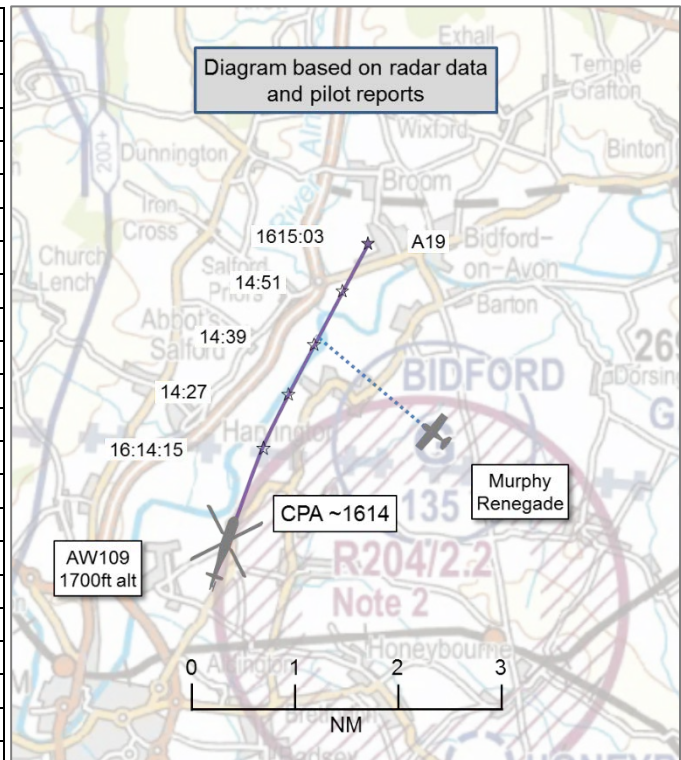


AIRPROX REPORT No 2017246

Date: 14 Oct 2017 Time: 1615Z Position: 5208N 00154W Location: 1.5nm NW Bidford

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Murphy Renegade	AW109
Operator	Civ Pte	HEMS
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	Gloucester
Altitude/FL	NK	1700ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White, green	Yellow
Lighting	Not fitted	Strobes, nav
Conditions	VMC	VMC
Visibility	NK	10nm
Altitude/FL	1100ft	1800ft
Altimeter	QFE (NK hPa)	NK
Heading	310°	050°
Speed	60kt	145kt
ACAS/TAS	Not fitted	TAS
Alert	N/A	None
Separation		
Reported	0ft V/100m H	200ft V/NK H
Recorded	NK	



THE MURPHY RENEGADE PILOT reports climbing out to the west from a local airfield when, just after exiting EGR204, a helicopter crossed his track from left to right at the same level. The pilot noted that he only saw it at the last minute as it passed ahead, and the other pilot did not appear to see him. The pilot also noted that he was looking into a low sun and that the biplane configuration of his aircraft may have masked the approaching helicopter to some degree.

He assessed the risk of collision as 'High'.

THE AW109 PILOT reports transiting back to home base under a Basic Service with Gloucester App, with just 2 pilots on board, when the PIC spotted a biplane off to the right-hand side at a range of approximately 0.5nm and on a converging course. The aircraft in question appeared to be approximately 200ft lower but, as a precaution, a slight left turn was initiated to ensure clearance. The biplane passed behind and below the helicopter and was then seen by the pilot occupying the left-hand seat, who confirmed that it was heading away. The biplane did not appear on the helicopter TAS and, due to the vertical separation, both pilots did not deem the event to be an Airprox.

He assessed the risk of collision as 'Low'.

Factual Background

The weather at Gloucester was recorded as follows:

METAR EGBJ 141620Z 21008KT 170V240 9999 SCT030 18/13 Q1022=

UKAB Secretariat

The Murphy Renegade and AW109 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. With reported converging tracks, the AW109 pilot was required to give way to the Murphy Renegade².

Summary

An Airprox was reported when a Murphy Renegade and an AW109 flew into proximity at about 1615hrs on Saturday 14th October 2017. Both pilots were operating under VFR in VMC, the AW109 pilot in receipt of a Basic Service from Gloucester and the Murphy Renegade 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 first discussed the pilots' actions and agreed that, although the AW109 crew had seen the Murphy Renegade at 0.5nm range, with an assessed separation at CPA was no more than 200ft vertically and 100m laterally, members felt that more could have been done to increase separation. On sighting it and recognising that they should give way, the AW109 pilot should ideally have either turned to pass behind the Murphy Renegade or climbed to increase the height separation. That they did not do so caused the Board to conclude that the AW109 pilot had flown into conflict with the Murphy Renegade. Significantly, the Murphy Renegade pilot had reported that he was climbing, which seemed to have eroded the vertical separation which the AW109 pilot noted on first sighting. Members wondered why the Murphy Renegade pilot had not seen the AW109 earlier, and were informed by an Airprox Inspector that the line of sight between the aircraft was such that the AW109 was directly into sun to the Murphy Renegade, thereby significantly reducing the probability of visual detection. Members agreed that this had been contributory to the Airprox.

Considering the risk, some members felt that safety had been much reduced (Category B), but the majority felt that although the Murphy Renegade pilot had been startled at the proximity of the AW109, the AW109 pilot had had the Murphy Renegade in sight sufficiently before CPA that there was no risk of collision. Finally, the Board reiterated that it was always prudent to apply sufficient margin to avoid causing concern to other aviators when avoiding them rather than assume that they would be as sanguine as yourself with your own comfort margin.

PART C: ASSESSMENT OF CAUSE, RISK AND SAFETY BARRIERS

Cause: The AW109 pilot flew into conflict with the Murphy Renegade.

Contributory Factors: The AW109 was directly into sun to the Murphy Renegade pilot.

Degree of Risk: C.

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:

¹ SERA.3205 Proximity.

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

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

ANSP:

Situational Awareness and Action were assessed as **not used** because Gloucester ATC provides a non-surveillance based Basic Service.

Flight Crew:

Situational Awareness and Action were assessed as **ineffective** because the Renegade pilot was not aware of the AW109's proximity until a late stage, and the AW109 pilot's actions to give way to the Renegade resulted in a reported separation of only 200ft V/100m H at CPA

Warning System Operation and Compliance were assessed as **ineffective** because although the AW109 was fitted with a TAS, the Murphy Renegade was not fitted with compatible systems.

