AIRCRAFT ACCIDENT REPORT No 6/2010

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REPORT ON THE ACCIDENT BETWEEN GROB G115E TUTOR, G-BYUT and GROB G115E TUTOR, G-BYVN NEAR PORTHCAWL, SOUTH WALES ON 11 FEBRUARY 2009

Registered Owner and Operator:	VT Aerospace Limited
Aircraft Types:	Two Grob Aerospace 115E Tutors
Nationality:	British
Registrations:	1) G-BYUT 2) G-BYVN
Location of Accident:	3 nm north-north-west of Porthcawl, South Wales Latitude: 51° 31.5' N Longitude: 003° 43.8' W
Date and Time:	11 February 2009 at 1047 hrs All times in this report are UTC

Synopsis

The accident was reported to the Air Accidents Investigation Branch (AAIB) on 11 February 2009 at 1107 hrs. A field investigation was commenced immediately. A Royal Air Force (RAF) Service Inquiry was also convened, which conducted a parallel investigation. The following inspectors participated in the AAIB investigation:

Mr P Taylor	Investigator in Charge
Mr K W Fairbank	Operations
Mr A Cope	Engineering
Mr S Moss	Engineering
Mr P Wivell	Flight Data Recorders

The two aircraft involved in the accident were based at MOD St Athan near Cardiff and were engaged on air

experience flights when they collided in midair. The aircraft were piloted by RAF pilots and each aircraft carried an air cadet as a passenger. The collision occurred in uncontrolled airspace in fine weather, in an area which was routinely used by St Athan based Tutor aircraft.

The investigation identified the following causal factor:

 Neither pilot saw the other aircraft in time to take effective avoiding action, if at all.

The investigation identified the following contributory factors:

1. The nature of the airspace and topography of the region reduced the available operating

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area such that the aircraft were required to operate in the same, relatively small block of airspace.

- 2. There were no formal procedures in place to deconflict the flights, either before or during flight.
- The small size of the Tutor and its lack of conspicuity combined to make visual acquisition difficult in the prevailing conditions.
- At various stages leading up to the collision, each aircraft was likely to have been obscured from the view of the pilot of the other aircraft by his aircraft's canopy structure.

Fifteen Safety Recommendations were made by the RAF Service Inquiry (SI) panel. No further recommendations have been made in this report.

Findings

- 1. Both aircraft were serviceable prior to the collision.
- 2. Both pilots were correctly qualified and experienced.
- 3. The weather was suitable for the proposed flights.
- 4. All required pre-flight activities had been completed.
- 5. Neither pilot was in contact with ATC, and was not required to be.

- 6. Neither aircraft was equipped with an electronic CWS.
- The primary method of collision avoidance was visual – see and be seen.
- 8. The physical size of the Tutor, together with its all white colour scheme would have made it difficult to acquire visually in the prevailing conditions.
- 9. It is likely that each aircraft was physically obscured from the other pilot's view at various times leading up to the collision, thus opportunities to acquire the other aircraft were limited for both pilots.
- 10. Neither aircraft appeared to take avoiding action.
- 11. The collision occurred in uncontrolled airspace.
- 12. The midair collision was catastrophic for both aircraft.
- 13. Successful abandonment was unlikely in the height and time available.

Safety Recommendations and actions

In view of the wide-ranging recommendations made by the RAF SI panel (Section 1.18), and the responses by the convening authority, no further Safety Recommendations were considered necessary by the AAIB.

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