

## AIRPROX REPORT No 2012027

Date/Time: 1 Mar 2012 1357Z

Position: 5545N 00230W (6nm  
NW Charter Hall – [13nm  
SW of SAB])

Airspace: UKDLFS (Class: G)

Reporting Ac Reported Ac

Type: Hawk T1 Tornado GR4

Operator: HQ Air (Ops) HQ Air (Ops)

Alt/FL: 750ft 300ft  
agl agl

Weather: VMC NR VMC CLBC

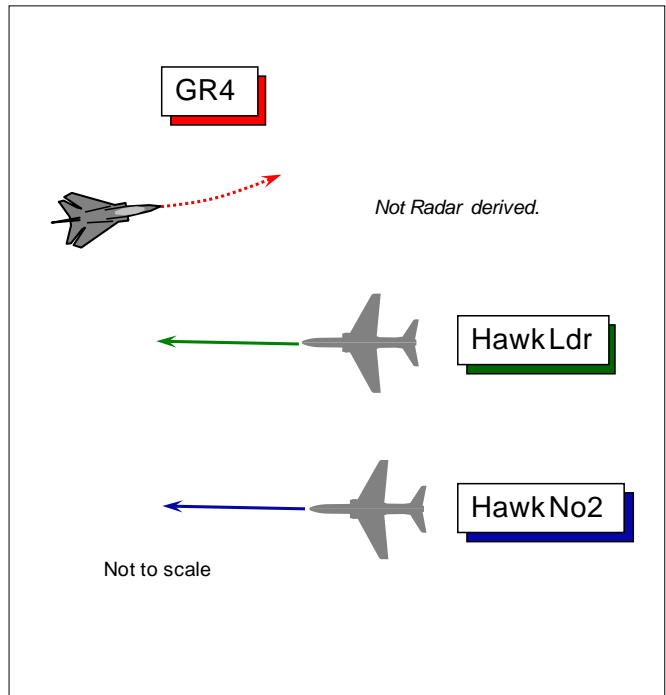
Visibility: 15km 15km

Reported Separation:

500ft V/200m H 500ft V/800ft H

Recorded Separation:

Not recorded



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE BAe HAWK T1 PILOT** reports he was leading a pair of Hawk ac operating autonomously within LFA16 on a 2v1 low-level evasion sortie for a Weapons System Operator (WSO) student. Heading W at 420kt approaching a position 6nm NW of Charter Hall light ac strip, during evasion he 'kicked' to put the fighter in his 6 o'clock to action a bomb-in-face (BIF) tactic. To simulate this he wing waggled and climbed to a height of about 750ft. As he resumed straight and level flight his wingman called 'tally' on a GR4 ahead on his nose. He acquired the GR4 visually himself at a range of about ¼nm, which then passed down his RH side 200m away and about 500ft lower than his ac. No avoiding action was taken as he assessed the GR4's flight path would keep the ac clear of each other and the Risk was 'low'. He stated that, as the Airprox occurred in the middle of a 'bounce', his lookout was focussed on the ac executing the bounce.

His ac has a black colour scheme; the HISLs and landing lights were on. A squawk of A7001 was selected with Modes C and S on; TCAS is not fitted.

**THE TORNADO GR4 PILOT** reports he was operating as a single GR4 in the LFS as his wingman was delayed on the ground. He was monitoring the LFS common frequency and was squawking with Mode C. TCAS is not fitted.

Flying at low-level at a height of about 300ft and approaching the location of the Airprox heading 080° at 420kt, he became 'tally' with a single Hawk in his 12:30 position at a range of about 3-4km. The Hawk was assessed as flying at a height of 1000ft, with L to R movement in the canopy. To avoid the black Hawk he manoeuvred 10° left and maintained level flight at 300ft keeping tally on the ac. At this point he and his navigator started to scan for a potential wingman. Assessing the horizontal displacement at the closest point to be in his 3 o'clock at about 800-1000ft, it did not appear that the Hawk pilot had seen his GR4. Just before the lead Hawk passed abeam, displaced some 800-1000ft horizontally to starboard and 500ft above his GR4 at the closest point, the No2 Hawk was seen in battle formation to port of the lead Hawk. At no stage did he feel that there was a risk of a collision and stated the Risk was 'low'.

His ac has a grey colour-scheme but the HISLs were on.

**HQ AIR (OPS)** comments that the Airprox occurred within Class G airspace at low level. The Hawk No2 ac acquired the GR4 (as would be expected from the formation SOP-defined lookout sectors) and called the 'tally' to the lead Hawk pilot. The lead Hawk pilot used this information to gain visual on the GR4, albeit at fairly short range. The benefits of flying in tactical formation and combining lookout sectors for an improved chance of detection are clearly illustrated. The GR4 pilot had previously gained tally on the lead Hawk and as a sight line rate existed, which demonstrated that the GR4 and lead Hawk were not on a collision course, he sensibly did not manoeuvre hard to increase separation on the lead Hawk until he had thoroughly scanned the surrounding airspace (for the expected wingman).

UKAB Note (1): The Airprox occurred outwith recorded radar coverage.

## **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available included reports from the pilots of both ac and comment from the appropriate operating authority.

It was apparent to the Members that the GR4 pilot saw a single Hawk first, in his 12:30 position at a range of about 3-4km and evidently the lead Hawk ac. Although he recognised that there would be some lateral displacement when the lead Hawk was first spotted, Members noted the GR4 pilot wisely manoeuvred gently left to ensure a wider berth as he maintained level flight at 300ft agl whilst keeping a watch on the lead Hawk and scanning for a No2, which was subsequently spotted before the ac passed abeam.

It appeared that the No2 Hawk crew spotted the GR4 slightly later but promptly warned the lead Hawk pilot about it, who saw the GR4 from a range of ¼nm. The Board noted that although he was able to do so, the lead Hawk pilot saw no need to take avoiding action as he assessed the GR4's flight path relative to his own would keep the ac clear of each other. The GR4 subsequently passed some 200m clear to starboard from his perspective, broadly in agreement with the GR4 pilot's estimate of about 240m. Taking all these factors into account, the Board concluded that this Airprox had stemmed from a conflict in the UKDLFS that had been resolved by the GR4 pilot.

Although the lead Hawk pilot had initiated his climb to 750ft agl as part of his evasion exercise, fortuitously, this had the added affect of increasing the vertical separation at a critical juncture and he wisely maintained this height as the GR4 passed abeam some 450-500ft below him. Despite the high closing speed of 840kt, the lead Hawk and GR4 pilots were visual with each other's ac in reasonable time. This coupled with the reported separation, led the Board to conclude, unanimously, that any Risk of a collision had been effectively eradicated.

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

Cause: Conflict in the UKDLFS resolved by the GR4 pilot.

Degree of Risk: C.