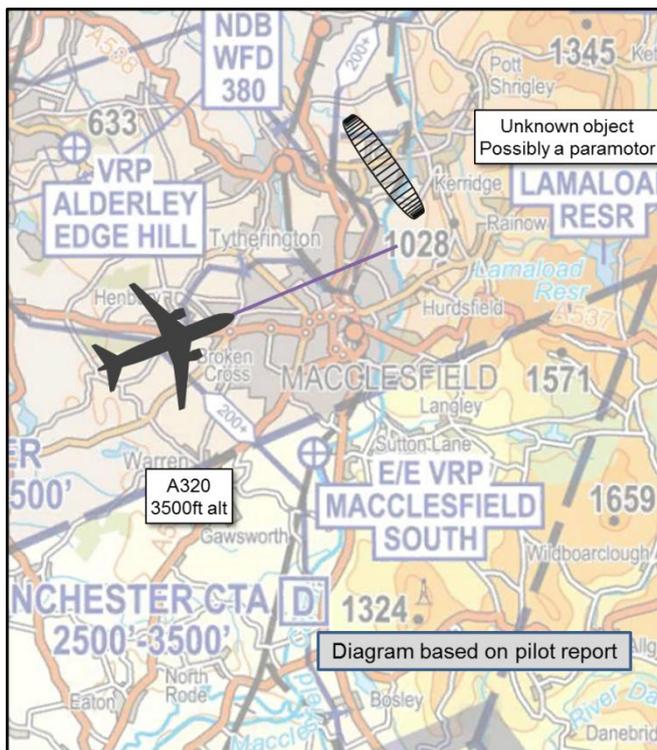


AIRPROX REPORT No 2014089Date/Time: 13 Jun 2014 1336ZPosition: 5316N 00205W
(7nm SE EGCC)Airspace: Manchester CTR (Class: D)Aircraft 1 Aircraft 2Type: Airbus A320 NKOperator: CAT UnknownAlt/FL: 3500ft NK
QNH (1024hPa)Conditions: VMC NKVisibility: >10KReported Separation:

300ft V/0.05nm H

Recorded Separation:

NK

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

THE A320 PILOT reports undertaking a go-around at Manchester airport when he and the first officer saw, for approximately 3-4 seconds, what they believed to be a person below a parachute/paraglider, although neither can categorically remember seeing a canopy because they were focusing on what appeared to be a person suspended below. They first sighted the object a few hundred metres in the 11 o'clock position 200-300ft above, it passed down the left-hand side of the aircraft at 100-200m. The crew only saw it fleetingly, there was no time to take avoiding action, and they reported that they based their assumptions on it being a person under a canopy, but couldn't be certain that it wasn't a person-shaped balloon. They immediately reported it to the Manchester controller.

He assessed the risk of collision as 'High'.

THE PARACHUTE/PARAGLIDER/PARAMOTOR PILOT could not be traced. Despite good radar coverage in the area, and the A320 being visible throughout, no conflicting traffic could be seen.

THE MANCHESTER CONTROLLER reports that, at 1336, when in the vicinity of Macclesfield and level at 3500ft, the A320 pilot reported seeing an object 2nm behind his current position. The pilot stated on the r/t that he had no idea what it was, a balloon or someone on a parachute, nothing was observed on radar in that area. On landing the pilot telephoned to provide further information, and stated that he had observed the object for 4-5 seconds and that it passed down the left-hand side of the aircraft, the object was the size and shape of a man, but may have been bigger if it was more distant.

Factual Background

The weather at Manchester was recorded as:

EGCC 131320Z 32005KT 270V350 9999 FEW040 BKN048 21/12 Q1025 NOSIG=

Analysis and Investigation

CAA ATSI

The A320 had been sent around from a previous approach. Whilst repositioning for the ILS to 23R, level at 3500' heading approx 060 degrees, both the Captain and the First Officer saw what appeared to be a person in a parachute or paraglider just to the left of 12 o'clock of the aircraft. The unknown object passed 100-200m from the A320 approx 2-300ft above. The crew reported the incident to Manchester ATSU. The unknown object was not visible on area radar recordings.

UKAB Secretariat

The BHPA confirmed that the weather after-cast for that day precluded the flight of a paraglider in that position at that time of the day; furthermore, there is no evidence of any parachuting in the area. Whilst the presence of a paramotor cannot be ruled out, it has not been possible to trace any such aircraft and there were no reports from other pilots in the area of a balloon or any other sighting of the unknown object. Notwithstanding, if the unknown object was indeed a paramotor then it was being operated within Manchester's CTR/TMA airspace without its pilot having established radio contact or having obtained permission so to do.

Comments

BHPA

An Instructor operating at a site some 5 nm from the incident confirmed the accuracy of the after-cast and the 'impossibility' of a paraglider being at that height and location at that time. For the following two reasons the BHPA believes that the object was not a paramotor:

1. "Neither [pilot] can remember seeing a canopy". The canopy of a paramotor is far larger than the pilot and engine combination, and at a distance of "a few hundred metres" from and "200-300ft above" the A320, the BHPA opined that in their opinion the canopy would have been the more obvious object by a significant margin.
2. Although paramotors are known to have a poor radar signature, the location is reported as having "good radar coverage", and so the BHPA opined that there would likely have been some weak returns in the at least 15 to 20 minutes that a typical paramotor would have taken to reach that height and return to land. [UKAB note: the processing and display of radar returns would be subject to speed minima algorithms within the radar processor that are designed to filter out slow-moving ground targets such as vehicles etc. It is likely that a paramotor would be flying at below these thresholds].

Summary

An Airprox was reported on 13 June 2014 at 1336 in the vicinity of Macclesfield between an A320, under a Radar Control Service from Manchester, and an unknown object, that the crew believed to be a parachute/paraglider/paramotor with a man suspended below, which could not be traced.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilot of the A320, transcripts of the relevant RT frequencies, radar photographs/video recordings and reports from the air traffic controllers involved.

The Board agreed that it was unfortunate that there was really no information that could lead to identifying the unknown object. This was frustrating to both the Board and the pilots concerned who had clearly seen something or someone but there was no way of corroborating what they had reported. The Board noted the BHPA's assertion that it was unlikely to be a paramotor given that the canopy would have been obvious, (although many human factors psychological selective attention

tests have shown that even quite obvious things can be missed visually even when one is focusing on a particular element or activity¹). During the course of the paramotor discussion, the subject of radar speed gates, or moving target indicator (MTI) minimum speeds was also raised; these are set at different levels for different radars and different operating conditions, and it was not known at what speed the MTI was set at Manchester [post meeting note, Manchester have been asked to provide this information subject to releasability]. Some members wondered whether this was the reason that the controller couldn't see anything in the vicinity on the radar given that a slow-moving object such as a paramotor would likely be flying below the threshold for display on the radar.

Given the uncertainty over a paramotor, the information that the after-cast had apparently precluded the unknown object being a paraglider and, with no evidence of parachuting or ballooning in the area either, the Board simply had to conclude that there was not enough data to determine the cause of the Airprox; therefore the risk was classified as Category D, insufficient information.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Insufficient Information.

Degree of Risk: D.

ERC Score²: N/A.

¹ E.g. Simons and Chabris (1999) at <http://youtu.be/vJG698U2Mvo>.

² Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.