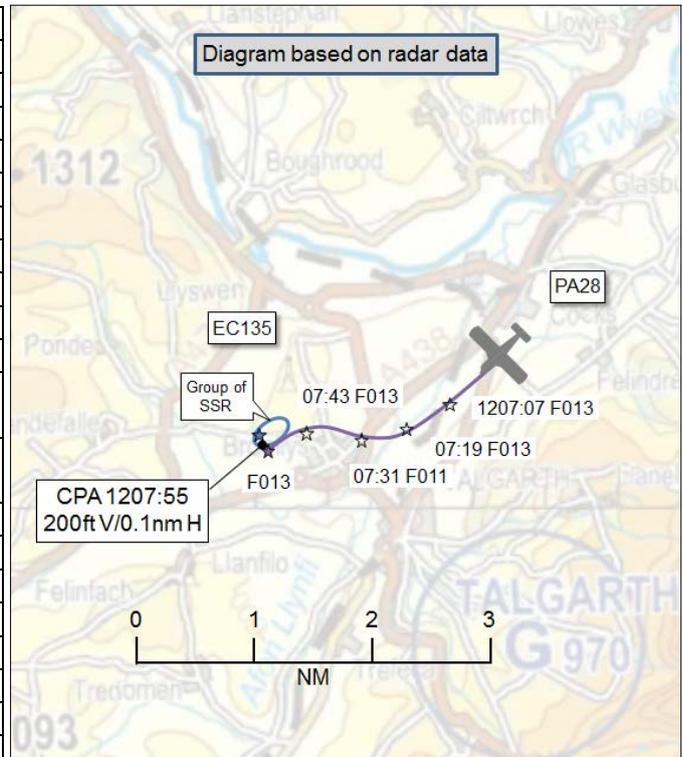


AIRPROX REPORT No 2017086

Date: 10 May 2017 Time: 1208Z Position: 5201NN 00316W Location: ivo Bronllys, Brecon

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	EC135	PA28
Operator	Civ Comm	Civ Trg
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	(London)	Shobden
Altitude/FL		
Transponder	A, C, S	A, C
Reported		
Colours	Yellow, black, day-glo	White, blue, yellow
Lighting	Strobes, HISL, landing lamps	Strobes, nav
Conditions	VMC	VMC
Visibility	>25km	30km
Altitude/FL	115ft	600ft
Altimeter	Rad Alt	agl (1009hPa)
Heading	240°	290°
Speed	10kt	115kt
ACAS/TAS	TCAS I	Not fitted
Alert	TA	N/A
Separation		
Reported	400ft V/0.5nm H	500ft V/500m H
Recorded	200ft V/0.2nm H	



THE EC135 PILOT reports carrying out a routine power-line inspection, listening out on the London Information frequency. The pole-mounted lines were generally 30-50 ft high, with the aircraft typically operating 10-20ft above and not less than 10ft horizontally from the line, except when crossing roads, livestock, structures or other obstacles. He had just commenced a climb in order to carry out an orbit of a pole to complete a full inspection when, prior to turning left, he heard a TCAS alert. He stopped the climb, noted from TCAS that traffic was indicated in the 7 o'clock, range 1nm, 100-200ft above and spot-turned to face the traffic. He saw a white, yellow and blue low-wing, single engine aeroplane flying directly towards them from the east, maintaining altitude at a similar level. The EC135 pilot prepared to descend to the left, away from trees and the powerline, when we saw the other aircraft turn to its left and commence a gentle climb about 5-10 seconds after the initial TCAS alert; the crew were then able to identify it as a PA28. Maintaining the hover, they monitored the progress of the other aircraft to ensure it presented no further threat; it appeared to head northwest up the Wye valley. After satisfying themselves that the other aircraft was remaining clear, the remaining portion of the powerline inspection was completed.



Photograph taken from the EC135

He assessed the risk of collision as 'None'.

THE PA28 PILOT reports instructing a navigation exercise. He gave the student a practice engine failure and, as they approached 600ft agl in the PFL, he saw a helicopter at a range of 800m, took control, turned away and climbed.

He assessed the risk of collision as 'Low'.

Factual Background

The weather at Cardiff was recorded as follows:

METAR EGFF 101220Z AUTO 15006KT 110V190 9999 NCD 14/06 Q1007=

Analysis and Investigation

UKAB Secretariat

The EC135 and PA28 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right². The radar picture was subject to a high degree of jitter due to the aircrafts' low height and consequently the horizontal separation at CPA has a large margin of error.

Comments

PA28 Operating Company

The Head of Training commented that the PA28 pilot was an experienced flight instructor carrying out PPL training. The company investigation found that the PA28 pilot had seen the helicopter and took appropriate action.

Summary

An Airprox was reported when a EC135 and a PA28 flew into proximity at 1208 on Wednesday 10th May 2017. Both pilots were operating under VFR in VMC, the PA28 pilot in receipt of a Basic Service from Shobden and the EC135 pilot not in receipt of a Service.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots and radar photographs/video recordings.

Members discussed the event as reported and agreed that both pilots had been operating normally in Class G airspace and had taken appropriate action once they became aware of the other aircraft. The Board considered that the EC135 pilot had quite correctly filed an Airprox, he had been concerned that safety may have been compromised given the nature of his task, but they judged that in this case normal procedures, safety standards and parameters had pertained.

PART C: ASSESSMENT OF CAUSE, RISK AND SAFETY BARRIERS

Cause: A sighting report.

Degree of Risk: E.

¹ SERA.3205 Proximity.

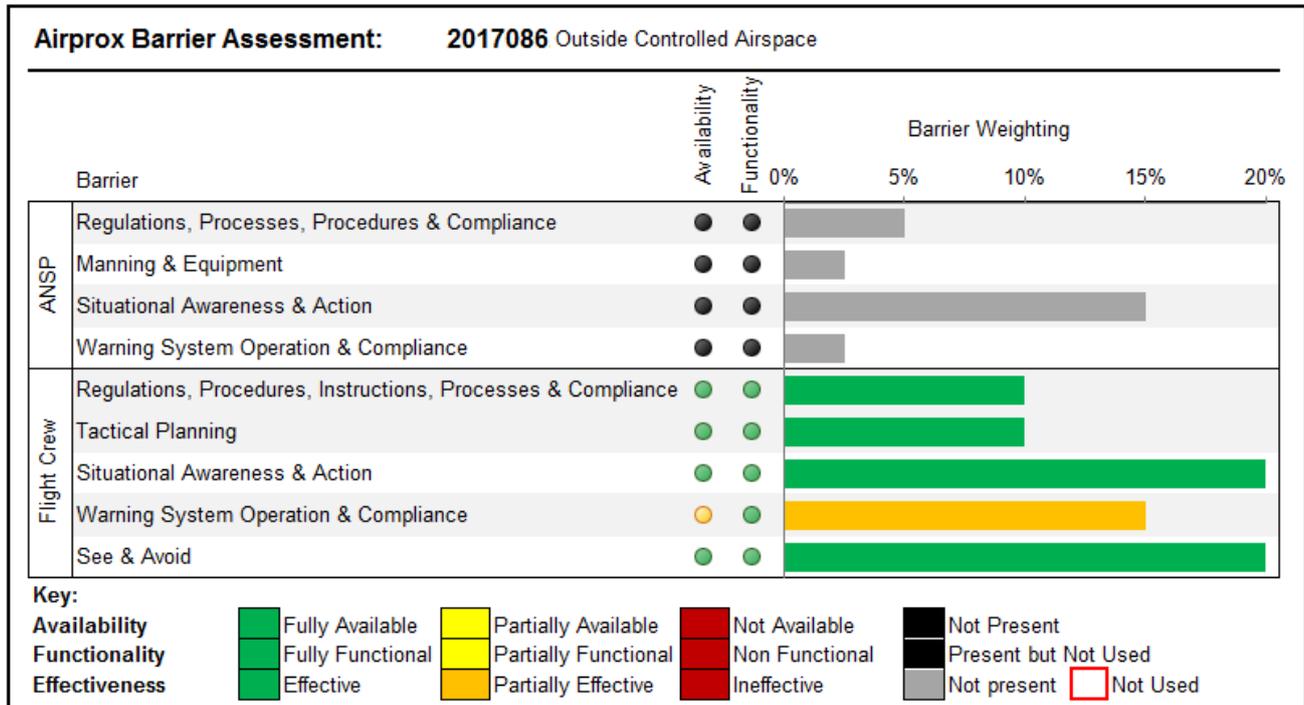
² SERA.3210 Right-of-way (c)(1) Approaching head-on.

Safety Barrier Assessment³

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

Flight Crew:

Warning System Operation and Compliance were assessed as **partially effective** because only the EC135 was equipped with a TAS/TCAS. Had the PA28 been similarly equipped then it is likely that the PA28 pilot would have become aware of the EC135 at an earlier juncture and would probably have abandoned the PFL before the aircraft came into proximity.



³ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).