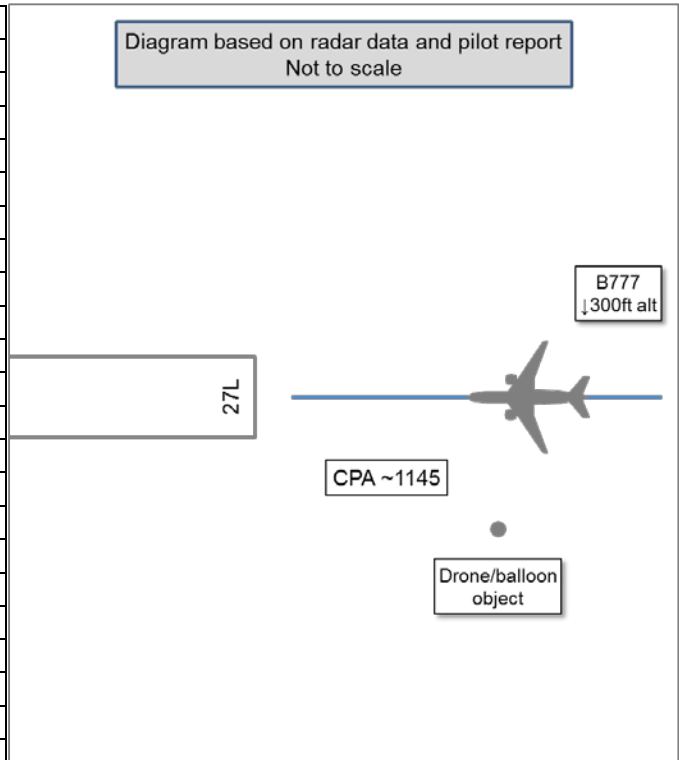


AIRPROX REPORT No 2015183

Date: 4 Oct 2015 Time: 1145Z Position: 5128N 00025W Location: Heathrow

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	B777	Drone/balloon
Operator	CAT	Unknown
Airspace	London CTR	London CTR
Class	D	D
Rules	IFR	
Service	Aerodrome	
Provider	Heathrow	
Altitude/FL	300ft	
Transponder	A, C, S	
Reported		Not reported
Colours	White/blue	
Lighting		
Conditions	VMC	
Visibility	8km	
Altitude/FL	~300ft	
Altimeter	NK	
Heading	270°	
Speed	150kt	
ACAS/TAS	TCAS II	
Alert	None	
Separation		
Reported	0ft V/3-400m H	
Recorded		NK



THE B777 PILOT reports being on short-final approach to RW27L when he saw an object pass down the left-hand side of the aircraft. He noted that the object appeared to be stationary, that it was in view for only a second or two, and that his initial thought was that it may have been a UAV or drone but that it may well also have been a balloon. No avoiding action was taken, and the incident was reported to ATC on ground frequency. The pilot also included a Police reference number, indicating that the matter had been reported to the police.

He did not make an assessment of risk.

DRONE/BALLOON OBJECT: It was not possible to confirm whether the object was a drone or a balloon.

THE HEATHROW CONTROLLER reports that the B777 landed on RW27L and subsequently reported to ground that when he was at 1nm final he saw something briefly out of the left hand window. He stated it could have been a 'quadcopter' or possibly a balloon. The details were passed to Heathrow Police who went to speak to the crew. The weather was misty with low cloud precluding any sighting from the VCR.

Factual Background

The weather at Heathrow was recorded as follows:

METAR COR EGLL 031120Z AUTO VRB03KT 4700 HZ BKN009 14/11 Q1015 BECMG 6000 NSW FEW009=
 METAR EGLL 031150Z AUTO VRB04KT 4900 HZ OVC011 14/11 Q1014 BECMG 6000 NSW FEW011=
 METAR COR EGLL 031220Z AUTO 22004KT 130V280 4500 HZ BKN014 15/11 Q1014 BECMG 6000 NSW FEW014=

Analysis and Investigation

UKAB Secretariat

The Air Navigation Order 2009 (as amended), Article 138¹ states:

‘A person must not recklessly or negligently cause or permit an aircraft to endanger any person or property.’

Article 166, paragraphs 2, 3 and 4 state:

‘(2) The person in charge of a small unmanned aircraft may only fly the aircraft if reasonably satisfied that the flight can safely be made.

(3) The person in charge of a small unmanned aircraft must maintain direct, unaided visual contact with the aircraft sufficient to monitor its flight path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions.’

(4) The person in charge of a small unmanned aircraft which has a mass of more than 7kg excluding its fuel but including any articles or equipment installed in or attached to the aircraft at the commencement of its flight must not fly the aircraft

(a) in Class A, C, D or E airspace unless the permission of the appropriate air traffic control unit has been obtained;

(b) within an aerodrome traffic zone ...; or

(c) at a height of more than 400 feet above the surface unless it is flying in airspace described in sub-paragraph (a) or (b) and in accordance with the requirements for that airspace.’

A CAA web site² provides information and guidance associated with the operation of Unmanned Aircraft Systems (UASs) and Unmanned Aerial Vehicles (UAVs).

Additionally, the CAA has published a UAV Safety Notice³ which states the responsibilities for flying unmanned aircraft. This includes:

‘You are responsible for avoiding collisions with other people or objects - including aircraft.

Do not fly your unmanned aircraft in any way that could endanger people or property.

It is illegal to fly your unmanned aircraft over a congested area (streets, towns and cities).

... stay well clear of airports and airfields’.

Summary

An Airprox was reported when a B777 and a reported drone or balloon flew into proximity at 1145 on Sunday 4th October 2015. The B777 pilot was operating under IFR in VMC, in receipt of an Aerodrome Control Service from Heathrow Tower. A drone operator could not be traced, nor could it be confirmed whether the object was a drone or a balloon.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the B777 pilot and area radar photographs/video recordings (which did not record the object).

Members agreed that the object had passed sufficiently clear on the left side as not to present an immediate risk of collision. If it was a drone then it was apparent that it was being operated in a location where it should not have been. If it was a balloon then it was considered it would not have

¹ Article 253 of the ANO details which Articles apply to small unmanned aircraft. Article 255 defines ‘small unmanned aircraft’. The ANO is available to view at <http://www.legislation.gov.uk>.

² www.caa.co.uk/uas

³ CAP 1202

been a meteorological balloon in that location but more likely a toy balloon. Ultimately, members were not able to ascertain what the object was, and were therefore not able to make a meaningful assessment of cause or risk.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A sighting report.

Degree of Risk: D.