

AIRPROX REPORT No 2011060

Date/Time: 23 Jun 2011 1208Z

Position: 5140N 00206W
(1nm W of Kemble - elev
433ft)

Airspace: Kemble ATZ (Class: G)

Reporting Ac Reported Ac

Type: AS355 R22

Operator: Civ Comm Civ Pte

Alt/FL: 700ft 800ft
(N/K) QNH (1014mb)

Weather: VMC CLBC VMC CLBC

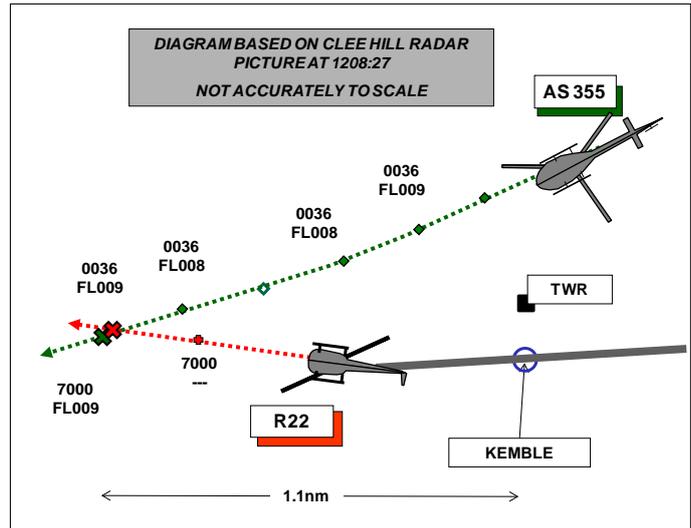
Visibility: >10km 999

Reported Separation:

30ft V/0ft H 80ft V/100ft H

Recorded Separation:

0 V/ <0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE AS355 PILOT reports that he was flying a pipeline inspection flight in a burgundy coloured helicopter, squawking 0036 (pipeline inspections) with Modes C and S and in receipt of a FIS from Kemble TWR; PCAS was carried but did not indicate any traffic. They were on a pipeline survey and had finished one pipeline at South Cerney and were heading 270° at 120kt, at 700ft on QFE 1001mb, [the QNH was 1016mb] positioning to the start the next inspection. He had called Kemble for transit through the cct 1.5nm to the N and maintained contact with ATC, passing his intention to ATC to transit to the N across the extended centre line of the RW crossing it at 3nm.

He was aware that there was a Robinson R22 leaving the cct and that the other cct traffic was aware of their position.

The first sighting of the conflicting ac was when the observer, seated in the front LHS, saw the conflicting traffic in their 9 o'clock below their ac and passing beneath; he shouted 'climb'. The pilot saw the ac's rotor blades in the chin bubble by his feet on the R of the ac and last saw the conflicting ac at 5 o'clock about 150ft away a split second later. He climbed the ac immediately the traffic was called by the observer. The other ac was approaching from below and behind them, in their blind spot and they would have been in theirs.

He informed Kemble TWR of the Airprox and assessed the risk as being high.

THE R22 PILOT reports flying a private flight from Kemble in a white ac with lights on, at the time in contact with Kemble ATC and squawking 7000 with Mode C. He was cleared for take-off from RW26 (grass) and, while in the climb at about 800ft (QNH) heading 260° at 60kt and 1nm W of the airfield, they were overflown by a dark coloured (possibly black or blue) AS350 or AS355. The ac was not sighted during the taxi or take-off from RW26 (grass). From the radio traffic the airfield appeared to be busy, however, no TI was passed by ATC nor were any calls heard from the other ac approaching or overflying the airfield.

The first sighting of the other ac was when it had already overflown them, as it was flying in a SW'ly direction.

He was not able to take any avoiding action as the other ac had already passed him and he assessed the risk as being high.

Although not required to do so, he opined that it would have been good practice for ATC to pass TI about an ac overflying the airfield at 1000ft. It also would have been good practice by the pilot of the over flying ac to make an 'over head the field call'.

He believes this incident brings into question why the other ac was allowed to overfly the airfield at such a low height which would bring it into possible conflict with other traffic and why the pilot elected to do so.

ATSI reports that the Airprox occurred at 1208:26, within the Kemble ATZ, which consists of a circle, radius 2nm, centred on RW08/26 and extending to 2000ft aal (436ft).

The Airprox was reported by the pilot of an Aerospatiale AS355 helicopter operating on a pipeline patrol and squawking 0036 and the other ac was a Robinson R22 helicopter departing from Kemble for a VFR flight to Blackbushe.

A FISO service is provided at Kemble. The FISO reported traffic levels as moderate with RW26 (hard and grass) in use.

ATSI had access to RTF and radar recordings and reports from both pilots. The FISO initially thought that the Airprox had occurred to the W and outside the Kemble ATZ.

The weather for Lyneham was:

METAR EGDL 231150Z 23010KT 9999 VCSH SCT028 BKN050 12/10 Q1016 BLU NOSIG=

At 1158:35, the R22 helicopter called for engine start for a flight to Blackbushe, departing to the SW and the FISO approved the start, "*(R22)C/S start approved Runway two six lefthand circuit the QNH one zero one six.*"

At 1202:04 the R22 reported ready for departure, requesting a departure direct to the SW.

One sec later at 1204:05 the AS355 established two way communication with Kemble and advised, "*afternoon sir (AS355)C/S a twin squirrel two onboard out of Dunkeswell for Halfpenny Green we at er South Cerney a thousand feet on one zero one five er looking route through overhead if we can er westbound*"; South Cerney is 4.5nm E of Kemble.

(Dunkeswell is 64nm SW of Kemble and Halfpenny Green is 51nm N of Kemble.)

The AS355 pilot was passed the QFE 1001mb and reported at a height of 600ft. The FISO replied, "*(AS355)C/S roger have one aircraft turning downwind one aircraft in the two six lefthand circuit report entering the zone*" and the pilot responded, "*Copy the traffic and wilco (AS355)C/S*".

An ac operating at Babdown Farm, situated 5nm SW of Kemble, was passed TI, "*C/S...one helicopter to transit south to north six hundred feet Kemble QFE*". The FISO could not recall why this had been passed but added that he had not heard the AS355 report at South Cerney, but remembers being aware that the AS355 was routeing through the ATZ on a W'ly track. The FISO indicated that pipeline helicopters frequently operate in the area but the route through the airfield was unusual.

At 1206:27, the R22 pilot was asked to report lined up RW26-grass.

At 1206:48, the AS355 reported, "*(AS355)C/S approaching the ATZ boundary to the er northnortheast and our present track should er take us through the extended centreline about a mile*

out to the west” and the FISO replied, “(AS355)C/S roger that’s copied report west abeam” and the pilot acknowledged.

The FISO reported that the AS355 was not in sight, but he believed it to be about 2nm NNE and would pass NW of the airfield before crossing the extended centreline of RW26. He added that the R22 had requested a direct route to the SW and he thought that the two helicopters would be on diverging tracks.

At 1207:03, the FISO advised the R22, “*Helicopter (R22)C/S take off and depart your discretion surface wind two nine zero degrees eight knots*” and the R22 pilot replied, “*and depart my discretion helicopter (R22)C/S*”.

The radar recording shows the AS355 to be 1.3nm NE of the ARP at 1207:10 tracking W and indicating FL008 (converting to 476ft on QFE 1001 with 1mb equal to 27ft); at 1207:53 it is 0.5nm NW of the ARP tracking SW.

At 1207:20 a Bulldog ac reported lining up RW26-hard and the FISO responded, “(Bulldog)C/S..*the helicopter ahead is departing to the southwest with that in mind take off at your discretion surface wind two nine zero degrees eight knots*”.

The Kemble Tower FISO control desk faces S. The FISO reported that he had not sighted the AS355 and was talking to and observing other ac manoeuvring on the airfield; he thought that it might have passed close to the overhead and been above the roofline. The FISO indicated that he had only visually acquired the AS355 as it approached a position NW abeam the RW08 ‘numbers’. The R22 was not in sight at that point and he thought that it had departed to the SW.

At 1208:02, the Bulldog was still on the RW and the FISO advised, “(Bulldog)C/S *just caution one erm twin squirrel in the overhead north side to depart to the southwest*”, the pilot acknowledged and elected to hold for a second.

At 1208:29, the radar recording shows the AS355, 1.2nm W of the ARP and the AS355 was then indicating FL009 (576ft on QFE 1001mb); the R22 was not showing on radar at that point. [Note: this is the position of the Airprox but the diagram above shows the preceding radar sweep].

At 1208:41 the radar recording shows the AS355, 1.5nm W of the ARP indicating FL010 (676ft on QFE 1001mb), with the R22 tracking WNW, in the AS355’s half past four position at a range of 0.2nm; the two ac have crossed and are then diverging.

At interview the FISO indicated that he had lost sight of the R22 which must have routed WNW rather than directly to the SW.

1209:20 the AS355 pilot called Kemble and asked if the R22 had them in sight; there was no immediate response so the AS355 pilot added, “*er Kemble er (AS355)C/S I think we’ll er need to report that as an Airprox er we’ll give you a call later on but it was a white R twenty two out of the field*”; this was acknowledged by the FISO.

At 1211:05 the AS355 pilot reported clear to the W and changing to the en-route frequency, but asked if the R22 was on frequency. The FISO asked the R22 pilot if the AS355 had been sighted on departure and he replied, “*er when he crossed over top of us we did er (R22)C/S*.”

The FISO recognised that TI should have been passed and would have aided the situational awareness of both pilots. He was asked if he had considered asking the AS355 to route N of the ATZ but he indicated that he was only able to pass TI and suggesting a routing did not guarantee a pilot’s compliance.

It is not clear why another ac was passed TI about the helicopter routeing S to N at 600ft; it is considered that the FISO may initially have misunderstood the route from Dunkeswell to Halfpenny Green.

When the AS355 reported approaching the NNE boundary, the FISO thought the AS355 was about 2nm NNE. He indicated that he was aware of the intended route, W through the ATZ and across the RW26 extended centreline at 1nm so the pilot was asked to report W abeam. The FISO thought that the AS355 would transit NW abeam the airfield and the R22 would depart directly to the SW with diverging tracks.

The R22 pilot had requested a route direct to the SW and this may have caused the FISO to believe that it would lift and immediately take up a SW'ly track.

It is considered that the intended track of the AS355, crossing 1nm W of the airfield, had the potential to bring the two helicopters into close proximity and would have justified the passing of updated TI.

The AS355 pilot was advised about the cct traffic but not the departures. He could have heard the R22's departure calls, but it is not clear why the pilot did not acquire visual contact.

The FISO did not pass TI to either the AS355 or R22 helicopters that would have aided the pilots' SA and assisted them in obtaining an early visual sighting of each other. The Manual of Flight Information Services, CAP410 Part B, Chapter 1, Page 1, Paragraph 2.1, states:

'The FISO has the following specific responsibilities:

issuing information to ac flying in the aerodrome traffic zone to assist the pilots in preventing collisions.'

Both ac were operating within the ATZ and were in receipt of a service from the FISO. CAP774, Chapter 1, Page1, Paragraph 2, 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. The Class F and G airspace environment is typified by the following:

It is not mandatory for a pilot to be in receipt of an ATS; this generates an unknown traffic environment;

Controller/FISO workload cannot be predicted;

Pilots may make sudden manoeuvres, even when in receipt of an ATS.'

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 and a report from the appropriate ATC authority.

The Board considered the parts played by the two pilots and the FISO in turn.

Members agreed that the AS355 pilot should have planned to, and given, the busy aerodrome at Kemble a wider berth; since he was in transit between two pipeline inspections, doing so would not have adversely affected his flight profile. Notwithstanding that the FISO did not provide him with TI regarding the R22 taking off, the AS355 pilot should have been alert to the possibility ac departing the visual circuit area. Further, even if he did not avoid the aerodrome completely, Members considered that flying through the departure lane at about the same height as ac in it, to be ill

advised as it can, and in this case did, lead to unnecessarily close encounters. Although the R22 was well below him, Members thought that the AS355 pilot should have manoeuvred his ac to make the RW visible.

The R22 pilot was also not passed TI regarding the AS355 and was not aware of its presence until the ac came in close proximity less than 1min after he took off. Although the pilot was aware that the circuit was busy, he did not (perhaps could not) see the AS355 which approached from his 5 o'clock and well above.

Both pilots however, had made the appropriate RT calls on the same frequency and despite that TI was not passed to either, Members thought that both should have been aware of the presence and location of each other from the (background) RT traffic.

The FISO, Members thought, had not fully appreciated the intended routeing of the AS355 which in any case had been slightly closer to the airfield than he initially stated. Although technically accurate, the AS355's first transmission to the FISO could have given a better description of his intended routeing from his location reported as South Cerney. The FISO, it seemed, had anticipated that it would be far enough away from the airfield and the departure lane not to pose a problem. Further he had apparently anticipated the R44 would turn immediately onto a SW track rather than going straight ahead then slightly right to clear the cct then turn SW (in accordance with the noise abatement departure procedures published in Pooleys Flight Guide). It was clear to Members that, although both pilots were operating in the visual circuit area under the 'see and avoid' principle, had TI been passed to either or both, that might have prompted them to be aware of, and specifically look for, the opposing ac; Members agreed that this had been part of the cause of the incident.

In actuality however, neither pilot saw the opposing ac in time to take any avoidance. Further, although the actual CPA was between sweeps, the radar recording verified that the separation was very small; that being the case, Members agreed unanimously that there had been an actual risk of collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: In the absence of TI, effectively non-sightings by the pilots of both ac.

Degree of Risk: A.