

AIRPROX REPORT No 2012046

Date/Time: 27 Mar 2012 1646Z

Position: 5558N 00128W
(Newcastle - elev 266ft)

Airspace: Newcastle CTA (Class: D)

Reporting Ac Reported Ac

Type: A319 Hot Air Balloon

Operator: CAT CAT

Alt/FL: 3500ft 3500ft
NK QNH

Weather: VMC CAVOK VMC CAVOK See Fig 1.

Visibility: 10km >20km

Reported Separation:

0ft V/0m H 200ft V/<1nm H

Recorded Separation:

NRV /0.8nm H

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE A319 PILOT reports flying a scheduled passenger flight, IFR from Belfast inbound to Newcastle squawking as directed with Modes C and S; TCAS was fitted but gave no indications at the time of the incident. They were in receipt of vectors from Newcastle APR, heading 140° at 250kt, S of the RW07 extended centreline at about 20nm. As they were turned N to establish on the ILS he saw off the left wing tip a large hot air balloon less than 1nm away and about 500ft above them. The balloon pilot had made no radio transmissions while they were on the frequency.

They avoided it without any aggressive manoeuvring.

They understood that Newcastle ATC were also filing a report as the Balloon was inside the CTZ/A.

THE HOT AIR BALLOON PILOT reports that following take off from a site which was 800ft amsl the balloon was climbed to 2000ft to avoid livestock downwind, having been advised of a recent problem by a local balloonist.

When they were 10min into the flight the wind dropped dramatically to less than 1kt, so they climbed (outside CAS) in order to investigate winds at different levels, but there was no significant difference; when steady at about 3500ft they could not detect any movement over the ground.

He was busy transmitting to his ground support party when an ac passed close to them, heading about N and passing to their E. The ac was in straight and level flight and they saw no avoidance being taken. He assessed the risk as being low/none.

His flight was plagued by light and variable winds and it took another 60min to travel a straight-line distance of 2nm to final landing position.

The pilot attached an Ordnance Survey map showing the track of the balloon and overlaid on the map is the relevant section of Newcastle CTA.

ATSI reports that the Airprox occurred at 1645:53, 12nm SW of Newcastle Airport, on the boundary of the Newcastle Control Area CTA-4, Class D controlled airspace (CAS) between an Airbus A319-111 (A319) and a Lindstrand LBL 260A Hot Air Balloon (Balloon). The A319 was inbound to Newcastle airport IFR from Belfast Aldergrove (EGAA), in receipt of a DS, upgraded to a RCS when it entered CAS. The Balloon had departed VFR from Slaley Hall, a private site just to the W of the boundary of Newcastle Control Area CTA-4 Class D CAS, which has a base of 3000ft. The Balloon pilot did not contact Newcastle Radar but reported listening out on the frequency [before the CPA].

CAA ATSI had access to RTF recording, NATS Area Radar and Newcastle ATSU radar recordings, with reports from the controller and two pilots.

The Newcastle weather was:

METAR EGNT 271620Z 10004KT 8000 NSC 20/06 Q1035=
METAR EGNT 271650Z 10005KT CAVOK 20/05 Q1034=

At 1638:22, the A319 contacted Newcastle Radar (RAD) on handover from Scottish Control. The A319 was identified by RAD, 34nm W of Newcastle and a DS service was agreed; the A319 was then descended to FL070.

At 1638:49, the A319 pilot reported a possible nose gear (inflation) problem and warned that after landing the aircraft might need to stop on the RW. The A319 was turned onto a heading of 115° and descended to an alt of 3500ft on the QNH of 1035hPa.

At 1640:41, RAD advised the A319 pilot that he was number 2 in the arrival sequence, but planned to delay the arrival, to allow two departures to get airborne before his landing; the A319 pilot then reported reducing speed.

The Newcastle radar display showed a number of spurious returns, (anomalous propagation) resulting from the high pressure atmospheric conditions; one of these contacts was subsequently believed to be the Hot Air Balloon.

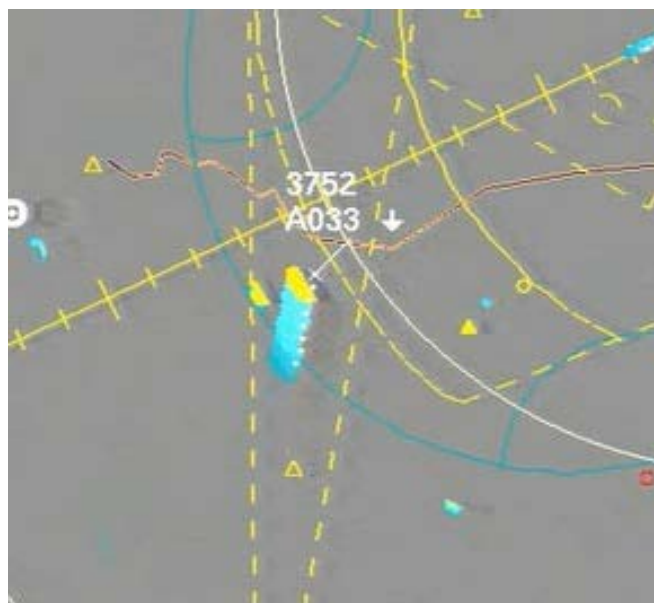


Fig 1. (1646:06)

At 1643:47, the A319 was turned left onto a heading of 015° and as it crossed the boundary of CAS the controller changed the service to a RCS.

At 1645:30, the A319 was given descent to an alt of 2500ft and at 1645:46, the pilot reported, “er (A319)c/s sorry also we’re just passing a Balloon very very close he’s just to our left here probably er less than 5 miles”. The controller replied, “OK what altitude - can you tell” and the pilot responded, “Er slightly higher than us about 4000ft er white and black ...” This was acknowledged by RAD and the A319 was turned right onto a heading of 050° to intercept the RW 07 localiser and then continued the approach without further incident.

The CPA occurred at 1645:53, as the A319 passed 0.8nm E abeam the radar contact which was believed to be the Hot Air Balloon. At that point the A319 was indicating an alt of 3500ft and the pilot reported that the Balloon was at a higher level.

From the data available to CAA ATSI, it was considered likely the Hot Air Balloon drifted inside CAS before descending below the base of the control zone. The Balloon pilot had been operating close to boundary of CAS and indicated that he was listening out on the Approach (Radar) frequency 124.375MHz. It was not clear why the pilot had not called in order to improve the SA of both ATC and other airspace users.

It is likely that the workload of the A319 crew was high in preparation for the landing with a nose wheel problem and they did not report visual sighting of the balloon until about 20sec before the CPA. The pilot’s report indicated that the Balloon was ‘avoided without any aggressive manoeuvring’ but he was concerned about the close proximity of the balloon which had no transponder or radio contact.

The Airprox occurred when the Hot Air Balloon, which was operating close to the boundary of CAS, was believed by CAA ATSI to have crossed marginally into Class D CAS without an ATC clearance and into potential conflict with the A319.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequencies, radar recordings, reports from the air traffic controllers involved and reports from the appropriate ATC authorities.

The Board was shown a photograph taken by a balloon passenger on a mobile telephone apparently showing the A319 slightly below them. The poor quality of the photograph and the lack of camera technical details precluded a full analysis.

Due to the lack of positive information, in particular altitude information on the balloon, the Board could not positively determine whether the balloon had inadvertently drifted just inside CAS as apparently shown on the radar recording or whether it was below; in any case Members agreed that it would not substantially affect the cause or degree of risk of the incident.

Whether or not the balloon entered the Newcastle CTA, Members agreed that the pilot was unwise choosing to operate (or drifting into) that area (close to the extended centreline) without informing Newcastle ATC on the RT (Members assumed the pilot had an RT licence since he was carrying passengers). A simple call to Newcastle Radar would almost certainly have allowed them to identify the primary only contact as the balloon, adopt a helpful approach and inform other ac that the balloon had become becalmed and route them well clear of it.

As it was the A319 did route clear of the balloon by (radar verified) about 1nm horizontally, the crew albeit slightly belatedly saw the balloon opting for only a gentle turn away, and Members agreed that that was sufficient separation to ensure there was no conflict or risk.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Sighting report.

Degree of Risk: E.