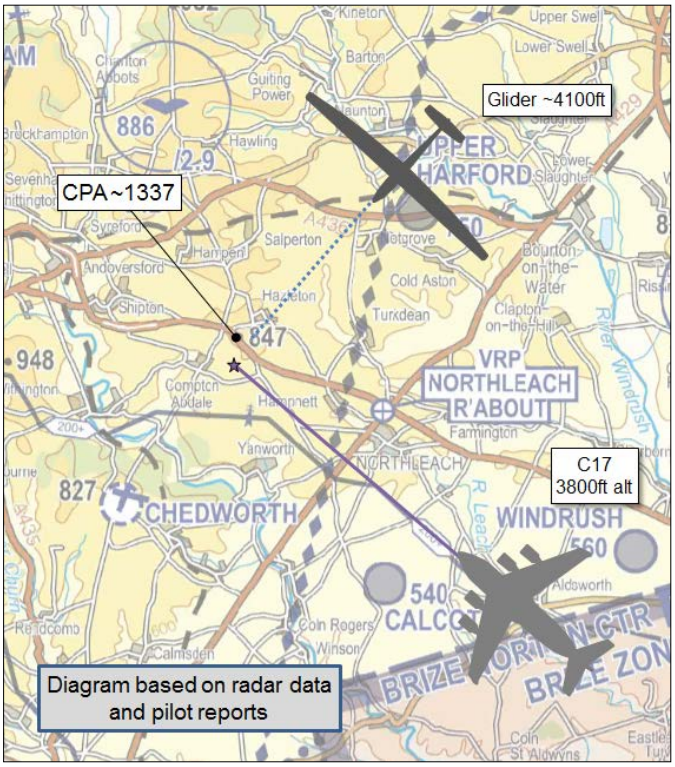
AIRPROX REPORT No 2017148

Date: 08 Jul 2017 Time: 1340Z Position: 5151N 00154W Location: ESE Cheltenham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	DG-300	C17
Operator	Civ Pte	HQ Air (Ops)
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Traffic
Provider		Brize
Altitude/FL		3800ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White, Red	Grey
Lighting	Nil	Anti-cols, Ldg, Taxy
Conditions	VMC	VMC
Visibility	>20km	10km
Altitude/FL	4100ft	4000ft
Altimeter	QNH (1024hPa)	QNH
Heading	210°	300°
Speed	70kt	230kt
ACAS/TAS	FLARM	TCAS II
Alert	None	None
Separation		
Reported	400ft V/0.1nm H	3-500ft V/0m H
Recorded	NK	



THE DG-300 PILOT reports that he had climbed enough to glide comfortably to Aston Down, and had straightened up on a heading of 210° in order to glide via a line of thermals. The glider started at 4500ft and, after about 1 or 2mins, at approximately 4100ft, he became aware of the C17 crossing left-to-right at 90° to his heading and slightly below. The C17 was clearly lower than his glider and so he did not feel the need to take immediate avoiding action, and it crossed the 12 o'clock very quickly. By the time that he passed over the other aircraft's track it had cleared to about 0.5nm away. He was not receiving an ATS and had just tuned the radio to Aston Down ready to call 'final glide'.

He assessed the risk of collision as 'Medium'.

THE C17 PILOT reports that he was on a VFR departure from Brize, in the climb to 4000ft, when he observed a glider passing clear above the aircraft. He did not take avoiding action because they were clear of the glider and heading into a clear area. On RTB they were informed that the glider pilot had reported the incident as an Airprox.

He assessed the risk of collision as 'Low'.

THE BRIZE APPROACH CONTROLLER reports that he was the App controller, with the Zone task bandboxed. He was providing a Traffic Service to the C17 conducting a local area sortie. The C17 got airborne and he called traffic in the NAXAT area, slow-moving with no height information. A few moments after the C17 had passed the track, a glider pilot came on frequency reporting that he wished to file an Airprox with a large transport aircraft. He reported that he was at 3500ft.

He perceived the severity of the incident as 'Low'.

THE BRIZE SUPERVISOR reports that he was in the VCR and did not witness the incident.

Factual Background

The weather at Brize was recorded as follows:

METAR EGVN 081250Z 30005KT 9999 FEW048 BKN300 23/10 Q1019 BLU NOSIG=

Analysis and Investigation

Military ATM

An Airprox occurred on 8 Jul 17, at approximately 1340hrs UTC, in the vicinity of NAXAT, between a Glider and a C17. The C17 was receiving a Traffic Service from Brize Approach while conducting a local flight and the glider was not receiving an ATS at the time of the incident. Radar replays from NATS radar sources were able to identify the C17 but no other conflicting traffic was visible in the aircraft's vicinity during the time of the Airprox. Based on the pilot and ATC reports, it is believed that the Glider was displayed on the Brize Approach controller's radar screen and that Traffic Information was passed to the C17 pilot iaw CAP 774.

UKAB Secretariat

The Glider and C17 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[1]. If the incident geometry is considered as converging then the C17 pilot was required to give way to the glider[2].

Comments

HQ Air Command

This Airprox took place in Class G airspace where the practical barriers to MAC would be expected to be electronic conspicuity, a surveillance-based ATS and lookout. The C-17 is equipped with TCAS II but the glider was not carrying equipment that could interact with it. Equally, the glider was FLARM equipped but this is not compatible with any equipment carried by the C-17. Although the glider was not transponding, it seems that there was a primary radar return in the vicinity of the glider that was on the controller's display and thus the controller issued TI to the crew of the C-17. This enabled the C-17 crew to gain visual with the glider and judge that no avoiding action was necessary; the glider pilot was also visual with the C-17 and felt that no immediate avoiding action was called for.

Whilst there was no obligation for the glider pilot to call Brize Norton to inform them of his intentions, it is possible that an Airprox could have been avoided if a call had been made prior to selection of the frequency for Aston Down to call 'final glide'. Brize Norton is a LARS provider and therefore will often work traffic that is not inbound to or outbound from Brize Norton, and a call to improve controller SA could be of benefit to many users of the local airspace.

Summary

An Airprox was reported when a glider and a C17 flew into proximity at 1340 on Saturday 8th July 2017. Both pilots were operating under VFR in VMC, the C17 pilot in receipt of a Traffic Service from Brize App and the glider pilot not in receipt of an ATS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, and reports from the air traffic controllers involved.

[1] SERA.3205 Proximity.
[2] SERA.3210 Right-of-way (c)(2) Converging.

The Board first discussed the actions of the DG-300 pilot. He was about to start his final glide into Aston Down and had called them on their frequency. Members agreed in principle with the HQ Air Command comment about calling Brize Norton, the designated LARS unit, but noted that not all glider pilots have radio licences and therefore are not able to call ATC units. Nevertheless, even if he could not call Brize to ask for a service (or he didn't want one), by listening on the frequency he may have heard the C17 and ATC transmissions, and might have been able to make a quick call to the Brize controller to give him positive information to work with. Members noted that both pilots had estimated the distance between the aircraft to be a similar amount; however, they wondered whether the sight of a large aircraft like the C17 crossing ahead of the glider may well have surprised the pilot and caused him to assess the encounter to be more risky than the C17 pilot did.

For his part, the C17 pilot had received Traffic Information from the controller that enabled him to see the glider. He was content with the separation and did not feel the need to take avoiding action. The incident happened on a Saturday, and members wondered whether Brize had taken sufficient steps to check the local area flying activity, including whether there was much in the way of glider activity on that day. Nevertheless, this was Class G airspace and both pilots were entitled to operate there. Members commended the actions of the Brize controller for his timely Traffic Information that probably cued the C17 pilot to look for the traffic; noting that neither aircraft were fitted with a CWS that was compatible with the other, they thought that the controller's Traffic Information was particularly pertinent in this case.

Turning to the cause of the Airprox, the Board agreed that both pilots were operating in accordance with normal regulations, and that the C17 pilot had received Traffic Information and was visual with the glider at a timely stage. They therefore agreed that the Airprox was probably best described as the DG-300 pilot being concerned by the proximity of the C17. In assessing the risk, the Board noted that neither pilot had felt the need to take avoiding action, and agreed that although the incident met all the parameters for reporting an Airprox, normal safety parameters and procedures had pertained; they therefore assessed the risk as Category E.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The DG-300 pilot was concerned by the proximity of the C17.

Degree of Risk: E.

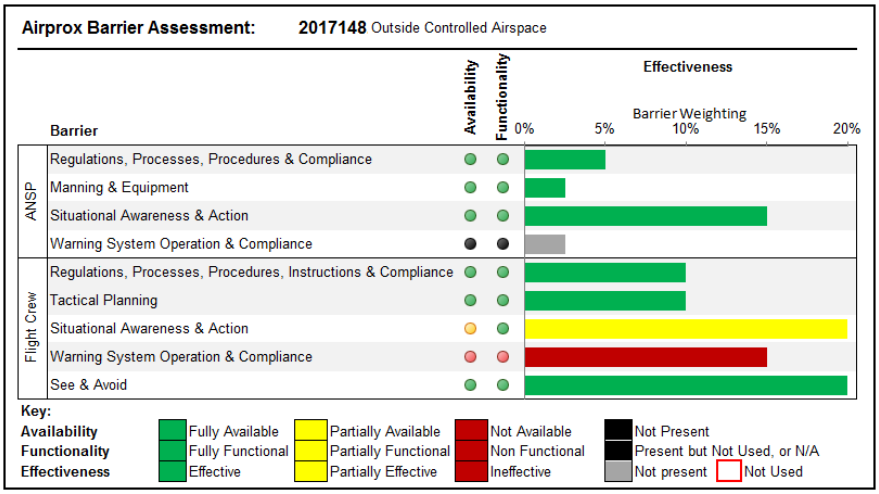
Safety Barrier Assessment[3]

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

Flight Crew

Situational Awareness & Action was assessed as **partially effective** because, given that he was not on Brize's frequency, the glider pilot had no way of knowing about the C17.

Warning System Operation and Compliance was assessed as **ineffective** because the FLARM and the TCAS warning systems were not compatible.



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