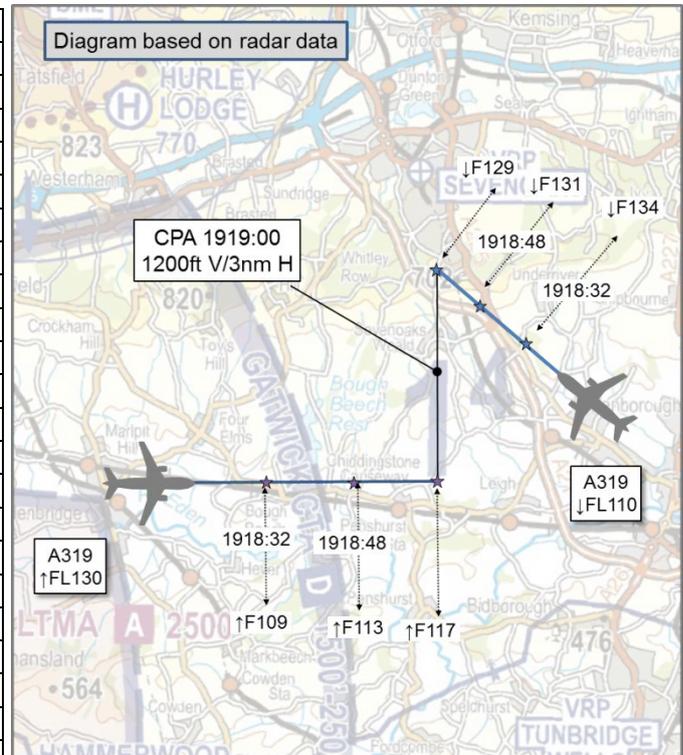


AIRPROX REPORT No 2017005

Date: 09 Jan 2017 Time: 1919Z Position: 5113N 00011E Location: 10nm E Gatwick

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|-------------------|--------------------|---------------|
| Aircraft | A319(A) | A319(B) |
| Operator | CAT | CAT |
| Airspace | London TMA | London TMA |
| Class | A | A |
| Rules | IFR | IFR |
| Service | Radar Control | Radar Control |
| Provider | Swanwick TC | Swanwick TC |
| Altitude/FL | FL129 | FL117 |
| Transponder | A,C,S | A,C,S |
| Reported | | |
| Colours | Company | |
| Lighting | Strobes, nav, logo | |
| Conditions | VMC | |
| Visibility | 50km | |
| Altitude/FL | FL130 | |
| Heading | NK | |
| Speed | 220kt | |
| ACAS/TAS | TCAS II | |
| Alert | TA | |
| Separation | | |
| Reported | Nil V/3nm H | |
| Recorded | 1200ft V/3nm H | |



THE AIRBUS A319(A) PILOT reports that on passing approximately FL140 descending to FL110 inbound BIG, they received a TCAS TA. The Captain-flying selected Vertical Speed (V/S) -1500, then V/S -1000 in response. Later the traffic was observed on the TCAS display passing through their level at approximately FL130 and 3nm range while still climbing; they continued descending. After consideration, it seem to them that without the intervention of selecting V/S they would have been closer when at the same level and they thought that they would probably have had an RA, hence the Airprox report. No further action was taken at the time. Shortly after the intruder aircraft was clear, they were cleared to FL100 and control was transferred to the Heathrow Director. No further observation was given by ATC. He did not recall any missed RT messages/clearances for them or other pilots on frequency. After returning home and thinking further, he decided to raise an Air Safety Report and apologised for not considering further at the time and reporting via RT.

He assessed the risk of collision as 'None'.

THE AIRBUS A319(B) PILOT did not submit a report to UKAB.

THE SWANWICK TC WATCH MANAGER reports that he was asked to file this report on behalf of one of his controllers, having been advised that a pilot had filed an Airprox on an encounter where there appears to have been no loss of separation. The controller climbed A319(B) outbound to FL100 with the inbound A319(A) descending to FL110. The approximate distance between them was 15.1nm and 8000ft. The outbound A319(B) was then climbed higher through the inbound A319(A) and, at time 1918:55, the closest point of approach was, [he reported] 3.0nm and 1500ft.

Factual Background

The weather at Heathrow was recorded as follows:

EGLL 091920Z AUTO 28008KT 9999 NCD 05/05 Q1012 NOSIG=

Analysis and Investigation

CAA ATSI

The A319(A) was inbound to the Biggin (BIG) Hold, maintaining FL150. The A319(B) had departed London Gatwick, initially on a CLN4X Standard Instrument Departure, climbing to 6000ft, and at 1916:32 was instructed to fly a heading of 095° and to climb to FL100.

At 1917:10 the A319(A) pilot was instructed to descend to FL110 and, at 1917:20, the A319(B) pilot was instructed to climb to FL120. The aircraft were in excess of 15nm apart laterally at this time. Shortly afterwards the A319(B) pilot was re-cleared to FL130.

CPA took place at 1919:06 with the aircraft separated by 3nm laterally and 1200ft vertically (Figure 1).

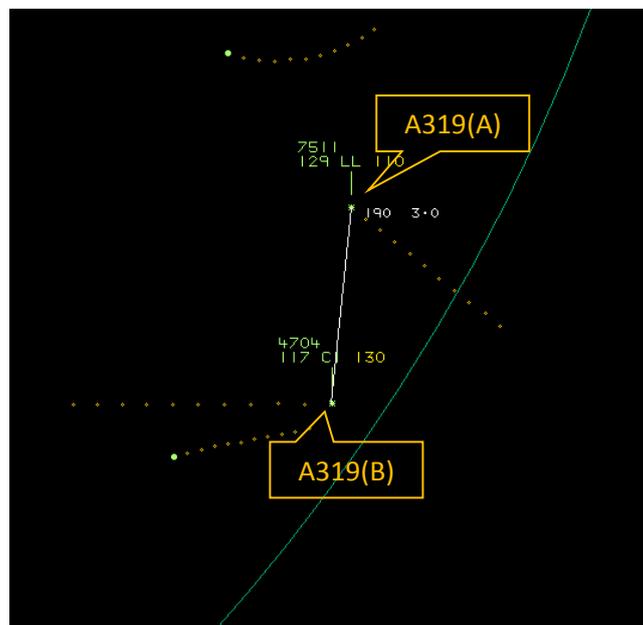


Figure 1 – 1919:06.

The controller was making nearly continuous transmissions throughout this period and Traffic Information was not passed on this occasion because it would have been considered unnecessary (the aircraft was descending to maintain 1000ft above the aircraft passing ahead). The Unit Investigation report concluded that there had been no loss of standard separation, the controller being allowed to apply a minimum of 3nm laterally, and that standard procedures had been followed.

The report from the pilot of A319(A) stated that they took avoiding action “*albeit gentle*” based on receiving a TCAS TA, and that this avoiding action “*prevented TCAS RA*”.

The UK AIP states¹:

'Flight Crews shall not manoeuvre an aircraft solely in response to a TA. TAs are intended to alert the pilot to the possibility of an RA, and to assist in visual acquisition of conflicting traffic. However, visually acquired traffic may not be the same traffic causing a TA, and visual perception of an encounter may be misleading, particularly at night'.

The pilot did not request Traffic Information from the controller and ATC were not advised of the pilot's intention to file an Airprox until a considerable time later.

UKAB Secretariat

The A319(A) and A319(B) pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard². Notwithstanding that, in Class A airspace, ATC were required to separate the aircraft, which they did.

Summary

An Airprox was reported when A319(A) and an A319(B) flew into proximity at 1919 on Monday 9th January 2017. Both pilots were operating under IFR in VMC, in receipt of a Radar Control Service from Swanwick TC. No loss of standard separation occurred.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the A319(A) pilot, the Swanwick TC Watch Manager, area radar and RTF recordings and reports from the appropriate ATC and operating authorities.

The Board was disappointed that no report was received from the A319(B) pilot because this meant that they could not allow for his perception of what had occurred when coming to their conclusions. The Board noted that the A319(A) pilot had not informed ATC that he would be filing a report at the time and, once he did, the subsequent tracing action had identified an incorrect aircraft which led to a delay in requesting a report from the other, correct, pilot. Additionally the controller concerned was also unfortunately not informed of the correct incident details, which resulted in the Watch Manager filing a report on his behalf. Notwithstanding, members felt that there was sufficient information available with which to come to a conclusion. In the circumstances, with no loss of separation and no necessity for an input from ATC, the A319(B) pilot would probably not have been aware that an incident had occurred and would likely not have any meaningful comments to add.

The Board noted that both aircraft were under the control of the same TC Sector controller, the A319(A) inbound to Heathrow and the A319(B) outbound from Gatwick. The A319(A) pilot had been cleared to descend to FL110 and, shortly afterwards, the A319(B) pilot was instructed to climb to FL120. At the time they had been 15nm apart horizontally. The A319(B) pilot was then given further climb to FL130.

The Board noted that the A319(A) pilot reported that on passing approximately FL140 he received a TCAS TA and had decided to reduce his rate of descent from 1500fpm to 1000fpm, believing that by slowing his descent rate it had removed the possibility of receiving an RA. The Board commented that this action, albeit still above the required 500fpm minimum, was not strictly in line with the UK AIP's statement that flight crews shall not manoeuvre an aircraft solely in response to a TA. However, Civil Airline Pilot members commented that they could understand why the pilot had carried out this action because they considered that it was a natural reaction in the circumstances. Notwithstanding, the Board cautioned against acting on TAs because it was difficult to ascertain the dynamics of a situation purely from the TCAS display (in a previous Airprox where pilots have independently shallowed their respective climbs and descents they have actually exacerbated the problem). Nevertheless, ICAO TCAS procedures allowed for pilots to react to TA warnings in as

¹ ENR 1.1-18 UNITED KINGDOM AIP (26 May 2016) Para 3.5.6.3

² SERA.3205 Proximity.

much as “Nothing in the procedures ... shall prevent pilots-in-command from exercising their best judgement and full authority in the choice of the best course of action to resolve a traffic conflict or avert a potential collision”.³ It was clear that the A319(A) pilot had monitored the surrounding situation and had taken allowable action, in the absence of any positive ATC control, to resolve what he perceived to be a potential confliction.

The Board considered that the TC controller had acted appropriately and had ensured that standard separation had been maintained; the aircraft had not been less than the required horizontal radar separation of 3nm.

The Board then turned its attention to the cause and risk of the Airprox. The Board opined that the A319(A) pilot had been concerned because he had received a TCAS TA on A319(B). Therefore, it was quickly and unanimously agreed that the Airprox had occurred because of a TCAS sighting report. Because normal operating procedures had pertained, with no loss of separation, the Airprox was assessed as risk Category E.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A TCAS sighting report.

Degree of Risk: E.

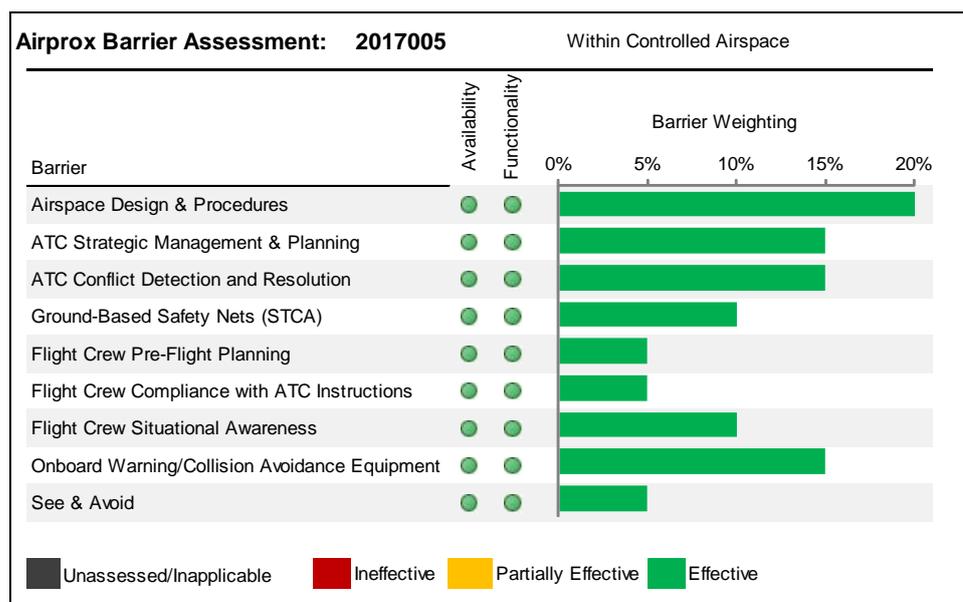
Safety Barrier Assessment⁴

The Board decided that the following key safety barriers were contributory in this Airprox:

Flight Crew Compliance with ATC Instructions was effective because both pilots complied with their ATC clearances.

Flight Crew Situational Awareness was effective because the A319(A) pilot had TCAS information on A319(B).

Onboard Warning/ Collision Avoidance Equipment was effective because the A319(A) pilot had received a TCAS TA on A319(B).



³ ICAO Doc 8168 PANS-OPS Part VIII Chapter 3 para 3.1.2.

⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).