

## AIRPROX REPORT No 2011064

Date/Time: 19 Jun 2011 1500Z (Sunday)

Position: 5133N 00020E (1.5nm NW Thurrock)

Airspace: LFIR (Class: G)

Reporting Ac Reported Ac

Type: R22 C152

Operator: Civ Pte Civ Trg

Alt/FL: 1200ft 2000ft  
QNH (1013mb) QNH

Weather: VMC CLOC VMC CLOC

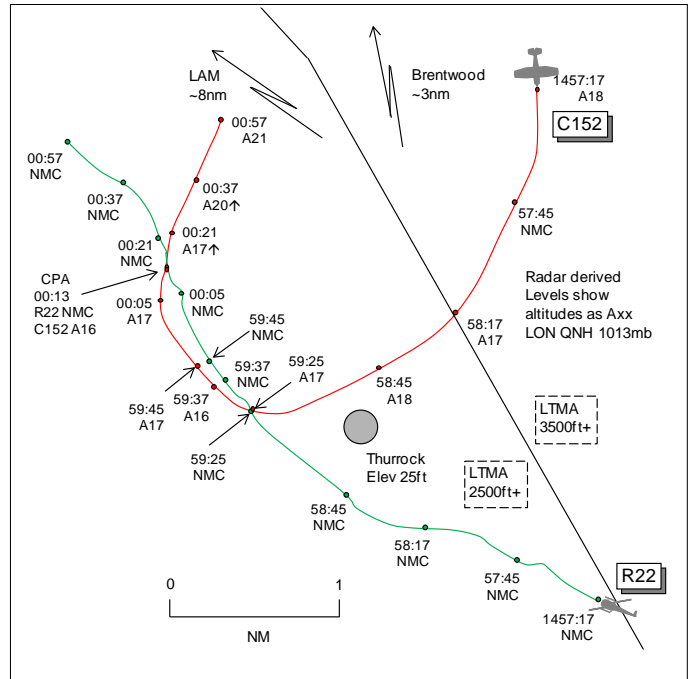
Visibility: >10km >10km

Reported Separation:

350ft Not seen

Recorded Separation:

Radar returns merge



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE R22 PILOT** reports en-route to Wycombe Air Park VFR at 80kt and in receipt of a BS from Farnborough LARS N on frequency 132.8MHz, squawking with NMC. The visibility was >10km in VMC and the helicopter was coloured green with strobe lights switched on. The routing was via DVR towards LAM to remain clear of the London/City CTR. The navigator was a single-engine fixed-wing pilot and together they have made more than 1500hr of flights over 25yr including this trip in both directions a number of times. The GS was slow owing to strong W'ly winds and they were flying at approximately 1200ft on the Chatham RPS as the wind was lighter than at higher altitude. They had just transferred from London Information to Farnborough LARS N and passed Thurrock when a Cessna, travelling roughly in the opposite direction, passed close by on their RHS in level flight with an estimated slant range separation of 500ft. Neither he nor his navigator had seen the Cessna before it appeared close by at about 30° to their direction of travel. Farnborough had not warned them of an ac in the vicinity but there was a changeover of controller just then from a female to male. They did not consider there to be any likelihood of collision and so did not take avoiding action. A few minutes later, the Cessna then appeared from behind on their LHS in level flight at a closer distance of about 350ft slant range and now travelling in the same direction and overtaking them. The navigator could see the person in the Cessna's RH seat was a man, he thought, of medium build with dark hair wearing a pale yellowish /fawn jumper and was looking into the cockpit diagonally towards the instrument panel. There were 2 on board but the person seated in the LH seat of the Cessna could not be seen and he had not specifically looked at the person when the ac first passed on their RHS. When it had passed it suddenly did a 180° turn to the R towards them and passed directly O/H. He took avoiding action by making a descending turn to the R and assessed the risk as high. The Cessna pilot did not seem to be aware of their presence or to be on the Farnborough frequency. They were concerned as they didn't know whether the Cessna was going to appear again and if so from where. No one seemed to be looking out of the window of the Cessna and the Cessna pilot could hardly have failed to see the R22's yellow and white disc made by the helicopter's blades. The Cessna was coloured white with red markings and its registration was clearly seen. It was either a C150 or C152, which they recognised as they had both learned to fly on that type but it was difficult to distinguish between the 2 models. He reported the incident to Farnborough and gave them the registration; Farnborough asked if he wanted to file an Airprox to which he stated he would.

**THE C152 PILOT** reports that she was informed post flight that the ac she was flying at the time was involved in an Airprox. At the time she was conducting a trial lesson flight from Stapleford during which she normally demonstrated pitch/roll and yaw at 2000ft and 90kt. The visibility was >10km in VMC and the ac was coloured white /red with anti-collision light switched on. The usual routeing was to the E of Brentwood and return following the M25 whilst listening out with Stapleford Radio. She did not see the reporting ac.

**THE FARNBOROUGH LARS N CONTROLLER** reports the sector was busy and he was using the whole of his SSR block allocation owing to traffic intensity. The R22 pilot called when in the vicinity of the Thames at 1200ft and was readable strength 2 improving to strength 3. At about 1500Z when the helicopter was in the vicinity of Thurrock the pilot reported an ac to be flying at dangerous angles close to his helicopter and reported its registration. Later when he requested if the R22 pilot wished to file an Airprox, the pilot acknowledged with an, "affirm, after landing". The R22 was in transit at 1200ft in an area of poor RT coverage at low altitude and the flight was under a BS.

**ATSI** reports that the Airprox occurred at 1500:13, within Class G airspace, 1.5nm to the NW of Thurrock Airfield, which does not have an ATZ.

The reporting flight was an R22 that was on a VFR flight from Le Touquet to Wycombe, in receipt of a BS from Farnborough LARS N and squawking 5033. The second ac was a C152 on a local VFR training flight operating from Stapleford and in communication with Stapleford Radio.

The Farnborough controller was operating as LARS N and reported the sector being busy with all available SSR codes allocated due to traffic intensity. The controller reported that the R22 helicopter in transit at 1200ft was operating in an area of poor RT coverage.

The weather for London City Airport was:  
METAR EGLC 191450Z 28015KT 9999 SCT040 18/07 Q1013 RERA=

The R22 flight contacted Farnborough LARS N at 1450:20. The controller reported the R22 RT as readability 2. The R22 pilot reported routeing from Le Touquet to Wycombe at 1200ft on QNH 1017 and requested a BS. The controller allocated a squawk of 5033 and passed the London QNH 1013. The radar recording shows the R22, 6.9nm SE of Thurrock Airfield with NMC altitude reporting. Shortly afterwards the controller agreed a BS.

At 1457:17 the radar recording shows the R22 positioned 2nm SE of Thurrock and the C152 tracking S, 2.3nm NNE of Thurrock squawking 7000 and indicating an altitude of 1800ft. Shortly afterwards at 1347:45 the C152 turns onto a SW'ly track. The radar recording shows both ac tracking towards Thurrock on converging headings.

The two ac continue to converge with the C152 maintaining an altitude of 1700ft. At 1459:25, the radar recordings shows both ac are in close proximity with labels overlapping at a position 0.7nm W of Thurrock. Shortly afterwards the tracks cross and the C152 turns onto a track which parallels the R22 at a range of approximately 0.1nm.

At 1500:05 the radar recording shows the C152, indicating an altitude of 1700ft, commenced a R turn and at 1500:13 the Airprox occurs when the ac's tracks cross. The radar recording shows the ac labels merge with the C152 indicating an altitude of 1600ft. The R22 pilot's written report indicated that the R22 was at 1200ft on QNH 1013. The tracks then diverge with the C152 tracking N.

At 1500:56, the R22 pilot reports, "????? Erm flying dangerously just north of Wh- yeah Thurrock airfield erm and er coming extremely close to me from several different angles we have his registration number." The controller asked for confirmation of the flight calling and the R22 pilot confirmed that the other ac had come into close proximity adding, "confirm it came from behind and on top of me." The pilot confirmed his intention to file an Airprox after landing. The controller advised that Stapleford was busy and transferred the flight to the Stapleford frequency.

The Airprox occurred in Class G airspace. The C152 flight was not in receipt of an ATS. The R22 flight was in receipt of a BS in an area of poor RT coverage at 1200ft. The Farnborough LARS N controller was operating a busy sector with high workload and was not aware of the other traffic. CAP 774, UK Flight Information Services, states:

‘Within Class F and G airspace, regardless of the service being provided, pilots are ultimately responsible for collision avoidance and terrain clearance, and they should consider service provision to be constrained by the unpredictable nature of this environment.’

‘A Basic Service is an ATS provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at aerodromes, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot’s responsibility.’

‘Basic Service relies on the pilot avoiding other traffic, unaided by controllers/FISOs. It is essential that a pilot receiving this service remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight.’

‘Pilots should not expect any form of traffic information from a controller, as there is no such obligation placed on the controller under a Basic Service outside an Aerodrome Traffic Zone (ATZ), and the pilot remains responsible for collision avoidance at all times. However, on initial contact the controller may provide traffic information in general terms to assist with the pilot’s situational awareness. This will not normally be updated by the controller unless the situation has changed markedly, or the pilot requests an update. A controller with access to surveillance derived information shall avoid the routine provision of traffic information on specific aircraft, and a pilot who considers that he requires such a regular flow of specific traffic information shall request a Traffic Service. However, if a controller considers that a definite risk of collision exists, a warning may be issued to the pilot.’

The Airprox occurred when the 2 flights operating under VFR came into close proximity. The R22 flight was in receipt of a BS from Farnborough LARS N. Under a BS there is no obligation placed upon the controller to provide TI. However, if a controller considers that a definite risk of collision exists, a warning may be issued to the pilot. The LARS N controller was operating on a busy sector with a high workload. The controller was not aware of the C152 and there was no requirement for the controller to monitor the R22 flight.

## **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.

Since the Airprox occurred in Class G airspace, both pilots had equal responsibility to maintain separation from other ac through see and avoid. Although the R22 flight was under a BS from Farnborough, the controller was busy and did not notice the R22 and C152 converging. There was no requirement for LARS N to monitor the R22 on radar, nor to provide TI. Members agreed that there had been ample opportunity for both crews to see each other as they approached, the C152 flight initially having right of way during its first pass of the R22. However, during any encounter the RoA regulations rely on crews sighting a potential confliction beforehand. On this occasion, the R22 pilot saw the C152 late as it converged from the N and then crossed about 500ft above whilst turning through a W’ly heading; the R22 passed unsighted by the C152 pilot. Thereafter, unbeknown to the R22 pilot, the C152 pilot had unwittingly turned onto a parallel course to his L at close quarters, still unsighted. The R22 pilot then saw the C152 again, as its pilot unknowingly slowly overtook the helicopter, and became concerned as the C152 pilot was apparently unaware of their presence before the flight executed a R turn to cross just ahead and about 350ft above. The R22 pilot

executed a descending turn to the R as he didn't know what further action the C152 pilot was going to take. The radar recording shows the C152's Mode C indicating unverified altitude 1600ft as the ac returns merge. With the R22 pilot reportedly flying at 1200ft, this would corroborate the estimated separation seen by the R22 pilot. Members agreed that the R22 pilot had taken all the necessary precautions and had acted appropriately. Members believed that the R22 pilot was always in the position to take further action if needed and that any risk of collision had been quickly and effectively removed.

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

Cause: A non-sighting by the C152 pilot and a late sighting by the R22 pilot.

Degree of Risk: C.