C.G.BUTLER
SENIOR CORONER · BUCKINGHAMSHIRE

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **1. Civil Aviation Authority**
1	**CORONER** I am CRISPIN GILES BUTLER senior coroner, for the coroner area of Buckinghamshire
2	**CORONER'S LEGAL POWERS** I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and Regulations 28 and 29 of the Coroners (Investigations) Regulations 2013. http://www.legislation.gov/uk/ukpga/2009/25/schedule/5/paragraph/7 http://www.legislation.gov.uk/uksi/2013/1629/pdfs/uksi/2013/1629/part/7/made
3	**INVESTIGATION and INQUEST** On 20th November 2017 I commenced an investigation into the deaths of Jaspal Singh BAHRA, Saavan Singh MUNDAE, Michael Leonard GREEN and Thanh Trung NGUYEN The investigation concluded at the end of the inquest on 2nd May 2019. The conclusion of the jury at inquest was that each man died from multiple injuries and each death was as a result of an accident.
4	**CIRCUMSTANCES OF THE DEATHS** Mr Bahra and Mr Mundae were flying in a Cessna 152 light aircraft and Mr Green and Mr Nguyen were flying in a Guimbal Cabri G2 helicopter when the two collided over Wilderness Wood, near Waddesdon Manor in Buckinghamshire. This led to a rapid descent by both craft through trees, impacting with the ground in the woodland. All of the men died at the scene from the injuries they respectively sustained.
5	**CORONER'S CONCERNS** During the course of the inquest the evidence revealed matters giving rise to concern. In my opinion there is a risk that future deaths could occur unless action is taken. In the circumstances it is my statutory duty to report to you. The **MATTERS OF CONCERN** are as follows. – (1) It was clear from the evidence of The Air Accidents Investigation Branch (AAIB) and The Civil Aviation Authority (CAA) that aircraft such as the two involved in this collision operate in unregulated Class G airspace such as exists in the area of this collision without the requirement to carry any inter-craft electronic proximity warning or collision avoidance devices and are primarily kept safe by operating under the "See and Avoid" procedure which remains the same today as it was on 17th November 2017 (when the

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	collision occurred). It appears this has also been the case for many years before that. This procedure is entirely reliant upon pilots seeing other craft and undertaking periodic clearing turns to try to bring craft into view which might be concealed by a blind spot particular to that craft. It was the view of the AAIB that the "See and Avoid" procedure was central to the cause of this collision. Although evidence was given by CAA about movement towards the introduction of electronic devices, it was clear that, without universal application, small craft would remain at risk and that timescales for implementation are unclear, leaving "See and Avoid" as the continuing process by which these types of craft avoid collisions. (2) Although it could not be demonstrated that exposure to Carbon Monoxide prior to or during flight played a part in the implementation of "See and Avoid" or the collision, evidence demonstrated that it is not mandatory for light aircraft such as were involved in this collision to carry any Carbon Monoxide monitors or warning devices, notwithstanding their potential availability. Given the regular service requirements for such craft and the possible limitations in identifying hairline cracks or hidden defects in aircraft exhaust and heating systems, there remains a risk that pilots and passengers may be exposed to Carbon Monoxide in such craft which might directly put them at risk of death or might put the craft at risk of collision or accident carrying with that the inherent risk of death.
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe you have the power to take such action.
7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by 13th July 2019. I, the coroner, may extend the period. Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed.
8	**COPIES and PUBLICATION** I have sent a copy of my report to the Chief Coroner and to the following Interested Persons: 1. The respective families of Messrs Bahra, Mundae, Green and Nguyen 2. AAIB 3. Airways Aero Associates and the insurers for the Cessna 152 4. V21 Ltd t/a Helicopter Services and Heligroup Ltd and the insurers of the Guimbal Cabri G2 helicopter 5. European Aviation Safety Agency I am also under a duty to send the Chief Coroner a copy of your response.

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	The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time of your response, about the release or the publication of your response by the Chief Coroner.
9	**17th May 2019** **Crispin Butler, Senior Coroner for Buckinghamshire**

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