

## **AIRPROX REPORT No 2011112**

Date/Time: 29 Aug 2011 1040Z

Position: 5145N 00146W  
(8nm W Brize Norton)

Airspace: Oxford AIAA (Class: G)

Reporting Ac Reported Ac

Type: TriStar Untraced Paramotor

Operator: HQ Air (Ops) NK

Alt/FL: FL045↑ NK  
SPS NK

Weather: VMC CLBL NK

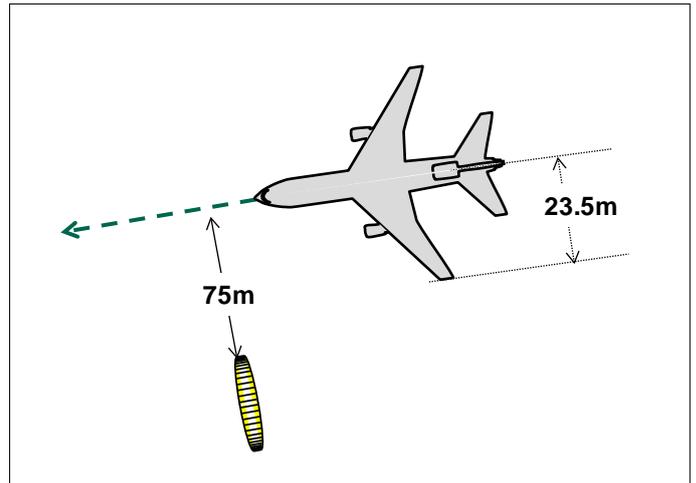
Visibility: 9km NK

Reported Separation:

0ft V/75m H NK

Recorded Separation:

NR



## **PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

**THE TRISTAR PILOT** reports they departed Brize Norton on the RW26 MALBY SID at 1035Z, in receipt of a TS from Brize Departure, squawking with Modes C and S. On turning onto the 285° radial at 8-9nm the pilot noted large numbers of TCAS contacts with no height information and alerted the flight deck crew to be extra vigilant. This was immediately backed up by ATC who informed them of a large number of contacts in the Kemble O/H. The Crew had initially elected to receive a TS but this was almost immediately upgraded to a DS.

At approx 8-9nm, just as the DS was being requested, the pilot noticed a yellow parachute-sized object in his L, 11 o'clock, approx level with the ac at a distance of ½nm. [On a subsequent telephone conversation it was understood that it was a paramotor]. The 'ac' passed rapidly down their LHS at a distance of about 75m. ATC was informed and the ac turned onto a S'ly heading.

A check of all ac systems was completed as they suspected a collision might have occurred. ATC were passed details of the Airprox but confirmed that they had no contacts on radar.

Of note - even under a DS and with the benefit of TCAS, lookout was the only defence against this potentially catastrophic incident. However, at 250kts indicated airspeed and an all up weight of 234 tons, the pilot believed they would have been unable to manoeuvre the ac in time for avoiding action to have taken effect if the ac had been closer.

He assessed the risk as being very high.

ATC have submitted a similar Airprox report detailing this incident from an ATC perspective.

METAR EGVN 1050Z: 290/09 9999 FEW035 SCT050 BKN250 +16/+7 1018h.

**THE PARAMOTOR PILOT** could not be traced.

**THE BRIZE DEPARTURE CONTROLLER** (APP) reported that he was controlling Zone and Approach, when the TriStar was released for a standard MALBY join. The ac called airborne and was identified but he was concerned by a large number of primary contacts in the vicinity of Kemble and

negotiated with Sector 23 for a heading towards SIREN to join CAS. The Tristar pilot advised that he would like a TS but he advised him of the large number of primary contacts and explained that he could give him a vector towards SIREN for his join. As the pilot considered this option, he then requested a DS so he immediately gave him an avoiding action turn to a heading of 170°.

At that point, the other pilot, who he thought was the ac commander, advised him that they had just had an Airprox with a coloured paraglider. He told him that there were no radar contacts in his immediate area and noted the time and position. The Controller then updated the pilot on the position of the primary contacts and when he was happy that he would maintain separation, released the ac to London with further climb to FL120, as advised by Sector 23.

The Supervisor was in the TWR and did not witness the incident.

**BM Safety Management** reports that the paramotor does not appear on the radar replay; consequently the investigation was based upon the R/T transcript and the occurrence reports.

The Tristar exited the BZN CTR at 0937:46 en-route to MALBY and was placed under a TS. At 0938:03 APP contacted the LACC S23 Planner and stated that the TriStar was, *“on a MALBY. I’ve got a lot of primary traffic to...surrounding Kemble...he’s a fairly slow climber, are you happy if I put him on a heading towards let’s say SIREN initially?”* The LACC S23 Planner agreed this course of action with the landline call completed at 0938:24. SIREN is approximately 10nm E of MALBY.

At 0938:28 APP informed the TriStar of *“multiple primary contacts in the Kemble area, um, all height unknown, all manoeuvring, are you happy to continue or would you like a vector, happy with a vector towards SIREN if that helps?”*; in reply, the Tristar requested a DS.

At 0938:44 APP acknowledged the TriStar’s request, stating, *“avoiding action, turn left immediately heading one seven zero degrees, Deconfliction Service.”* No TI was provided with this avoiding action; consequently, it has not been possible to determine what the turn was planned to avoid.

At 0938:49, the TriStar read back the avoiding action turn and stated that they had, *“just had a er an Airprox with an unknown er it looked like a er a kite or paraglider”*. APP replied that they saw, *“absolutely nothing on radar”* thus suggesting that the avoiding action turn issued at 0938:44 was against un-related traffic.

As identified by the TriStar’s crew, given that the paramotor was not displayed on the BZN surveillance display, the ATM related safety barriers were unable to operate and the only defence against this occurrence was lookout.

UKAB Note (1): Although the TriStar can be seen on radar the Paramotor does not show at any time.

**HQ AIR (OPS)** comments that there is no doubt that a definite hazard existed. The TriStar crew were coordinating effectively with Brize ATC to obtain separation on known contacts. However, this incident highlights the risk of encountering small non-transponding ac in Class G airspace, the defence against which is limited to effective lookout. The operators of such ac must understand the elevated risk they expose themselves to when flying in the arrival and departure lanes of busy airfields such as Brize Norton without ATC coordination.

## **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available included reports from the TriStar pilot, transcripts of the relevant RT frequency, radar recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

Members were surprised that the Paramotor pilot did not submit a report, as they agreed unanimously that his ac would have encountered significant wake turbulence just after the TriStar passed it.

Members agreed with the TriStar pilot and HQ Air Ops that the 'See and Avoid principle' was not designed for these circumstances and does not work as envisaged in them. That being the case, Members considered that flying (any ac) in the departure lane of a busy airfield operating large transport ac and just above its associated airspace (even though it is Class G airspace) is at best ill-advised.

Without a report from the Paramotor pilot, it could not be determined at what stage he saw the approaching TriStar. The Board noted the Controllers were pro-active and did what was required of them but, since the Paramotor did not show on their radar displays and was unknown to them, they were unable to provide the TriStar crew with any warning. Therefore the Board considered that the TriStar crew had seen the Paramotor as early as might reasonably be expected and that the Cause of the Airprox was a Conflict in the Oxford AIAA.

When assessing the degree of risk, Members considered the proximity of the Paramotor to the TriStar, that the former did not paint on the radar so no warning could be issued by ATC and the lack of manoeuvrability of the TriStar (or paramotor) at the very high all-up weight. Bearing these in mind, Members agreed that even if the TriStar crew had seen the Paramotor a short time earlier (say as soon as visually practicable) it is unlikely that they would have been able to change their flightpath substantially and provide 'safe' separation; that being the case this incident had been close to a collision which the TriStar crew could not have prevented.

### **PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: A conflict in the Oxford AIAA.

Degree of Risk: A.