

## **AIRPROX REPORT No 2013170**

**Date/Time:** 1 Dec 2013 1241Z (Sunday)

**Position:** Estimated 5301N 00048W  
(3nm south of Newark)

**Airspace:** Lincolnshire AIAA (*Class:* G)

**Type:** Aircraft 1 Aircraft 2  
Squirrel Untraced Light  
Aircraft

**Operator:** HQ AAC Unknown

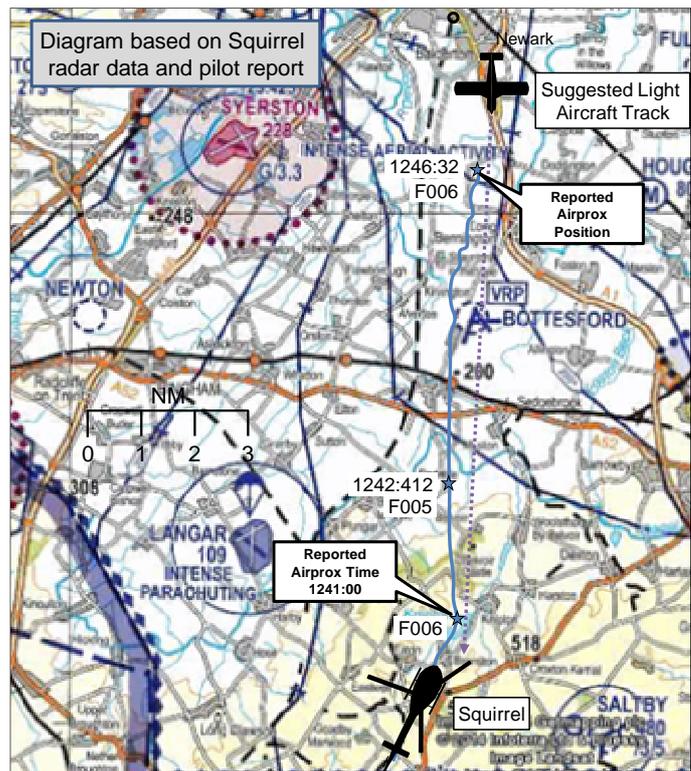
**Alt/FL:** 2000ft NK  
RPS (1029hPa) NK

**Conditions:** VMC NK

**Visibility:** 30km NK

**Reported Separation:**  
100ft V/ 0nm H NK V/NK H

**Recorded Separation:**  
NK V/NK H



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

**THE SQUIRREL PILOT** reports flying a black and yellow helicopter VFR in VMC, clear below cloud, with upper and lower HISLs and the landing light illuminated, and squawking transponder Modes 3/A, C and S. He was heading 359° at 100kt, flying at 2000ft on the Barnsley RPS, receiving a Basic Service from London Information but speaking to Waddington Zone 'to establish local traffic' and to obtain a clearance through the Scampton MATZ<sup>1</sup> stub. When they were around 3nm south of Newark the handling pilot, who was in the right-hand seat, saw a high-wing light aircraft in their 12 o'clock, around 100ft below them and 150m away, on an 'almost reciprocal' track but with a 'slight crossing angle' from left to right; the other aircraft was in a slow climb. The Squirrel crew made an 'avoiding action' 'gentle left turn' and a 'slight climb' so that the light aircraft passed behind and below them without any observable indication that the pilot had seen their helicopter. The Squirrel crew did not receive any indication from their TAS<sup>2</sup> either before or after the encounter.

He assessed the risk of collision as 'Medium'.

**THE LIGHT AIRCRAFT** could not be traced.

**THE WADDINGTON LARS<sup>3</sup> CONTROLLER** reports being made aware of the Airprox four days after the occurrence; he recalls that it had been a busy day and remembers speaking to the Squirrel pilot but cannot recall any pertinent details of the Airprox.

**THE WADDINGTON SUPERVISOR** reports that the Controller's and the Unit's workload were 'medium'.

### **Factual Background**

The weather at Waddington at 1250 was recorded as:

METAR EGXW 011250Z 34006KT CAVOK 08/05 Q1032 BLU NOSIG

<sup>1</sup> Military Air Traffic Zone

<sup>2</sup> Traffic Alerting System

<sup>3</sup> Lower Airspace Radar Service

## Analysis and Investigation

### Military ATM

At 1238:06, the Squirrel free-called Waddington Zone controller to request a Basic Service and a transit through the RAF Scampton MATZ. At 1238:32 Zone provided a Basic Service and MATZ crossing approval.

The Squirrel was allocated a discrete squawk and Zone provided two sets of Traffic Information to the Squirrel crew prior to instructing them to freecall Doncaster at 1253:44. The first Traffic Information was passed at 1242:18 as, “[Squirrel callsign] *traffic northeast one mile, tracking west, indicating seven hundred feet above.*” The Squirrel reported visual with the traffic. The second set of Traffic Information was passed at 1252:40, “[Squirrel callsign] *traffic north one mile, manoeuvring...slow moving, indicating one thousand feet below.*” The Squirrel once again reported visual with the traffic. [UKAB Note: The circumstances reported by the Squirrel pilot do not correlate with either of these sets of Traffic Information and so it is likely that they referred to other traffic encountered during that leg]. No Airprox was reported on the frequency and once the details became known, the controller completed the report four days later; the Supervisor did not witness the occurrence. The Zone controller does not recall the specifics of the incident but does recall providing the Squirrel a service and being busy on the day.

### UKAB Secretariat

Both pilots had equal responsibility to avoid a collision.<sup>4</sup> The aircraft were approaching head-on so both pilots were ordinarily required to alter course to the right;<sup>5</sup> however, the Squirrel crew assessed that it was best, in the circumstances, to avoid to the left and climb.

## Summary

An Airprox was reported by the pilot of a Squirrel helicopter, 3nm to the south of Newark, with a high-wing light aircraft. The other aircraft involved in the incident was not traced. The Squirrel pilot reported being at 2,000 feet with 30 km of visibility. The right-hand seat handling pilot reports seeing the other aircraft in the 12 o'clock position at approx 150m horizontal distance and 100ft below, on an almost a reciprocal heading, slightly crossing left to right. The helicopter crew took avoiding action by turning left and climbing; no indication was observed on TAS.

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

Information available included a report from the Squirrel pilot and radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

The Board viewed the radar photographs and compared them with the pilots report; members noted that the report's CPA time and location could not be reconciled (the Squirrel was much further south of Newark than the reported 3nm at 1241:00). The associated radar trace showed the Squirrel manoeuvring in the way the pilot described in both places, but the radar recording did not display a conflicting light-aircraft in either. There are many reasons why the light aircraft may not have been detected; amongst others, the aircraft could have been lower than the Squirrel relative to the radar head in use, it may have presented a smaller radar cross-section than the radar is tuned to detect, or it could have been travelling at a lower ground speed than the radar filters would display. Furthermore, members could not be certain that the Traffic Information passed by the Waddington LARS controller referred to the conflicting aircraft. In the end, the Board agreed that there was insufficient correlating information to assess the cause or degree of risk in this Airprox.

<sup>4</sup> Rules of the Air 2007, Rule 8, Avoiding Aerial Collisions

<sup>5</sup> Rules of the Air 2007, Rule 10, Approaching Head-on

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

Cause: Insufficient information.

Degree of Risk: D

ERC Score<sup>6</sup>: N/S

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<sup>6</sup> 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.