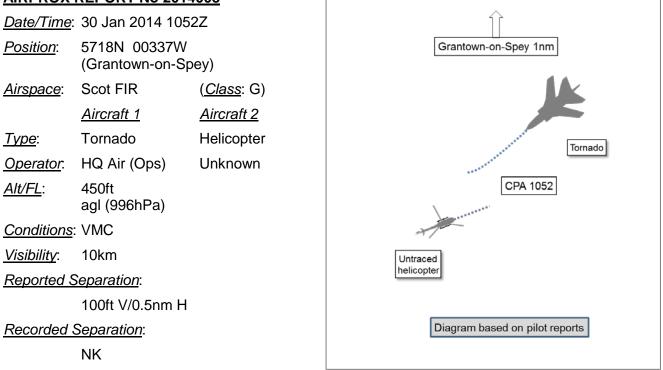
AIRPROX REPORT No 2014008



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE TORNADO PILOT reports conducting a low-level training sortie. The grey camouflaged aircraft had navigation lights and HISL selected on, as was the SSR transponder with Modes A, C and S. The aircraft was not fitted with a TAS or ACAS. The pilot was operating under VFR in VMC, not in receipt of an ATS. Shortly after passing 15nm south of RAF Lossiemouth, having descended to lowlevel, the rear-seat captain made a call on the low-level common frequency declaring the aircraft position and intentions. After two minutes of low-level flying in the Spey Valley, on passing south of Grantown-on-Spey heading 230° at 430kt, the front-seat pilot made a small heading change to the right and, on rolling out of that small turn, immediately spotted a white and red helicopter at a range of 1.5nm, slightly low in the 11 o'clock position. He called it to the rear-seat pilot and simultaneously initiated a turn to the right, away from the helicopter. He continued with commentary on its position as it passed down the left-hand side; the rear-seat pilot did not see the helicopter. The front-seat pilot estimated that the Tornado had passed within 1/2 nm of the helicopter. The helicopter was seen to be flying a steady heading away from the Tornado track, but at no time was it observed to alter its course as it might had the pilot had been aware of, or visual with, the Tornado. The helicopter type was not recognised. From the video replay, the helicopter was displayed as a thermal cue at exactly the moment the front-seat pilot called visual and actioned the turn away.

He assessed the risk of collision as 'Medium'.

THE UNTRACED HELICOPTER: The radar recording was examined from 30min before the reported CPA to 20min after; no PSR or SSR, other than the subject Tornado, were observed. Despite contacting local operators, the helicopter pilot could not be traced.

Factual Background

The weather at RAF Lossiemouth was recorded as follows:

METAR EGQS 201050Z 16008KT 9999 FEW035 05/02 Q1003 BLU NOSIG

Analysis and Investigation

UKAB Secretariat

Both pilots shared an equal responsibility for collision avoidance¹ and, if the geometry is considered to be head-on, the Tornado pilot was required to turn to the right², which he did. Given the altitude and location of the incident it could reasonably be surmised that the helicopter pilot was operating under VFR in VMC and was not in receipt of an ATS.

Comments

HQ Air Command

This incident is a salutary reminder of the benefit of effective lookout throughout a sortie.

Summary

An Airprox was reported when a Tornado and a helicopter flew into proximity at 1052 on 30th January 2014. The Tornado pilot was operating under VFR in VMC without an ATS, as was the helicopter pilot most likely, both in Class G airspace.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included a report from the Tornado pilot and the appropriate ATC and operating authorities.

The Board quickly agreed that this Airprox was the result of a chance encounter between two aircraft operating in the same airspace within the Class G/UK Military Low-Flying System. They also agreed that it was evident that it had been the Tornado pilot's lookout during his navigational turn that had enabled visual acquisition (perhaps due to the generation of a crossing-component and relative movement of the helicopter to aid visual acquisition). At the height and position of this encounter it was unlikely that the helicopter pilot could have been in receipt of an ATS and, in the absence of any further information from the helicopter pilot, the Board could not deduce whether he had seen or heard the Tornado pass by, or had taken avoiding action. In the event, the Tornado pilot discharged his collision avoidance responsibility in Class G airspace; effective and timely action had been taken to prevent aircraft collision.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u> :	A conflict in Class G.
Degree of Risk:	С.
ERC Score ³ :	2

¹ Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).

² ibid., Rule 10 (Approaching head-on)

³ Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.