

AIRPROX REPORT No 2010111

Date/Time: 17 Aug 2010 1443

Position: 5353N 00122W (6.5nm WNW Church Fenton - elev 29ft)

Airspace: Vale of York AIAA (Class: G)

Reporting Ac Reported Ac

Type: BH06 JetRanger Lynx AH7

Operator: Civ Pte HQ JHC

Alt/FL: 1500ft 2000ft
(QNH) (RPS)

Weather: VMC CLBC VMC CLBC

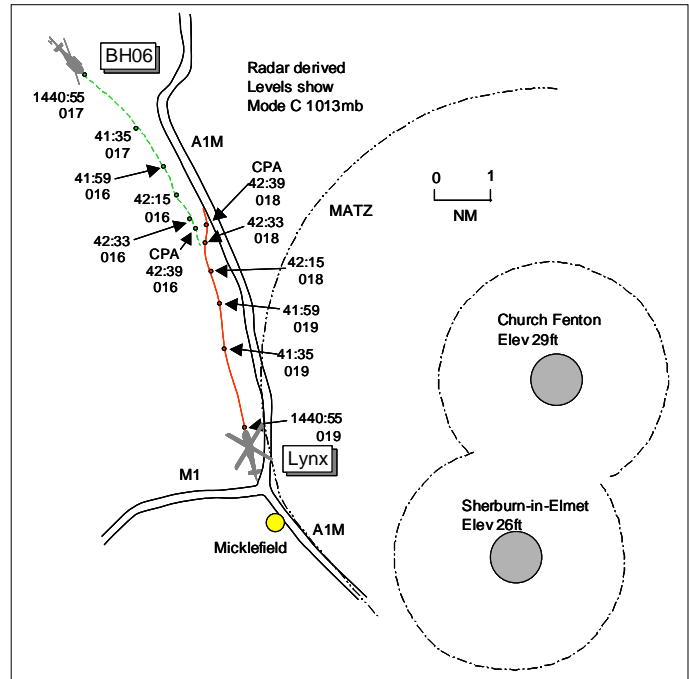
Visibility: 30km >10km

Reported Separation:

NR Nil V/300m H

Recorded Separation:

200ft V/<0.2nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE BH06 JETRANGER PILOT reports en-route from a private site in N Yorks to Sherburn-in-Elmet (SIE) VFR and in receipt of a BS from Church Fenton on 126.5MHZ, squawking an assigned code with Mode C. The visibility was 30km flying 4000ft below cloud in VMC and the ac was coloured blue with anti-collision and nav lights switched on. Heading 160° at 110kt and 1500ft QNH he had been handed over from Leeming to Linton-on-Ouse then Church Fenton involving 3 frequencies and 3 squawk changes. He received a call from Church Fenton on opposing traffic, 0.5nm, slightly lower to which he responded, "He's just gone past my window". He saw the Army helicopter late and turned R to avoid it, assessing the risk as high. He spoke to Linton ATC after the Airprox who informed him that under a BS there was no requirement for ATC to report conflicting traffic. He asked ATC why did he receive a very late call and was told that ATC need not have done that either. Later he asked what would have happened if there had been a mid-air collision and was told that there would be an inquiry.

THE LYNX AH7 PILOT reports from Middle Wallop to Dishforth VFR and in receipt of a BS from Linton Zone squawking an assigned code with Modes S and C. The visibility was >10km flying 3000ft below cloud in VMC and the ac was painted in grey/green camouflage; no lighting was mentioned. About 6nm W of Church Fenton heading 330° at 120kt and 2000ft RPS during a period of low workload he saw a JetRanger helicopter in his 12 o'clock, range 1km at the same level so he turned R in good time to avoid, estimating separation at the CPA as 300m. The JetRanger took no avoiding action and he did not hear the flight on the Linton frequency for ATC deconfliction. As far as his crew was concerned, this was not an Airprox, assessing the risk as low.

THE CHURCH FENTON APPROACH (CFN APP) CONTROLLER reports that he was informed of the Airprox 3 months post incident so his recollection of the event was poor. Following the initial call from the JetRanger flight he asked the pilot if he was aware of the inbound routeing to SIE, to which the pilot replied negative. CFN APP gave the JetRanger pilot instructions to follow the A1M motorway until Micklefield and then route direct to SIE not above 1500ft CFN QFE iaw the LoA with the SIE aeroclub. The JetRanger pilot requested and was given a BS. The pilot asked why he had to route in this manner and was told that it was in order to de-conflict with CFN operations. He had other traffic on UHF, possibly a radar PFL, therefore generating a reasonably high workload; on completion he scanned his display for the JetRanger and saw a conflicting ac flying in the opposite direction in close proximity. He called the traffic to the JetRanger flight whose pilot said that the call

was late but did not state his intention to file an Airprox. He did not remember the Lynx being on frequency at the time and, if it was, whether he passed TI to its pilot on the JetRanger. The Supervisor told him the following day that the JetRanger pilot had telephoned and provided APP with a resume of the conversation but again no mention was made of the Airprox.

THE LINTON-ON-OUSE SUPERVISOR (LIN SUP) reports that he received a telephone call from the pilot of the JetRanger who complained about the late calling of traffic by CFN APP. Whilst working Linton Zone the pilot was aware of the Army Lynx routeing in the opposite direction also at 1500ft RPS but complained that he had been handed over to CFN APP and was no longer on the same frequency. Further complaint was made that CFN APP had not called the Lynx traffic soon enough and that the Lynx had had to take aggressive avoiding action to avoid a collision. Also the pilot questioned why he had been routed via Micklefield, a location he was not familiar with. SUP told the pilot that he was not aware of the incident but would listen to the RT tapes to ascertain the full details and would call the pilot back; however, the pilot appeared to be unhappy with his response. He telephoned the pilot and informed him that both ac were under a BS where both pilots are responsible for avoiding other traffic unaided by controllers and that controllers are not required to monitor the flight. The pilot was not content with this information and again asked why the traffic had been called late. He was informed that if a definite risk of collision existed, subject to workload, under duty of care a warning may be passed. The pilot stated that as the unit had radar and had issued a squawk, the controller should have been passing TI and should have been aware of his location. SUP read the pilot an extract from CAP774 describing the terms and provisions of a BS.

HQ 1Gp BM SM reports that the Airprox occurred between the Lynx AH7 routing N towards Dishforth in receipt of a BS from Linton (LIN) Zone and a Bell 206 JetRanger routing S towards SIE in receipt of a BS from Church Fenton (CFN) Approach (APP), situated at Linton.

Unfortunately, the unit was delayed in raising reports on the occurrence. However, whilst the APP controller has described their recollection of events as "poor", they accord reasonably well with the more detailed account of the SUP and the tape transcript. Whilst a report and transcript from LIN were not requested, the RT recordings were subsequently examined to provide additional information.

In order to facilitate the sequencing of CFN and SIE traffic, CFN APP provides ATS to SIE inbounds and outbounds in accordance with a LoA between RAF Linton on Ouse and the Sherburn Aero Club.

Initially, as the JetRanger transits S it is handed over from Leeming to LIN ZONE, before subsequently being handed over to CFN APP for the transit to SIE, in accordance with the LoA. Examination of the LIN ZONE RT recordings demonstrates that ZONE's workload was moderate and that the JetRanger was on frequency at the point when the Lynx flight makes first contact with LIN ZONE at Ferrybridge (7nm SE of CFN) inbound to Dishforth. Furthermore, LIN SUP cites the JetRanger pilot as stating that they were aware of the Lynx travelling in the opposite direction at the same altitude. No further transmissions were made to or by the Lynx flight until it reached Newby Hall (15nm N of CFN) and went en-route; consequently, it can be seen that LIN ZONE did not provide any warning to the Lynx about the proximity of the JetRanger.

At 1440:56 the JetRanger flight contacted CFN APP "*Fenton ????? JetRanger c/s ?????*" (words unintelligible). CFN APP transmitted, "*...JetRanger c/s Fenton Approach eh Basic Service Barnsley one zero zero two route inbound to Sherburn via Micklefield, are you familiar.*" The JetRanger pilot replied, "*Eh one zero zero two eh Basic Service I'm eh just North North-West of eh Sherburn by ten miles this time, not familiar with Micklefield and eh I've got Sherburn visual JetRanger c/s.*" CFN APP transmitted "*JetRanger c/s roger if you follow the A1 eh obviously southbound and the fork with the M1 that should be Micklefield and eh you turn left towards Sherburn direct there.*" The JetRanger pilot replied "*I don't fly straight lines with these things.*" CFN APP replied "*It's just to avoid the climb out lane at Fenton.*" The JetRanger pilot read back "*JetRanger c/s route via Micklefield JetRanger c/s.*" which was acknowledged by CFN APP. It is clear from LIN SUP's subsequent conversation with the JetRanger pilot and the CFN APP tape transcript that the JetRanger pilot was unaware of SIE recovery procedures and the requirement to route via Micklefield. Once CFN APP had completed

briefing the JetRanger pilot of the arrival procedures at 1441:37, there were no further transmissions on the CFN APP freq until 1442:37 when a traffic warning was passed. CFN APP transmitted *“JetRanger c/s traffic South half a mile tracking North indicating slightly below.”* The JetRanger pilot replied *“He’s just gone past me a bit higher in fact thanks.”*

[UKAB Note (1): The radar recording at 1440:55, when the JetRanger pilot makes initial contact with CFN APP, shows the JetRanger 9.7nm NW of Church Fenton tracking 135° indicating FL017 (1370ft RPS 1002). At the same time the Lynx is 5.4nm WSW of Church Fenton tracking 350° indicating FL019 (1670ft RPS), in the JetRanger’s 1 o’clock range 6.7nm. Just over 1min later at 1441:59 the JetRanger has descended 100ft and turned R about 25° head-on to the Lynx in its 12 o’clock range 2.6nm. Both helicopters converge and by 1442:15 the Lynx is indicating FL018 (1470ft RPS) 1.5nm ahead of the JetRanger.]

Although CFN APP recalls their workload at the time of the occurrence being “reasonably high,” this is not borne out by the tape transcript. Further investigation with the unit proved that the Airprox occurred immediately after a lengthy period of high workload for CFN APP, although their workload in the minute immediately prior to passing the warning to the JetRanger pilot was low, with no other transmissions being made. Consequently, best controlling practice suggests that the opportunity existed for a more timely warning to be given. Considering the length of time that has elapsed between the occurrence and the controller’s completion of the DFSOR, the difference in recollection is understandable. However, research has demonstrated that psychophysiological alertness reduces significantly immediately following a high to low workload transition and remains so for up to 15min, regardless of the individual’s motivation for the task. Further research has proved that humans consistently over-estimate their level of psychophysiological alertness. Whilst this poses a supervisory challenge for ATM, it is a fact not well known within the Specialisation.

At the point when the Lynx’s avoiding turn to the R becomes evident at 1442:33, the JetRanger has entered a slight turn to the L, bringing it further into conflict with the Lynx, separation 0.5nm and 200ft. At 1442:37, CFN APP passes TI to the JetRanger flight and the CPA occurs 2sec later at 1442:39, with just under 0.2nm lateral separation existing - at this point the JetRanger has appeared to turn back to the R, away from the Lynx.

Whilst the opportunity existed for CFN APP to pass a more timely warning to the JetRanger, it is reasonable to suggest that given their workload history, they were suffering from reduced psychophysiological alertness, which served to delay their perception of the growing conflict. That notwithstanding, CAP774 is clear about the pilot’s responsibilities for seeing and avoiding other ac stating that under a BS ‘pilots should not expect any form of TI from a controller...and the pilot remains responsible for collision avoidance at all times.’ CAP 774 does however permit a warning to be transmitted to the pilot, if the controller ‘perceives a definite risk of collision,’ but qualifies this by stating that ‘whether or not TI has been passed, a pilot is expected to discharge his collision avoidance responsibility without assistance from the controller.’

Notwithstanding the fact that at the time of the Airprox the JetRanger and Lynx flights were operating on different frequencies, the information provided by the Lynx flight on its initial contact with LIN ZONE should have prompted the pilot of the JetRanger to focus their scan on their forward arc in order to visually acquire the Lynx. It appears from the SUP’s record of his conversation with the pilot of the JetRanger, specifically relating to the use of radar, that the pilot may have been under a misunderstanding as to the level of information provided under a BS. This may have served to degrade his visual scan causing the effective non-sighting of the Lynx. Furthermore, despite not receiving any TI, the Lynx pilot reported that he had sighted the JetRanger at a range of approximately 1km and been able to take effective avoiding action. Unfortunately, the separation gained by this avoiding action was eroded by the JetRanger’s L turn towards the Lynx. The JetRanger pilot does raise a potential issue that warrants further investigation in terms of the visibility of the SIE VFR arrival procedures to private pilots.

UKAB Note (2): The UK AIP at AD2-EGCJ-1-5 Para 2.22 Flight Procedures for Arrivals states:

'a. Pilots of inbound aircraft are to contact Fenton Approach on 126.5MHz when at 15nm or 5 minutes flying time from the MATZ boundary and are to enter the MATZ at 1500ft on the Sherburn QFE.'

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.

It was clear that the JetRanger pilot was expecting more from a BS than was likely to be provided; Members concurred with the Linton SUP's explanation of the service, reinforced by HQ 1Gp BM SM, it being important to ensure that there was no blurring of services under ATSOCAS. Members understood how pilots might be lulled into a false sense of security under a BS when working a radar equipped ATSU that issues a squawk; however, pilots requiring TI should request a TS. That said, under a TS as well as a BS, pilots should be in no doubt that they are still responsible for their own separation from other traffic, whether TI or warnings are passed or not. The JetRanger pilot, although unfamiliar with the SIE arrival procedure, was told of the preferred routeing, which necessitated following the A1M line feature under the RH traffic rule. The Lynx was routeing direct to Dishforth, situated just E of the A1M NW of Linton-on-Ouse, but its pilot was not mirroring the JetRanger pilot's RH traffic rule orientation. Pilots should always take due regard when a planned track coincides with a line feature by either adopting a track to follow the line feature on its R or moving clear of the line feature laterally if not following the RH rule. The Church Fenton APP passed a late warning to the JetRanger pilot who saw the Lynx slightly above, and turned R to avoid it. Given the geometry of the encounter, with a small target aspect visible of a helicopter approaching head-on, Members accepted this sighting was as soon as practicable. Fortunately the Lynx pilot had seen the JetRanger slightly earlier (1km), and also turned R, estimating separation as 300m which was corroborated by the radar recording. Taking these elements into account, the Board agreed that this had been a conflict resolved by both pilots whose actions had been effective in removing any risk of collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Conflict in Class G airspace resolved by both pilots.

Degree of Risk: C.