

AIRPROX REPORT No 2013011

Date/Time: 28 Feb 2013 0724Z

Position: 5150N 00011W (6nm NW
BPK)

Airspace: LTMA (Class: A)

Reporting Ac Reported Ac

Type: A319 EMB190

Operator: CAT CAT

Alt/FL: ↑5000ft ↑NR
(QNH) (QNH)

Weather: VMC CLAC VMC NR

Visibility: NR >10km

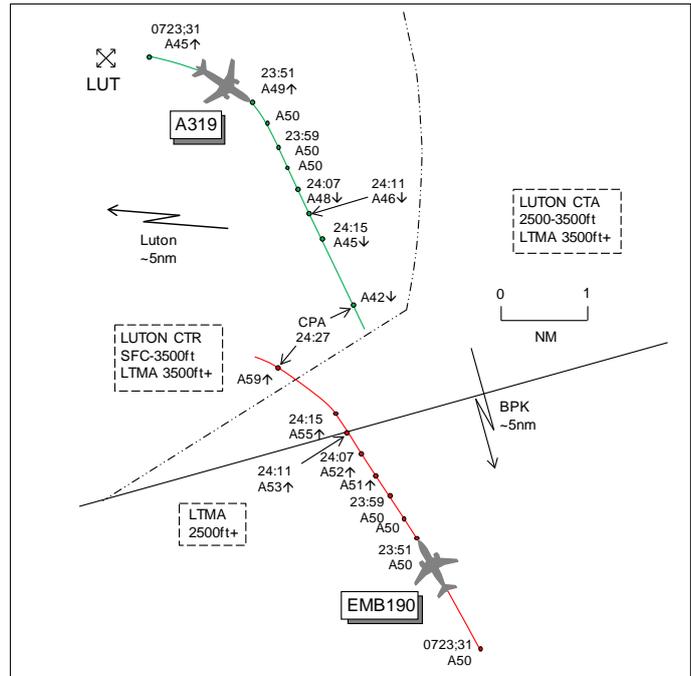
Reported Separation:

400ft V/3nm H NR

Recorded Separation:

Nil V/4.3nm H OR

1700ft V/1.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE A319 PILOT reports outbound from Luton, IFR and in receipt of a RCS from London on 118.82MHz, squawking 3454 with Modes S and C. Climbing to 5000ft, heading 110°, he thought, and flying into sun at 240kt, ATC told them to descend to 4000ft which was flown manually with AP off. Traffic was sighted turning in level flight in their 2 o'clock range 2-3nm about 400-500ft higher and a TCAS TA was received at the end of the manoeuvre. The frequency was congested and blocked transmissions from other flights led to a later call to ATC than desirable although this was not unusual at the time of day. He assessed the risk as high.

THE EMB190 PILOT reports outbound from London/City, IFR and in receipt of a RCS from London, squawking an assigned code with Modes S and C. Both he and the FO considered this not to be an Airprox. Just S of Luton flying at 250kt they were given avoiding action heading by ATC, a L turn, and they were visual with the other ac and didn't get close at any point. There were no TCAS TA or RA alerts/warnings and he believed the avoiding action turn was overkill. He assessed the risk as none.

THE LTC NE DEPS RADAR CONTROLLER reports working the NE/LAM/LOREL position bandboxed. The TC NE workload was high with a complex situation at BPK owing to E'ly operations but it was very quiet into LAM so she assessed that LAM did not need to be split off as this would not have affected the complexity of the traffic. The EMB190 was released by the Coordinator from London/City on a BPK SID followed by the A319 being released from Luton on a CLN SID. The EMB190 was airborne as the A319 was released and she climbed the EMB190 to altitude 5000ft under a Heathrow BPK departure before she became busy elsewhere with departures; the EMB190 was missed in her scan potentially owing to garbling. As the EMB190 approached BPK the Coordinator requested that she climb the EMB190 to altitude 6000ft at the request of LTC NW. The A319 flight checked-in whilst it was garbling with a Stansted inbound flight from the NW. She 'identified' the flight and stopped it off at altitude 4000ft; however, the crew informed her that they were already level at altitude 5000ft. She climbed the EMB190 flight to altitude 6000ft and then gave avoiding action to the A319 flight by descending it to altitude 4000ft followed swiftly by issuing an avoiding action turn to the EMB190 onto heading 290°. She passed TI to the EMB190 crew who reported "visual" and then passed TI to the A319 crew. Prescribed separation was lost, 700ft/2.6nm.

THE LTC N COORDINATOR reports the sector loading was moderate. Ironically, prior to this incident, he had discussed the technique of stopping a Luton CLN or DVR SID flight from RW08 at 4000ft to give flexibility against the climb of London/City BPK departures. He had released the EMB190 flight from London/City on a BPK SID and subsequently released the A319 flight on a CLN SID from Luton. His general mode of operating was to ask the Sector Controller (SC) for each release, which he believed he did but could not be sure. He had coordinated the EMB190 with LTC NW at 5000ft and written this on NW's fps. At this time he had not written this coordination on the NE SC's fps. Essex Radar telephoned him on the NW Coordinator line to coordinate a Luton inbound that was going through 'the gate' but high over the line. He pointed this out to the NW SC (student and OJTI) and the mentor asked him to organise a higher acceptance level into their sector. He subsequently coordinated 6000ft and annotated this both on the NW and NE fps. It was at this time that the Essex SC used the priority line to point out the potential conflict between the EMB190 and the A319. He believed the NE SC had just noticed the conflict and was already taking steps, including avoiding action, to resolve it.

ATSI reports that the Airprox was reported by the crew of an A319 following avoiding action being given by LTC NE against an EMB190 at 5000ft in Class A airspace, 8.5nm SE of Luton Airport.

The A319 was operating IFR on a flight from Luton to Germany on a BPK5U departure and was in receipt of a RCS from LTC NE on frequency 118.825MHz.

The EMB190 was on an IFR flight from London/City to Scotland on a CLN7C departure and was in receipt of a RCS from LTC NE on frequency 118.825MHz.

Traffic departing from London/City RW09 on a BPK5U climbs to altitude 3000ft and turns L to intercept the 150 radial towards BPK. Traffic departing from Luton RW08 on a CLN7C climbs to altitude 5000ft and turns R at LUT NDB to intercept the 337 radial towards BPK. Figure 1 shows the interaction between the two SIDs.

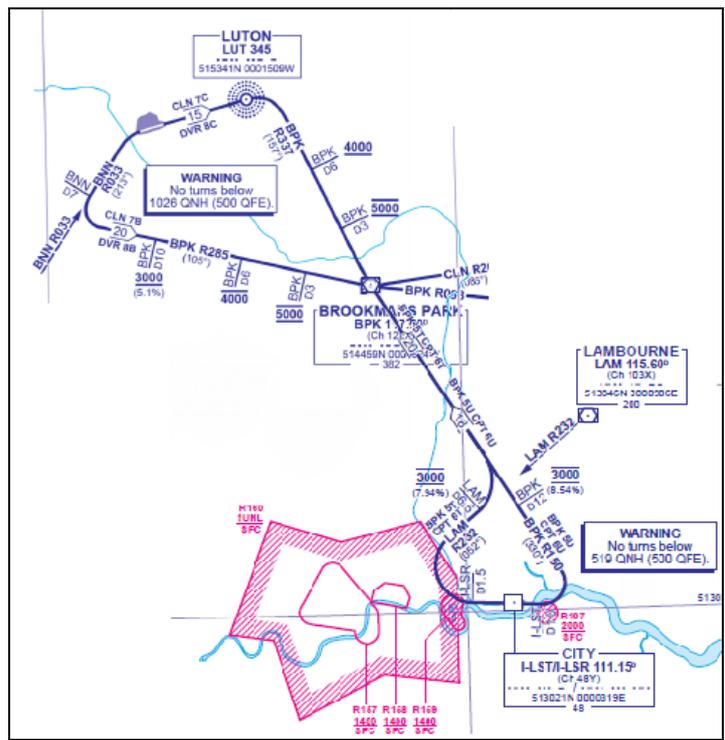


Figure 1.

The LTC NE sector comprises NE (Deps), LOREL and LAM sectors combined as one position.

CAA ATSI had access to written reports from both pilots, written reports from the LTC NE controller and N Coordinator together with area radar recordings and RT recordings of the LTC NE frequency.

The Luton METARs are provided for 0720 and 0750 UTC:

EGGW 280720Z 02012KT 360V080 9000 NSC 01/00 1029= and EGGW 280750Z 02010KT 9000 NSC 01/01 Q1030=

Prior to the Airprox the LTC NE controller had a London/City BPK departure against a Luton CLN departure. The controller and the N Coordinator had a conversation about stopping the CLN departure at 4000ft. The LTC NE controller did not consider it necessary to stop the CLN departure at 4000ft and the situation was easily resolved without incident. The LTC NE controller and the N Coordinator then had a conversation about the general technique of using intermediate levels to give flexibility to traffic climbing on the BPK departure from London/City.

At 0714:40 London/City Tower telephoned the N Coordinator to request a release on the EMB190 on a BPK departure (climbing to 3000ft); the EMB190 was released.

At 0717:00 the pilot of another ac that was not directly involved in the Airprox contacted the LTC NE controller. The pilot was given a heading of 015° which was read back correctly. Some moments later this ac was observed to be heading 105° and the LTC NE controller corrected the situation. Later the LTC NE controller recalled wondering if an incorrect read back had been missed but did not feel unduly distracted by the issue.

At 0718:00 Luton Tower telephoned the N Coordinator to request a release on the A319 on a CLN departure (climbing to 5000ft). The N Coordinator asked Luton Tower to standby and there was a short pause before the A319 was released. The Coordinator's normal practice was to check with the controller before issuing a release; however, he could not specifically recall doing so in this case. The LTC NE controller also could not recall if a release had been issued. Later the LTC NE controller reported not having fully assimilated the presence of the A319 into the overall situation.

At 0718:50 the crew of the EMB190 contacted the LTC NE controller climbing to 3000ft. The controller climbed the EMB190 to 5000ft as the anticipated level for coordination. The Coordinator agreed 5000ft for the EMB190 but did not write the level on the fps.

The LTC NW controller requested that the EMB190 be co-ordinated at 6000ft due to a Luton inbound that was high through the Luton gate. The new agreed level was annotated on the fps by the Coordinator.

At 0723:31 the A319 flight contacted the LTC NE controller, "*London (A319 c/s) passing four thousand six hundred feet climbing altitude five thousand feet Clacton seven Charlie*". The radar display label for the A319 was garbling with another ac inbound to Stansted. The EMB190 was 8.3nm SE of the A319, tracking NNW. The LTC NE controller replied, "*(A319 c/s) squawk ident maintain alt-stop climb altitude four thousand feet*". The crew of the A319 replied, "*Okay ident and we're just levelling altitude five thousand feet (A319 c/s)*".

The LTC NE controller then instructed the crew of the EMB190 to, "*...climb now altitude six thousand feet expedite*" which was read back correctly (0723:51). The 2 ac were on conflicting headings 5.5nm apart.

[UKAB Note (1): Minimum vertical separation occurs at 0723:59, both ac at altitude 5000ft at a range of 4.3nm.]

The A319 crew was then instructed, "*(A319 c/s) avoiding action descend immediately altitude four thousand feet*". During this transmission low level STCA activated, followed by high level STCA 3sec later. The A319 crew read back (0724:00), "*Descend immediately altitude four thousand feet (A319 c/s)*".

The LTC NE controller gave avoiding action to the crew of the EMB190, instructing them to turn L immediately heading 280° and advised they had traffic in their 12 o'clock. The pilot of the EMB190 replied, "We're visual two eight zero degrees (EMB190 c/s)".

At 0724:11 the 2 ac were 2.6nm apart with the EMB190 at 5300ft and the A319 at 4600ft.

TI was passed to the crew of the A319 on the EMB190 and the pilot of the A319 replied that they were visual.

At 0724:15 separation had been restored – the A319 was at 4500ft and the EMB190 was at 5500ft.

[UKAB Note (2): The CPA occurs at 0724:27 as the EMB190, climbing through altitude 5900ft, passes 1.1nm SW of the A319, which is descending through altitude 4200ft.]

Later the LTC NE controller stated that on the day, the traffic was steady but did not require splitting. The controller who relieved the LTC NE controller agreed that the position did not require splitting as did the Coordinator; however, the initial watch investigation indicated that a split may have helped the RT loading.

Both the controller and the Coordinator stated that the area around BPK can be complicated when on Easterlies, partly due to the proximity of the Stansted RMA. When the LTC NE controller gave avoiding action the emphasis was on separating the ac vertically to allow time to assess the traffic in the vicinity of the Stansted RMA and ensure that any headings issued did not put the traffic in further conflict with traffic being vectored for Stansted.

The LTC NE controller stated that, in hindsight, stopping the A319 at 4000ft would have prevented the conflict.

Neither the LTC NE controller nor the Coordinator could recall if a release on the A319 had been approved by the LTC NE controller. As the release was requested just after the LTC NE controller had been required to take action on another ac that had turned onto the wrong heading, it is possible that the distraction prevented the LTC NE controller from incorporating the A319 into the overall 'plan'.

When the A319 became airborne from Luton the radar label was garbling with other traffic inbound to Stansted and the potential conflict against the EMB190 was not immediately apparent on the display. Although the crew of the A319 reported passing 4600ft the controller did not seem to absorb this information and the A319 was initially instructed to stop climb at 4000ft.

When the controller became aware of the conflict appropriate action was taken to resolve the situation.

The Airprox occurred when an A319 was allowed to depart unrestricted on a SID that climbed to the same level as that already occupied by an EMB190 on a conflicting track. It is unclear whether or not the LTC NE controller and the Coordinator discussed the release on the A319 prior to the Coordinator issuing a release to Luton Tower; however, the LTC NE controller reported not assimilating the presence of the A319 into the overall traffic plan (possibly due to the distraction caused by an earlier situation). The conflict between the 2 ac did not become apparent to the LTC NE controller until the A319 was airborne and levelling at 5000ft and in conflict with the EMB190 which was also at 5000ft.

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 video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC authorities.

A controller Member advised the Board that this incident had occurred in a busy piece of airspace where tactical coordination was imperative for the safe and expeditious movement of traffic departing Luton, Stansted, Heathrow and London/City. The normal SOP for BPK departures from London/City is for the NE controller to climb the ac above the SID level of 3000ft as soon as possible to 5000ft, the normal coordinated altitude with LTC NW. As this climb impacts on the CLN SID from Luton climbing to 5000ft, it was essential for the NE controller and N Coordinator to ensure that appropriate steps/measures were taken to deconflict the 2 flights; the norm is to restrict the Luton departure to 4000ft. However, the required coordination did not take place as the A319 was released from Luton into conflict with the EMB190 which had caused the Airprox.

Neither the NE controller nor the N Coordinator could remember if the NE controller had approved the release; certainly the NE controller had not taken the A319 into her traffic plan. The confliction only became apparent to the NE controller when the A319 flight made initial contact on frequency, with separation at 8nm; however, she did not assimilate the crew's report 'passing 4600ft' when she instructed the flight to stop at 4000ft. After the A319 crew reported levelling at 5000ft she cleared the EMB190 to climb expeditiously to 6000ft, the coordinated level agreed with LTC NW, before giving the A319 crew an avoiding action descent to 4000ft. This was all achieved before STCA activated, which changed quickly from low to a high severity alert as the A319 crew acknowledged the avoiding action. The A319 crew saw the EMB190 as they actioned the descent prior to a TCAS TA being received. The NE controller then gave the EMB190 crew an immediate L turn away and TI. The EMB190 crew reported visual with the A319 with separation now 700ft and 2.6nm before standard separation was restored seconds later. Although not ideal, the NE controller had quickly reacted to the deterioration situation when the potential confliction was noticed. She had issued instructions which were acted upon swiftly by both crews which had resulted in a minor loss of separation. These combined actions were enough to allow the Board to conclude that any risk of collision had been effectively removed.

Assessing the safety barriers, although the loss of separation had occurred as a result of controller error, the controller then took action before the STCA activated to recover the situation; Board Members concluded, therefore, that effective ATC safety barriers remained. Both crews had visually acquired each other's ac whilst following avoiding action instructions. While visual sightings are providential rather than systemic in Class A airspace, both aircrews had SA from their TCAS with the prospect that the robust barrier of TCAS RAs would have been effective. Since robust aircrew barriers and ATC barriers remained, the Board assigned an ERC score of 50 to the Airprox.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: ATC released the A319 into conflict with the EMB190.

Degree of Risk: C.

ERC Score: 50.