AIRCRAFT ACCIDENT REPORT No 8/2010

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REPORT ON THE ACCIDENT BETWEEN CESSNA 402C, G-EYES and RAND KR-2, G-BOLZ NEAR COVENTRY AIRPORT ON 17 AUGUST 2008

Registered Owner and Operator:	 Reconnaissance Ventures Limited Privately owned
Aircraft Types:	 Cessna 402C Rand KR-2
Registrations:	 G-EYES G-BOLZ
Place of Accident:	Close to Coventry NDB, approximately 3.0 nm from Runway 23 threshold at Coventry Airport
Date and Time:	17 August 2008 at approximately 1036 hrs (All times in this report are UTC, unless otherwise stated)

Synopsis

The accident was notified to the Air Accidents Investigation Branch (AAIB) by Warwickshire Police shortly after it occurred; an AAIB field investigation was commenced immediately.

Cessna 402C aircraft G-EYES was engaged in flight calibration training and was making an ILS approach to Runway 23 at Coventry Airport when it was involved in a mid-air collision with a Rand KR-2 aircraft, G-BOLZ, operating in the visual circuit. The collision occurred in Class G (uncontrolled) airspace. The four occupants of G-EYES and the single occupant of G-BOLZ received fatal injuries.

The investigation identified the following primary causal factor:

The two aircraft collided because their respective pilots either did not see the other aircraft, or did not see it in time to take effective avoiding action.

The investigation identified the following contributory factors:

- 1. The likelihood that the crew of G-EYES would see G-BOLZ in time to carry out effective avoiding action was reduced by the small size of G-BOLZ, its position relative to G-EYES and the high rate of closure between the aircraft.
- 2. Insufficient or inaccurate information was provided to the pilots, which did not assist

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them in fulfilling their duty to take all possible measures to avoid collisions with other aircraft.

- 3. The Aerodrome Controller's sequencing plan, which was based on an incomplete understanding of the nature of G-EYES' flight, was unlikely to have been successful. By the time the risk of a collision was identified, it was too late to devise an effective method of resolving the situation.
- 4. There were no effective measures in place to give G-EYES priority over traffic in the visual circuit.

As a result of this accident one Safety Recommendation was made.

Findings

- 1 The crew of G-EYES and the pilot of G-BOLZ were properly licensed and qualified to conduct their respective flights.
- 2 The air traffic controllers involved held relevant Certificates of Competence for their respective roles.
- 3 G-EYES and G-BOLZ were correctly maintained and were serviceable for their respective tasks.
- 4 Both aircraft appeared to have been operating normally before the collision.
- 5 All relevant ATC equipment was serviceable.

- 6 The collision occurred in Class G (uncontrolled) airspace and outside the Coventry Airport ATZ.
- 7 There was no evidence to suggest that the pilots took action to avoid the collision.
- 8 G-BOLZ was on a constant bearing relative to G-EYES for approximately three minutes prior to the collision.
- 9 It was estimated that at the point of collision G-BOLZ was crossing G-EYES' track at an angle of 43° and that G-EYES was overtaking G-BOLZ at a relative speed of approximately 106 kt.
- 10 The sightline to G-BOLZ from the front right seat of G-EYES probably intersected the canopy behind, or slightly to the left of, the windscreen central pillar.
- 11 The pilot of G-BOLZ was not informed about G-EYES approaching on the ILS.
- 12 At the time the crew of G-EYES was advised that G-BOLZ (number 2 in the landing sequence) was turning final inside the Coventry NDB, the PA-28 (number 1 in the landing sequence) was turning final inside the Coventry NDB. G-BOLZ had not yet completed its base leg.
- 13 The ATC Instrument Training booking sheet for G-EYES was annotated 'ILS calibration work' but this was incorrectly transferred to the flight progress strip as 'IRT', denoting Instrument Rating Training.

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- 14 The ADC was not aware that G-EYES was undertaking calibration training because the flight progress strip was annotated with 'IRT'.
- 15 The operator of G-EYES did not appear to have followed the procedures outlined in its SMS that were to be used when undertaking a new flying activity because no risk analysis was produced, and there was no evidence that the planned calibration training had been discussed at the monthly safety meetings.
- 16 There was no discussion between the operator and ATC managers about the planned calibration training flights and how they would be integrated with other traffic.

Safety Recommendation

The following Safety Recommendation was made:

Safety Recommendation 2010-003

It is recommended that the Civil Aviation Authority ensures that the requirement in Part 1 of the Manual of Air Traffic Services for Aerodrome Control to issue *'information and instructions to aircraft under its control to achieve a safe, orderly and expeditious flow of air traffic and to assist pilots in preventing collisions'* is suitable, sufficient and complied with.