016, as amended ('ANO'). The CAA may only conduct functions given to it under, or pursuant to, legislation.

The CAA works closely with those that operate and conduct aviation activities with a view to maintaining high levels of safety performance in civil aviation. As with all regulated activities however, the obligation to ensure safety is placed upon organisations and individuals that undertake aviation activities, not the regulator.

#### Self-Propelled Hang Gliders

Self-Propelled Hang Gliders ('SPHG's') are defined in the ANO, and are more commonly known as 'Paramotors', 'Powered Paragliders' and 'Powered Hang Gliders'. SPHG's have no regulated status and are not therefore subject to specific licensing or airworthiness requirements.

Due to their light and simple design, SPHG's are amongst the most basic general aviation aircraft to operate and maintain. Their limited construction results in there being minimal risk of airworthiness defects.

SPHG activity usually takes place at minimal speeds in non-populated areas. These aircraft operate with low kinetic energy and mostly below 3,000ft agl, therefore the risk to third parties that is presented by this activity is considered low.

The CAA manages an aviation safety occurrence reporting system (known as 'ECCAIRS') which contains data on aircraft accident and incident rates. From this system, the CAA has noted that since 2010 there have been a total of 6 fatal injuries involving an SPHG aircraft and a total of 19 serious injuries, all occurring prior to 2017. Since 2017 there are no records of fatal or serious injury occurrences in an SPHG aircraft save for this tragic accident involving Mr Crossfield.

Based on these figures, the CAA considers that the accident rates for SPHG activities remain low and stable.

As SPHG's are defined under the ANO as aircraft, the pilot-in-command ('PIC') of an SPHG is required to comply with the rules of the air whilst operating, including the operational requirements set out in the ANO.

It remains the responsibility of the PIC of any aircraft to operate that aircraft in a safe manner. The PIC is responsible for ensuring the safety of the aircraft and should only commence a flight if they are satisfied that the aircraft is airworthy, the weather conditions are suitable and that they are not incapacitated from performing duties by any cause such as injury, sickness, fatigue, or the effects of any psychoactive substance.

Optional pilot training for SPHG pilots is available from various specialist clubs, schools and independent instructors. The BHPA provide a syllabus, qualification and membership scheme for SPHG pilots and instructors.

The basis for all aviation safety regulation will be informed by taking a risk-based approach which incorporates several factors including, but not limited to assessing; relevant UK aviation safety data, third party risks, proportionality, impact and cost.

Given the available safety data, it is the opinion of the CAA that the probability of an SPHG accident having unintended consequences for uninvolved third parties remains low. The consequences of such an occurrence, given the lightweight profile of these aircraft, are also considered to be low, when compared to more complex aviation activities that create greater risks to the public, including private transport, flight training and commercial operations.

Consequently, the CAA does not consider that it would be proportionate, or in line with the UK's risk-based approach to aviation safety regulation to introduce mandatory airworthiness requirements for SPHG aircraft at this time.

The CAA considers those who operate SPHG aircraft understand and accept the risks when undertaking SPHG activity.

As with any activity that involves risk, the regulation and operation of General Aviation activities requires a balance between proportionate controls and avoiding disproportionate constraints on activities that people value.

#### Next Steps

Whilst the CAA maintains that the safety risks associated with SPHG activity remain low and responsibility for the safety of all such operations rests solely with those who choose to fly these aircraft, as a result of the circumstances of the tragic accident involving Mr Crossfield the CAA does consider that it would be appropriate to act on the recommendation outlined in the Report.

The CAA therefore considers that it would be appropriate for it to publish new safety guidance on the importance of maintaining the airworthiness of all operational SPHG aircraft to a high standard.

The CAA has previously worked with the BHPA to update and revise the <u>Paramotor Code</u> published by the CAA in August 2023. This document incorporates best practise for SPHG pilots, focussing on the rules of the air and the risks associated with airspace infringements.

The CAA will therefore continue to work closely with the BHPA to ensure revised guidance is now incorporated into the <u>Paramotor Code</u> on the safe maintenance of SPHG aircraft. This revised guidance will be published, distributed to SPHG pilots and the wider General Aviation community in or before September 2024.

The CAA will also commence a project of work in or before November 2024 to explore ways to improve pilot performance, knowledge of the rules of the air and aircraft maintenance. This project will include an assessment of whether additional regulation to improve training for SPHG pilots is appropriate. The CAA will ensure that the concerns identified by the Assistant Coroner in the Report will be specifically highlighted as part of this process.

Head of General Aviation Civil Aviation Authority

8 March 2024