

AIRPROX REPORT No 2010071

Date/Time: 12 June 2010 (Saturday) 1237Z

Position: 5306N 00017W (6nm
W Coningsby)

Airspace: London FIR (Class: G)

Reporting Ac Reporting Ac

Type: Typhoon x 3 C150

Operator: HQ Air (Ops) Civ Pte

Alt/FL: 2000ft 2000ft
(QFE 1024mb) (RPS)

Weather: VMC CLBC VMC CLBC

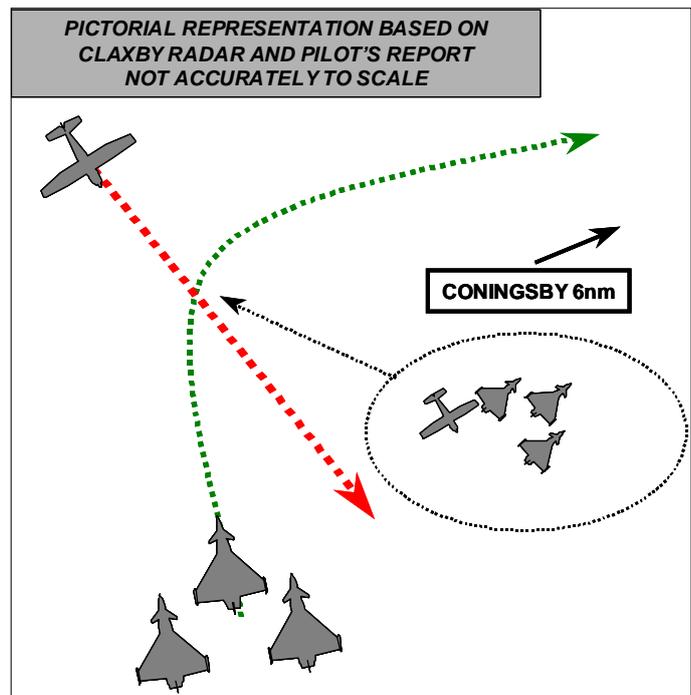
Visibility: 40km 30km

Reported Separation:

0V / 100-200ft H 200ft V/ 100m H

Recorded Separation:

100ft V/ 0.2nm H



BOTH PILOTS FILED

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE TYPHOON FORMATION No2 PILOT reports that 3 Typhoons in 'vic' formation were returning to base after participating in the Queen's Birthday Flypast. They were recovering through initials for RW07 at RAF Coningsby and were in receipt of a TS from Coningsby ATC; no TCAS was fitted but the No2 ac had a crew of two. They were 6nm out turning right through 040° at 2000ft QFE and 300kt and had just been handed over from APP to TWR when they had a close encounter with a civilian light ac. The ac approached from their 10 o'clock at the same alt and it was not reported by ATC; it was a white, single-engined type with a red top surface and it passed about 100-200ft behind them. They assessed the risk of collision as being medium to high. At the time the two wingmen were focused on maintaining position and, although a formation is relatively hard to manoeuvre, a turn away was initiated.

THE C150 PILOT reports flying a private flight with a passenger inbound to Cromer from Scampton, in a white and maroon ac without TCAS. The flight was one of a number of part-prepared and filed standard routes. [A map was provided]. On the evening of 9 June 2010, the NOTAMS were printed from the Website for a narrow and direct route. In the event on Saturday [12 Jun], an overland route via Sutton Bridge was flown. The navigation warning for Coningsby was not seen in the NOTAMS; however, in accordance with Scampton SOPs, when airborne Waddington ZONE was contacted for a MATZ penetration and a BS. They were cruising level at 2000ft on the Barnsley RPS and 80kt, squawking as directed with Mode C and when abeam Waddington, a MATZ crossing of Coningsby was also requested; the Controller immediately responded instructing them to squawk 7000 and free-call Coningsby on APP [VHF]. In response to his initial call to Coningsby, the controller requested that they avoid the airfield by 6nm and 10000ft vertically. They therefore turned right onto a Southerly track to comply with this instruction thus remaining at least 6nm from the airfield. A heading change to parallel track was initiated when overhead the E edge of Ruskington [6nm to the W of Coningsby and the Eastern edge of the **Cranwell** MATZ]. Almost immediately a 3-ship formation of military fast jets, later identified as Typhoons, was seen in the upper part of their windscreen very close in their 1 o'clock position and slightly above; he assessed collision angle as being 140°. He immediately pushed the nose down to avoid them and his passenger only caught a glimpse of the nearest ac passing slightly higher as it emerged on their starboard side; he anticipated wake vortex problems but

none materialised. Shortly afterwards, the controller advised “nothing further to conflict - contact Marham on 124.15”. This request was somewhat surprising as the service is normally provided out to 30nms and 3 calls to Marham indicated they had closed.

He did not report the incident on the radio but did so later and resubmitted when he was made aware that the Typhoons had also reported the incident, assessing the risk as being high.

UKAB Note (1): The recording of the Claxby radar shows the incident clearly. At 1236:00 the C150, squawking 1757 tracks 150° towards the CPA at a level of FL022; meanwhile the Typhoons are 3nm in its 12 o'clock descending through FL030 on a reciprocal track. They continue to close, the C150 still at FL022 and the Typhoons descending until they are displaced by 0.6nm at the same level, when the Typhoons commence a right turn inbound Coningsby passing just ahead of the C150. The CPA is at 1236:33 and the separation is as shown above.

UKAB Note (2): The transcript does not show any inter-formation dialogue regarding the C150 by the Typhoons. The formation transfers from APP to TWR at 1237:22 [after the ac cross at 1236:33]. On transfer to TWR the Typhoon leader first mentions the presence of ‘a light aircraft’ at 1238:36 but TWR suggests that it was unknown but might in the Cranwell cct. Both APP and TWR frequencies are very busy.

HQ AIR BM Safety Management reports that a formation of 3 Typhoons was returning to RAF Coningsby for a pre-arranged Families’ Day. They were under a TS and had been released ‘own-navigation’ for a timed arrival while a C150 was routing to the W of RAF Coningsby VFR under a BS.

Although the Typhoons had been released own-navigation to facilitate their timed arrival, they were still subject to a TS. Although another ac squawking 7000 was called to the Typhoons twice, at no time was TI passed on the Cessna. The APP controller was making many liaison calls to TWR regarding the co-ordination of flypasts (as seen from the transcript). Furthermore, the late call of another formation, the subsequent control instructions and the liaison required, increased significantly the controller’s workload, distracted him from his primary task and reduced his ability to scan the radar effectively.

Best practice during Families’ Days which involve timed arrivals and the pressure that this creates, requires careful consideration of manning in order to provide effective display liaison and coordination.

HQ AIR (OPS) comments that there was a break down in the TS provided to the Typhoon formation which meant the C150 went unreported, unfortunately it was also not detected by the lead pilot’s visual lookout scan. ATC Manning levels for events such as Families’ Days needs to be carefully considered as the tasks associated with their coordination can easily saturate even the most competent of controllers if personnel numbers are insufficient. They also questioned the wisdom of transiting such a busy piece of airspace under a BS, although the ability of a C150 to avoid a formation of 3 fast jets would be at best limited, which would be better than nothing.

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

Members were concerned that despite both pilots/crews being in receipt of an ATC service, the Typhoons a TS and the C150 a BS, neither was warned of the impending (head on) conflict with the other ac. Further, the C150 had not intended to route through the area of the airfield approach but was, in effect, asked to do so by Coningsby APP. While taken in isolation the request to remain clear of Coningsby by 6nm (or 10000ft) was reasonable, Members agreed that the controller should have foreseen that this would most likely mean that the C150 would route to the W of the airfield and

through the approach lane, as any other alternatives were not viable. Since the C150 called APP on VHF before the Typhoons were on frequency (UHF) there was no way that the Typhoon Leader could determine from RT transmissions that the C150 might be in the area. Following the instruction to 'free-call' Coningsby, the C150 pilot called APP on the published VHF frequency. At that time APP was controlling the Typhoon formation on UHF but simultaneously transmitting on a different VHF frequency (DIR). That being the case the C150 pilot would not have heard any transmissions made by APP to the Typhoons.

In sum neither pilot/crews could have been aware of the presence of the other ac from any ATC action, therefore lookout was the only means available for them to avoid the conflict. While some controller Members reasoned that in Class G airspace 'see and avoid' should take primacy, others said that when in receipt of an ATC service there is an understandable expectation that they will assist.

In addressing the lookout issues Members noted that 2 of the 3 Typhoon handling pilots would have been concentrating largely on closing to and maintaining close formation. Also the leader would have been busy lining up smoothly with the RW centreline and achieving his timed arrival; Members considered, however, that he also had a significant lookout responsibility. The C150 was level at 2000ft and the formation, although initially above and descending, was levelling at 2000ft just before commencing the right turn onto the centreline and, since the C150 should have been visible to them, the leader's non-sighting was part of the Cause. Members debated whether or not the C150 pilot's sighting of and reaction to the formation had been early enough for him to change the ac flightpath. Although there were differing opinions, a majority agreed that it had not and therefore his was an 'effective non' rather than a 'late' sighting.

Since in effect none of the pilots involved saw the opposing ac in time to take effective and timely avoiding action, it was agreed that there had been an erosion of normally acceptable safety standards.

A GA Member commented that the C150 pilot's checking of the NOTAMs pertaining to his flight had not been adequate in that he had done this check too early (3 days before the incident) to reveal any late changes. Also the 'filtering' criteria had not been correct for the route he actually flew, rather than the one he previously planned some time earlier. In other respects his planning and execution had been good and by understanding and applying correctly other procedures he had learned about the increased weekend activity at Coningsby while airborne and adhered to the NOTAMed avoidance.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: In the absence of TI to the Typhoon formation or a warning to the C150 pilot, a non-sighting by the Typhoon Leader and effectively a non-sighting by the C150 pilot.

Degree of Risk: B.