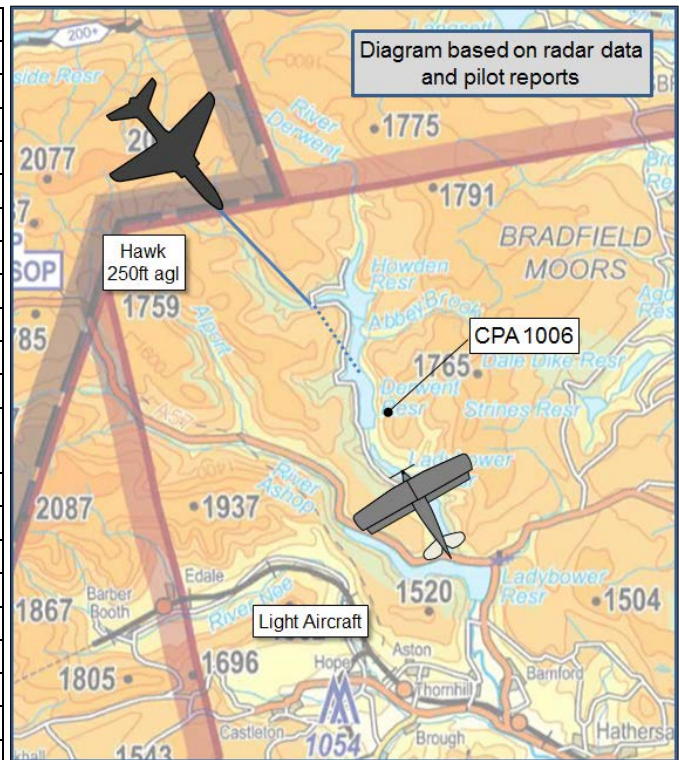


AIRPROX REPORT No 2016051

Date: 13 Apr 2016 Time: 1006Z Position: 5324N 00144W Location: IVO Ladybower Reservoir

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Hawk	Biplane
Operator	HQ Air (Trg)	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	
Service	None	
Provider	N/A	
Altitude/FL	NK	
Transponder	A,C,S	
Reported		
Colours	Black	Yellow
Lighting	Strobes, Nose Light	
Conditions	VMC	
Visibility	15km	
Altitude/FL	250ft	
Altimeter	RPS (106hPa)	
Heading	160°	
Speed	420kt	
ACAS/TAS	Not fitted	
Alert	N/A	
Separation		
Reported	200ft V/ 0m H	
Recorded		NK



THE HAWK PILOT reports that he had been due to take part in a task at Spadeadam, but this had cancelled so he re-planned a sortie that included continuation training general handling and some low-level work. The low-level element was fully planned and entered into CADS, NOTAMS were checked, and it was noted that there was mixed military activity in LFAs 8, 11 and 17, but there was no notified civil traffic. Following a MATZ crossing at Linton-on-Ouse, he entered low-level in LFA 11. Shortly afterwards he free-called Leeds-Bradford for a Basic Service because the route took him south through the Halifax flow arrow; however, west abeam Huddersfield, the service was terminated because comms were difficult to maintain. At 1106 he reached the northern end of the Ladybower lake complex, heading 160°. As he entered the reservoir valley, he noticed a small flying object in the 12 o'clock, assuming it was a bird he bunted down into the valley to avoid it. He then realised it was a light-aircraft, half a mile away, on a reciprocal heading, and saw that it was beginning to slowly climb away. The Hawk passed beneath the light-aircraft at less than 200ft vertical separation and the pilot could see it was a yellow bi-plane, possibly a Tiger-Moth. Although he was close enough to see the markings beneath the bi-plane, the closing speed was such that he was unable to see the aircraft registration.

He assessed the risk of collision as 'High'.

THE BI-PLANE PILOT could not be traced.

Factual Background

The weather at Leeds-Bradford was recorded as follows:

METAR EGNM 130950Z 26007KT 210V310 9999 FEW016 10/06 Q1007=

UKAB Secretariat

The Hawk and Biplane 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.

Comments

HQ Air Command

The unit investigation into this incident has yet to be completed but, from the information available, it appears that the Hawk pilot conducted his mission in accordance with all extant procedures. The usual barriers to MAC in a Class G airspace environment are electronic conspicuity, provision of an appropriate ATS and lookout. In this instance electronic conspicuity was unavailable as the Hawk is not yet equipped with a CWS (the equipage of the biplane is unknown). An ATS was not available due to the poor radio performance encountered by the Hawk, the operating altitude of both aircraft and the possibility that the biplane was not transponder-equipped. Thankfully, a disciplined lookout permitted the Hawk pilot to acquire the biplane and manoeuvre in order to increase separation, though it cannot be known if the pilot of the biplane was visual with the Hawk.

Summary

An Airprox was reported when a Hawk and a Biplane flew into proximity at 1006 on Wednesday 13th April 2016. The Hawk pilot was low-level, operating under VFR in VMC, not receiving an ATS. The Biplane could not be traced.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the Hawk pilot, and radar photographs/video recordings.

The Board noted first that both pilots were entitled to operate over the reservoir in Class G airspace, and that, with an ATS being difficult to achieve in the area due to terrain obscuration at low-levels, in the absence of any CWS, see and avoid was the only mitigation available against mid-air collision (the Hawk did not have a collision warning system fitted and, even if it had, it was thought unlikely, although not impossible that the bi-plane had a transponder). Having checked the available low-level notification systems and seen nothing to affect, members thought it likely that the Hawk pilot wasn't expecting to encounter another aircraft in the vicinity. Nevertheless, they noted that his look-out had been effective in seeing the other aircraft at a distance of ½ nm, and that he was able to take timely action to avoid the other aircraft by descending beneath it.

The Board were disappointed that the bi-plane pilot could not be traced because this meant that they could not assess the incident from his perspective. They were informed that a company offering bi-plane pleasure flights over the Ladybower reservoir had been contacted by the UKAB Secretariat, but that they had failed to respond. As a result, it was not known whether the bi-plane seen by the Hawk pilot was from this company or not and, without the other pilot's perspective, it was impossible to know whether he had either seen the Hawk and was not concerned, or had not seen it at all. The Board emphasised that civilian flights were entitled to operate at whatever height they wished provided that they maintained 500ft separation from any person, vessel, vehicle or structure; ordinarily, this meant that most pilots kept above 500ft agl, but military pilots should still expect to potentially encounter aircraft at the same altitude as them at low-level, especially over water.

¹ SERA.3205 Proximity.

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

Given that it was likely that the bi-plane had been from the pleasure flight company, a discussion followed about whether the Military Low-Flying Handbook should have an entry within it warning of possible pleasure flights in the area. However, this was generally thought to be counter-productive because it was not possible to highlight every single area or location where pleasure flights might take place. However, it was noted that the Civil Aviation Notification Procedure (CANP) system could be used by civil organisations to notify the military of activities that were taking place at less than 1000ft³ in order to warn military low-level aircraft. Members wondered whether the pleasure flight company had previously used the CANP system, or might be well advised to do so for future operations. They also wondered whether it was possible to fit a transponder to their aircraft in recognition that other CWS-equipped aircraft might be able to detect their aircraft to the mutual benefit of all.

The Board then turned to determining the cause of the Airprox and quickly decided that this was a conflict in Class G that had been resolved by the Hawk pilot. A brief discussion followed about whether the achieved separation had been such that the incident could be described as falling within normal safety standards (and therefore Category E). However, in the end, it was decided that because the Hawk pilot had felt the need to take action, and had seen the bi-plane in time to do so, the risk was assessed as Category C; timely and effective action had been taken.

The Board agreed that mutual communication was key in understanding the airspace needs of other users, and were heartened to hear from the military members that, whether or not this was an aircraft from the pleasure flight company, now that they were aware that such companies existed it was the intention to invite them to future Regional Airspace Working Groups in the hope that an exchange of information could take place.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in Class G resolved by the Hawk pilot.

Degree of Risk: C.

³ ENR 1.10-12 section 5 Low-level Civil Aircraft Notification Procedures