

## **AIRPROX REPORT No 2013180**

Date/Time: 18 Dec 2013 1116z

Position: 5429N 00103.W  
(22nm NNE Leeming)

Airspace: Vale of York AIAA (Class: G)

Aircraft 1                      Aircraft 2

Type: Hawk                      Unknown  
Balloon

Operator: HQ Air (Ops)

Alt/FL: 15000ft  
QNH (990hPa)

Conditions: VMC

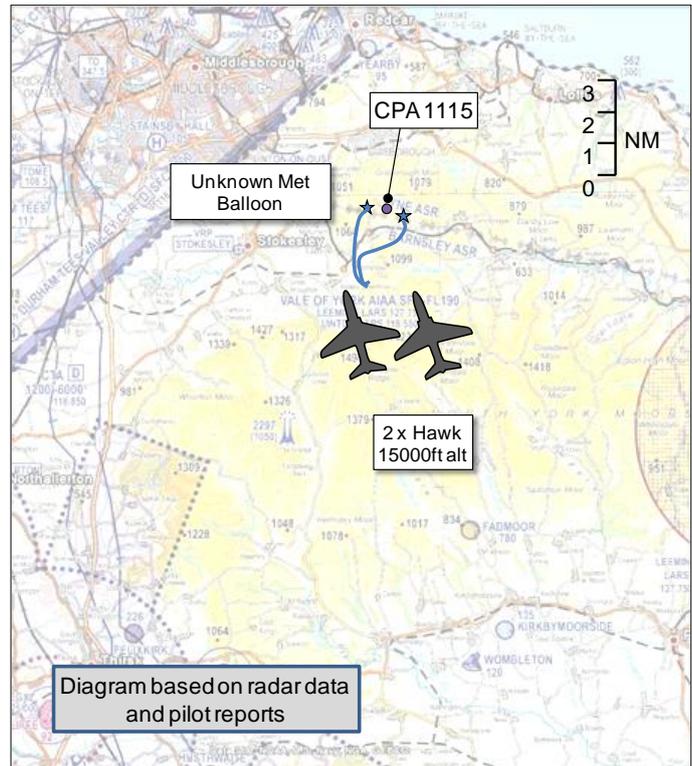
Visibility: 40km

Reported Separation:

NK V/100m H

Recorded Separation:

NK



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

**THE HAWK PILOT** reports flying in a formation of two, in an air combat manoeuvring phase of flight at 350kts and 15000ft. Both aircraft were in a level, right-hand turn during the initial phase of separation for air combat. The number-two pilot was 2000-3000ft behind the lead when he saw an object that he perceived to be a met balloon pass within 100ft of the lead aircraft. He described it as a silver balloon with suspended equipment. He saw the object pass between the pair, close to the lead, and was able to maintain visual contact with it for 2-3 seconds before losing sight of it. Consequently a “terminate” on manoeuvring was called and Swanwick Mil were informed.

He perceived the severity of the incident as ‘Very High’.

**THE LATCC (Mil) NORTH EAST SECTOR CONTROLLER** reports controlling a pair of Hawks who were general handling in the Vale of York. At 1116 the pilot of the second aircraft in the formation reported an Airprox with a weather balloon at approximately 15000ft: the pilot asked whether the balloon was visible on the radar, it wasn’t.

**THE EAST SUPERVISOR** reports that traffic intensity at the Unit at the time of the incident was low. He did not witness the event, but was made aware by the controller and then took actions to relieve the controller and pass traffic information to other users in the area. Although he was aware of NOTAMs for met balloons in other parts of the country, there were none for North Yorkshire.

## **Factual Background**

The weather at Leeming was reported as:

METAR EGXE 181050Z 15013KT 7000 BR SCT007 SCT020 BKN060 06/05 Q1003 GRN TEMPO 17015G25KT FEW007 SCT020 WHT

## **Analysis and Investigation**

### **Military ATM**

The incident involved a formation of Hawks and a perceived Met Balloon. The Hawks were receiving a Traffic Service from Swanwick (Mil). The radar replay could not capture a return from a conflicting object. During two-ship formation manoeuvres, the second aircraft in the formation noticed a perceived Met balloon pass within 100ft of the lead aircraft of the formation. The trailing aircraft was approximately, 2-3000ft in trail; the object was not seen by the lead aircraft.

The controller was manning the North East Sector at LATCC(Mil) with just the formation on frequency. At the time the incident was reported the controller could not see the balloon (or any other conflicting object) on the radar screen. The Supervisor confirmed the location of the reported incident and relieved the controller. All adjacent units were passed Traffic Information on the sighting and all NOTAMs were checked for Met balloon activity. Of the three balloon NOTAMs on the day (H5314, H6188, H6326), none were in the vicinity.

Following enquiries by the Station Flight Safety Officer at RAF Leeming, a Met balloon at 15000ft would be about the size of a beach-ball and the SWIFT weather display system used by RAF Leeming Met Office confirmed that there were no meteorological radio-sondes in that area at the reported time. The controller and Supervisor at Swanwick(Mil) carried out the correct actions and reported the incident in detail; however, it was not possible to trace the conflicting object.

### **UKAB Secretariat**

Unfortunately, it has not been possible to trace the origin of the balloon, the CAA confirmed that there were no NOTAMs issued for the release of Met balloons in the area that day. The Met Office also confirmed that they had not launched any radio-sondes that day.

## **Comments**

### **HQ Air Command**

This incident underlines that lookout continues to be a fundamental barrier to MAC in all regimes of flight.

## **Summary**

On 18<sup>th</sup> December 2013 two Hawks were combat manoeuvring at 15000ft north east of Leeming, when the pilot of the second aircraft saw what he perceived to be a met balloon pass close to the lead aircraft. It has not been possible to trace the origins of the object.

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

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

The Board discussed at length the possible origins of the balloon. The pilot had reported that he saw suspended equipment beneath the balloon and this therefore suggested that it wasn't just a toy balloon or a Chinese lantern, yet there were no NOTAMs notifying such a release; the Met Office has confirmed it was not one of their radio-sondes. Whilst there are regulations governing the release of such balloons, the Board wondered whether it was possible that an organisation such as a school, company or university conducting their own research might be unaware of these, and might have released the balloon without understanding the full implications of doing so.

In assessing the cause and risk, the Board considered the pilot's report, but acknowledged that it was difficult to judge from one visual assessment exactly how close the object had actually got to the lead aircraft when determining the risk of collision. Given that there was also no radar data or information on the balloon itself, the Board had to conclude that, unfortunately, in this case there was insufficient evidence to make an assessment of risk and they therefore classified the Airprox as Category D. Notwithstanding, this categorisation, the Board decided that it would be worthwhile re-emphasising to relevant organisations the regulations associated with the release of research balloons; they resolved to recommend to the CAA that it considers highlighting radio-sonde procedures to potential operators.

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

|                               |   |
|-------------------------------|---|
| <u>Cause:</u>                 | Insufficient Information  |
| <u>Degree of Risk:</u>        | D   |
| <u>ERC Score<sup>1</sup>:</u> | N/S   |
| <u>Recommendation(s):</u>     | The CAA considers highlighting the radio-sonde procedures to potential operators. |

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<sup>1</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.