

## **AIRPROX REPORT No 2010098**

Date/Time: 21 Jul 2010 1504Z

Position: 5429N 00040W  
(2nm W Whitby)

Airspace: UKDLFS/Lon FIR (Class: G)

<u>Reporting Ac</u>	<u>Reported Ac</u>
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<u>Type:</u> Tucano	R44
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<u>Operator:</u> HQ AIR (TRG)	N/K
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<u>Alt/FL:</u> 400ft (RPS 999mb)	NK (N/K)
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<u>Weather:</u> VMC CLBC	NK
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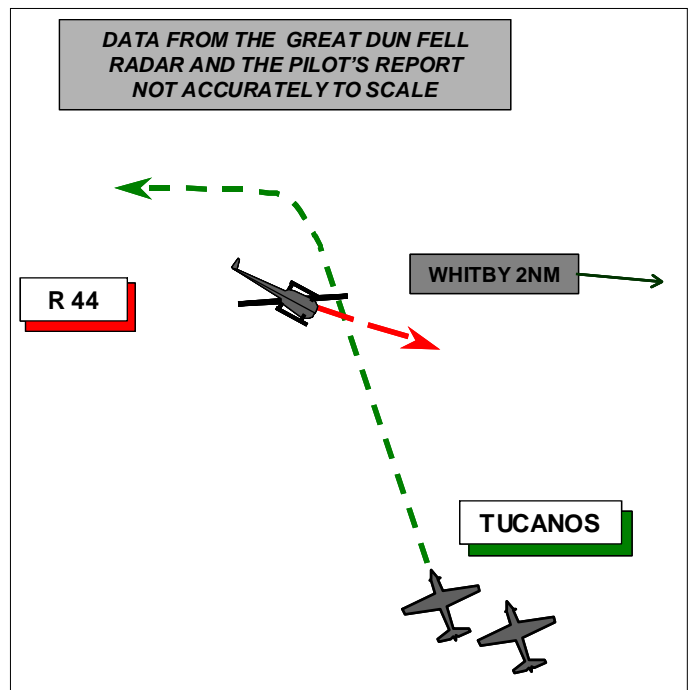
<u>Visibility:</u> 30km	NK
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Reported Separation:

100ft V/ 0 H	NK
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Recorded Separation:

NR



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

**THE TUCANO PILOT** reports he was flying as No2 of a pair of black ac, with an instructor in the rear seat, with all lights switched on, Squawking 7001 with Mode C on a basic training LL navigation exercise in LFA 11; TCAS 1 was fitted but they were not in receipt of an ATC service. At a turning point just to the W of Whitby their attention was drawn to a large flock of birds that were resting on the ground. While heading 350° at 240kt, just after seeing the birds he saw a helicopter ½nm away, tracking from left to right, at about 250ft agl but bunting aggressively to avoid their formation - the helicopter was dark blue with white lettering, the top of the rotor blades could be seen as the ac pitched nose down and the flight path of the helicopter was such that it disturbed the birds on the ground and passed directly underneath both the leader and the No2. At the time both formation members had climbed from a nominal 250ft agl to around 400ft agl since they were near a town and in a busy phase of flight approaching a turning point. The crew considered that this combined with the helicopter's bunt had prevented a collision with one or other of the ac.

UKAB Note (1): The radar recording shows the ac to be loose arrow formation with the leader on the left.

Neither crew received any TCAS information regarding the helicopter so it appeared to them that it had not been squawking with Mode C.

No avoiding action was possible and he assessed the risk as being high.

**THE R44 PIPELINE INSPECTION PILOT**, his secretary and his company were contacted on at least 7 occasions and although it was confirmed that he was flying the ac involved, he did not provide a report. It is understood that the helicopter was operating from a private farm strip 7nm N of Driffield [~20nm S of the incident position].

UKAB Note (2): The recording of the Great Dun Fell radar shows both Tucano ac throughout the period operating at low level indicating about FL013 (1000ft amsl – terrain variable up to 980ft amsl) in the vicinity of Whitby. The Helicopter does not paint as either a primary or a SSR contact at any time.

**THE TUCANO UNIT** comments that this appears to have been a close call. During a recent Flight Safety visit to the Station it was pointed out to HQ staff that probably the biggest airborne threat to Tucano operations is a mid-air-collision with a non-squawking GA aircraft or glider. TCAS is not a panacea and cannot replace effective lookout but the MoD should apply as much pressure as possible to make Squawking in all UK airspace mandatory.

**HQ AIR (TRG)** comments that it is disappointing the helicopter pilot has not responded to the UKAB request for comment. This was a close encounter in the UKDLFS but it seems that the Tucano formation pilots and helicopter pilot saw each other with sufficient time to take effective avoiding action. Of note, non-squawking ac do not show on TCAS therefore lookout continues to be the primary tool in 'see and avoid' airspace.

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

Information available included reports from the Tucano pilot, radar recordings and a report from the Tucano Station and operating authority.

Members were concerned that despite repeated requests and apparent concern about the incident, the R44 pilot did not provide a report. They were also concerned that he did not make use of the PINS process and was apparently not squawking, both of which would have made his presence known to the TCAS-equipped Tucano crews. It was emphasised that all operators should embrace the significant safety initiatives taken in the pipeline inspection industry consistently and proactively.

Nevertheless the incident occurred in the Class G airspace where pilots share an equal responsibility to see and avoid other ac. Given only the report by the Tucano pilot, it seemed that the R44 pilot saw the Tucano late, but in time for an avoidance manoeuvre. Members also concluded that the sighting of the small helicopter at ½nm was later than optimum, but since no additional avoidance was required there had been no risk of collision.

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

Cause: A late sighting by the Tucano crews and a probable late sighting by the R44 pilot.

Degree of Risk: C.