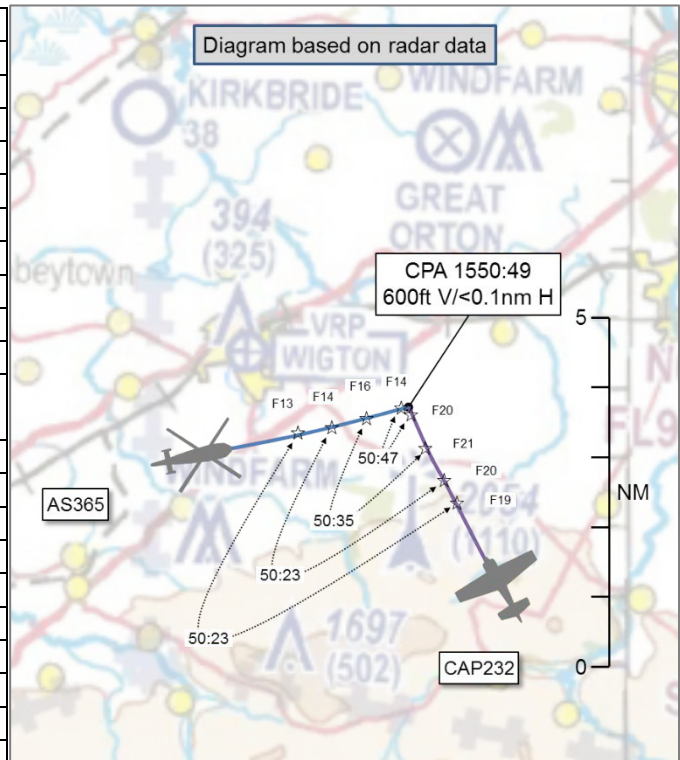


AIRPROX REPORT No 2018068

Date: 04 May 2018 Time: 1551Z Position: 5449N 00305W Location: 1.5nm S Wigton VRP

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	AS365	CAP232
Operator	HEMS	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Listening Out
Provider	London Info	London Info
Altitude/FL	FL014	FL020
Transponder	A, C, S	A, C, S
Reported		
Colours	Green, yellow, red	Yellow, red
Lighting	Strobes, nav	NK
Conditions	VMC	VMC
Visibility	30km	NK
Altitude/FL	1500ft	NK
Altimeter	QNH (1018hPa)	NK
Heading	080°	NK
Speed	145kt	NK </td
ACAS/TAS	TCAS I	Not fitted
Alert	Information	N/A
Separation		
Reported	400ft V/0m H	Not seen
Recorded	600ft V/<0.1nm H	



THE AS365 PILOT reports conducting a gentle cruise-climb en-route to hospital with a patient. A TCAS icon was noted in the 1 o'clock position, range 4nm and 1400ft above. Their climb was stopped and lookout continued. A white fixed-wing aircraft was noted above, but the AS365 pilot could not confirm whether this was the TCAS icon aircraft. The TCAS displayed the other aircraft as descending, at which point autopilot 'holds were disengaged' and a descent started with the other aircraft still not positively identified. The pilot did not turn because of the patient's condition, and the TCAS icon was now showing 600ft above. A yellow and red, low-wing, single-engine aircraft was seen directly above, which passed overhead and continued north-bound. The pilot noted that the medical crew were fully occupied in the rear of the helicopter and could not assist with lookout. A blind call was made on the Carlisle Approach frequency in case the other pilot was monitoring that instead of London Information. The Airprox was reported to London Information by R/T.

He assessed the risk of collision as 'Medium'.

THE CAP232 PILOT reports that he did not see any other aircraft and was not aware of the HEMS helicopter being in that area. The weather was reasonably good with broken cloud at around 2500ft, if he recalled correctly, with good visibility below. He also recalled scattered clouds at lower level that occasionally required routing around or below. The pilot noted that the CAP232 has excellent all round visibility and minimal instrumentation so there is little reason to look in the cockpit. However, the pilot noted that in that area he would have been setting the Kirkbride frequency prior to calling them before passing through their overhead and that there are two tall radio masts in the vicinity that are difficult to see and may have been taking the main focus of his lookout. The pilot stated that, unfortunately, he didn't see any other aircraft close enough to warrant particular attention and nothing stood out enough for him to have any particular recollection of the flight.

THE LONDON INFORMATION FISO reports that a HEMS helicopter pilot, in receipt of a Basic Service, reported an Airprox with a yellow fixed-wing aircraft whilst en-route to Newcastle Hospital. The other traffic was not known to London Information and no further information could be provided.

Factual Background

The weather at Carlisle was recorded as follows:

METAR EGNC 041520Z NIL=
METAR EGNC 041450Z NIL=

Analysis and Investigation

CAA ATSI

An Airprox was filed by an AS365 pilot as a result of a CAP232 aircraft coming into proximity and passing directly overhead while the AS365 was conducting a category A HEMS flight with a seriously ill passenger on board.

At 1548:02, both aircraft were observed on the radar replay. The AS365 transpondering code 0020 and the CAP232 transpondering code 7000 (Figure 1).

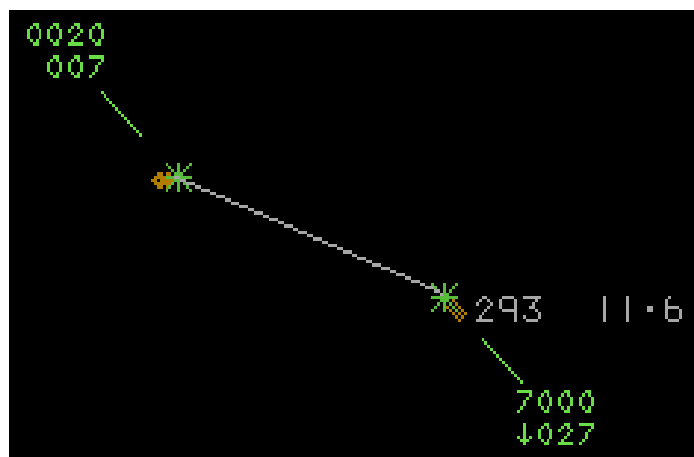


Figure 1- 1548:02

At 1548:20, the AS365 pilot contacted London Information and advised that they were climbing out of a site 5nm north of Cockermouth, with 4 PoB, routing to Newcastle Royal Victoria Infirmary, not above 3000ft on the Barnsley RPS and requested a Basic Service. A Basic Service was agreed and the Barnsley RPS 1018 was passed (Figure 2).

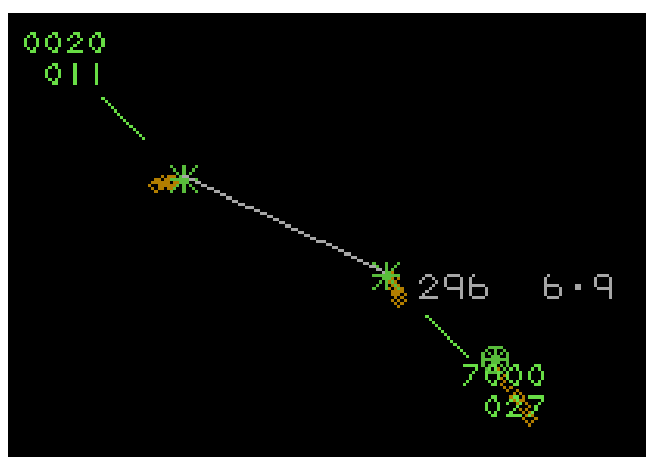


Figure 2- 1548:20

At 1550:05, the AS365 was passing altitude 1300ft and the CAP232 had commenced a descent (Figure 3).

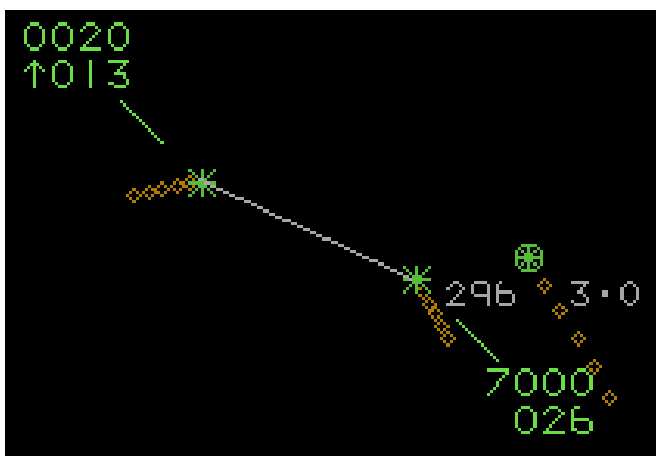


Figure 3 – 1550:05

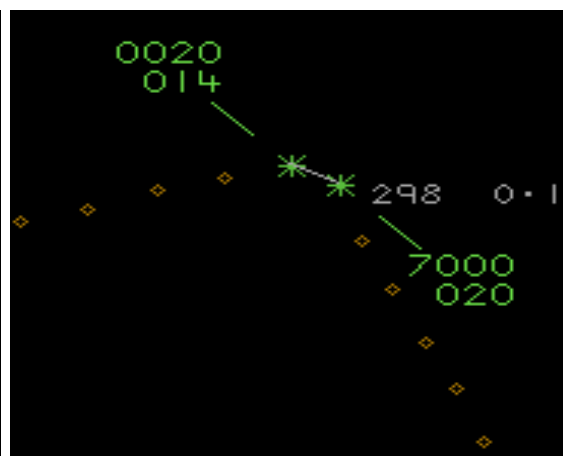


Figure 4 – 1551:00

At 1550:50, the AFISO asked the AS365 pilot to report 18 miles to run to destination which was acknowledged by the pilot. CPA occurred at 1551:00 with the aircraft separated laterally by 0.1nm and vertically by 600ft.

The CAP232 pilot was not receiving a service from London Information at the time of the Airprox. The AS365 was being provided with a Basic Service from London Information. The London FISOs provide services without the use of surveillance equipment. As such the FISO was unaware of the presence of the CAP232 until after the Airprox event when the AS365 pilot passed them the details.

The CAP232 pilot reported listening out on the London Information frequency. However, he may have missed the call from the AS365 pilot to London Information as a result of selecting the R/T frequency for Kirkbride, in readiness for passing through the overhead.

The London Information FISO, operating without surveillance, could not be expected to know of the presence of the CAP232. As such they discharged their responsibilities in the delivery of a Basic Service to the AS365 Pilot.

UKAB Secretariat

The AS365 and CAP232 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 converging then the AS365 pilot was required to give way to the CAP232².

Summary

An Airprox was reported when an AS365 and a CAP232 flew into proximity at 1551hrs on Friday 4th May 2018. Both pilots were operating under VFR in VMC, the AS365 pilot in receipt of a Basic Service from London Information and the CAP232 pilot either listening out on the London Information frequency or on the Kirkbride frequency.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, a report from the FISO involved and a report from the appropriate ATC authority.

¹ SERA.3205 Proximity.

² SERA.3210 Right-of-way (c)(2) Converging.

The Board first considered the pilots' actions and noted that it was unfortunate the CAP232 pilot had not heard the AS365 pilot's call to London Information containing details of his routing. Nevertheless, members also noted that the aircraft were well separated vertically but that the AS365 pilot was understandably concerned by the unknown traffic, its possible manoeuvring, and his own constraints on manoeuvring due to the condition of the patient. Some members were of the opinion that the format of the TCAS display may be such that traffic proximity can be more alarming when inferred from the display than would be the case if the traffic was sighted. Notwithstanding, members agreed that the AS365 pilot was fully justified in submitting an Airprox report but that in this instance normal operating procedures and safety standards had pertained.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A sighting report.

Degree of Risk: E.

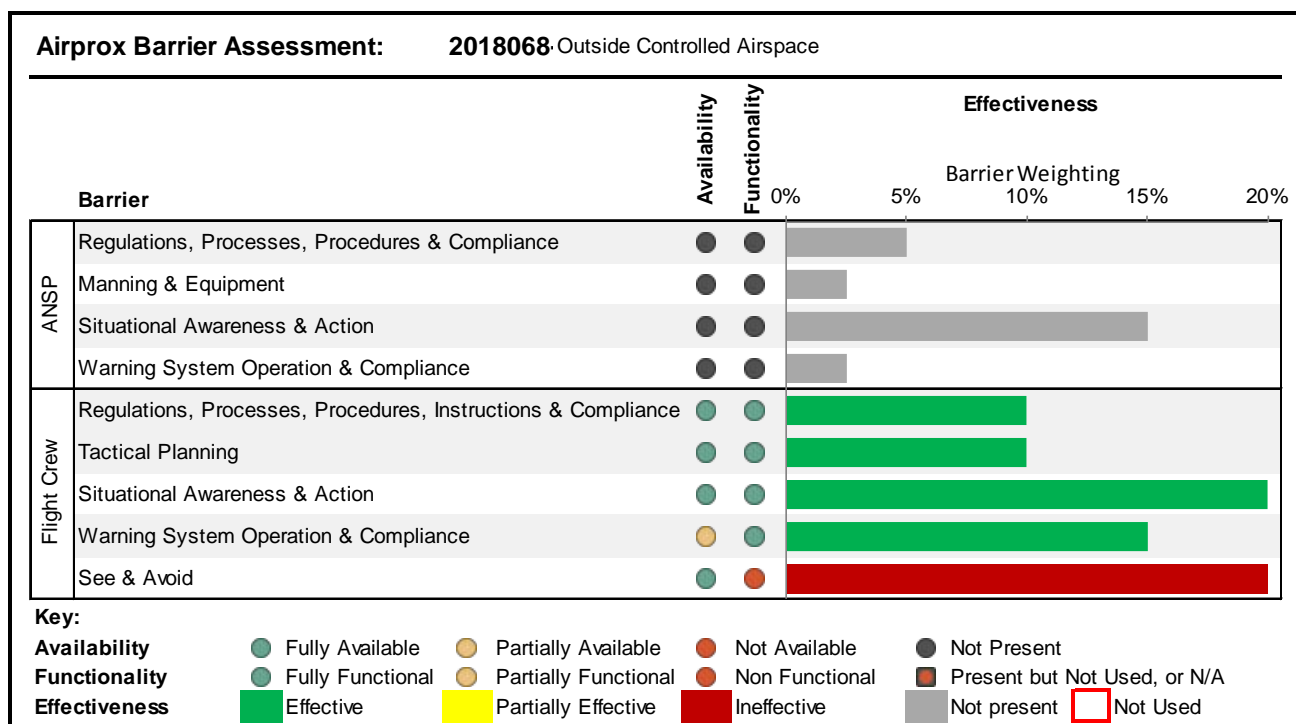
Safety Barrier Assessment³

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 available** because the CAP232 was not fitted with a TAS.

See and Avoid were assessed as **ineffective** because the CAP232 pilot did not see the AS365 and the AS365 pilot only saw the CAP232 at about CPA.



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