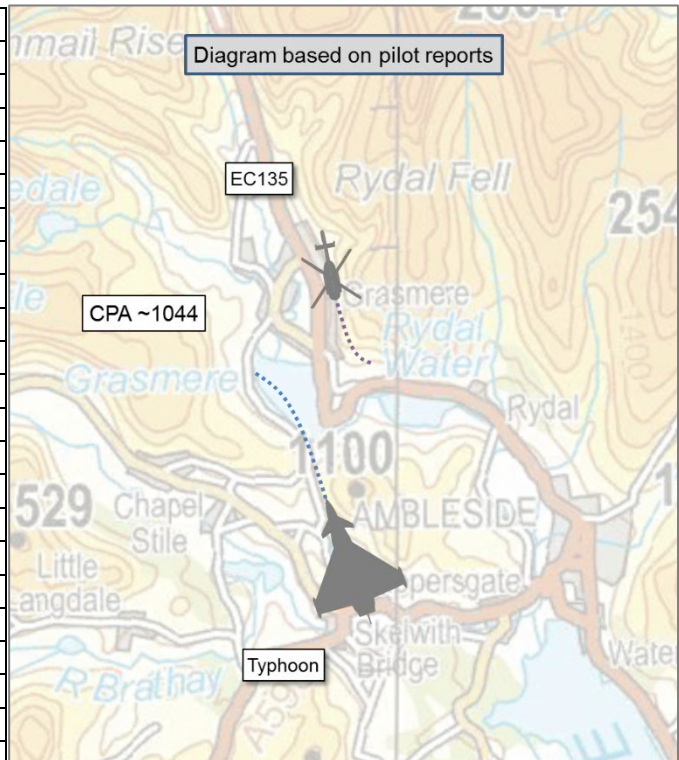


**AIRPROX REPORT No 2018015**

Date: 01 Feb 2018 Time: 1044Z Position: 5427N 00301W Location: Grasmere

**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

Recorded	Aircraft 1	Aircraft 2
Aircraft	Typhoon	EC135
Operator	Civ Comm	NPAS
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	London Info
Altitude/FL	NK	NK
Transponder	A, C, S	A, C, S
Reported		
Colours	Grey	Blue, yellow
Lighting	NK	Strobe, nav
Conditions	VMC	VMC
Visibility	NK	>10km
Altitude/FL	NK	800ft
Altimeter	QNH (1002hPa)	RPS (993hPa)
Heading	0°	180°
Speed	NK	100kt
ACAS/TAS	Not fitted	TCAS I
Alert	N/A	TA
Separation		
Reported	300ft V/3000ft H	100ft V/500m H
Recorded	NK	



**THE TYPHOON PILOT** reports that during a low-level portion of the flight, near Grasmere, a black and yellow helicopter passed down the right side of his aircraft. The pilot noted that he saw the helicopter about ½ second before making a left-hand climbing avoiding-action turn. He reported the Airprox by radio to his home base.

He assessed the risk of collision as ‘Low’.

**THE EC135 PILOT** reports that as he approached Grasmere, flying on the eastern side of the valley with a slight left angle of bank to follow a natural valley feature towards Lake Windermere, the crew became aware of a Typhoon approaching in the 1 o'clock position. The crew had been briefed prior to entry to the Lake District area to be on the lookout for low-flying jet aircraft and, as it was sighted, it was seen in a left climbing turn, away from the helicopter. A TCAS warning of an aircraft in the 1 o'clock was also observed. The pilot thought that the risk of collision was ‘Low’, and the crew felt that there was no risk of collision. The pilot noted that after landing he received a telephone call from the Typhoon pilot; they discussed the occurrence and agreed that they had both seen each other and had both turned away from the other, minimising any risk of collision.

He assessed the risk of collision as ‘Low’.

**Factual Background**

The weather at Warton was recorded as follows:

METAR EGNO 011050Z 32018KT 290V360 9999 FEW023 06/01 Q1002=

## Analysis and Investigation

### UKAB Secretariat

The Typhoon and EC135 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard<sup>1</sup>.

## Comments

### NPAS Director of Operations

As the Police operator for England and Wales, NPAS is fully engaged in the reporting process in the interests of reducing the risk of airborne conflict. In this instance the incident highlights the inherent risks of helicopter v. low-flying fast-jet traffic; the various barriers available (lookout, TCAS, aircraft positioning etc.) were effective in minimising the risk of collision.

## Summary

An Airprox was reported when a Typhoon and an EC135 flew into proximity at about 1044 on Thursday 1<sup>st</sup> February 2018. Both pilots were operating under VFR in VMC, the Typhoon pilot not in receipt of a Service and the EC135 pilot in receipt of a Basic Service from London Information and Listening Out on the Warton Radar frequency.

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

Information available consisted of reports from both pilots, radar photographs/video recordings (which did not display either aircraft's track) and a report from the appropriate operating authority.

Members quickly agreed that the separation at CPA, the EC135 TCAS warning, each pilot's visual acquisition, and the Typhoon pilot's timely and effective avoiding action were such that this incident could be classed as a conflict in Class G that fell within the definition of normal operations.

Notwithstanding, the Board also discussed whether improved SA could have been achieved through NPAS use of CADS. However, members agreed that, unless there were opportunities to access CADS in flight through a suitably 3G/4G enabled laptop (or by communicating such information to the crew by R/T from an operations room), the rapid responses required of NPAS operations were such that CADS would probably be of limited utility unless used as a planning aid for pre-planned flights such as transits. Members also felt that a low-level VHF common frequency could potentially have been of use in that the Typhoon and EC135 pilots could have broadcast their routes on entry into the low-flying system (subject to NPAS operational security limitations) which, depending on terrain screening, may have alerted them to the other's presence. Members were informed by the HQ Air Command representative that efforts to approve a frequency for such use were nearing fruition, subject now only to CAA finalising the frequency allocation.

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

Cause: A conflict in Class G.

Degree of Risk: E.

Safety Barrier Assessment<sup>2</sup>

<sup>1</sup> SERA.3205 Proximity.

<sup>2</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

**ANSP:**

**Situational Awareness and Action** were assessed as **not used** because neither pilot was in receipt of a service which could provide SA on the other aircraft.

**Flight Crew:**

**Situational Awareness and Action** were assessed as **effective** albeit with partial availability because the Typhoon pilot was not aware of the EC135's presence until his visual sighting.

**Warning System Operation and Compliance** were assessed as **effective** albeit with partial availability because the Typhoon was not equipped with a CWS.

