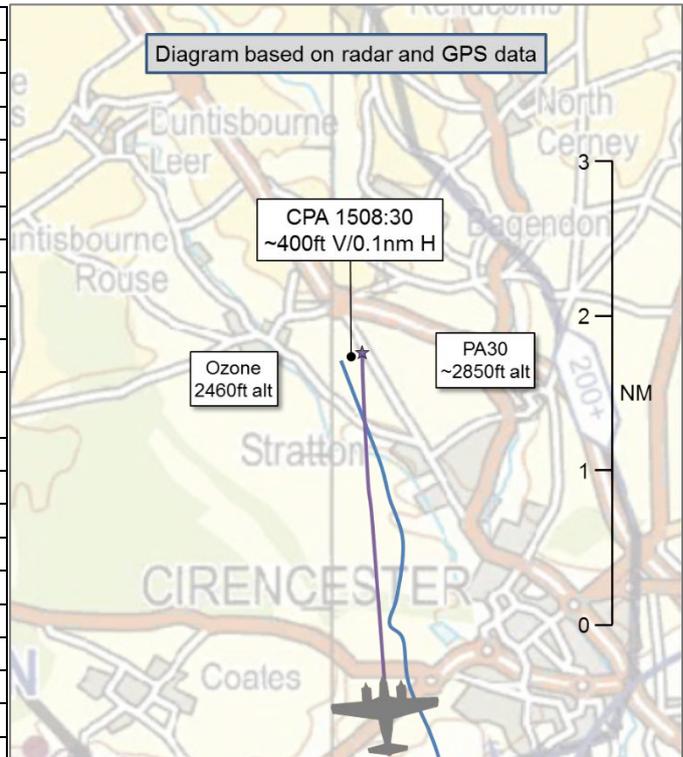


AIRPROX REPORT No 2018051

Date: 14 Apr 2018 Time: 1509Z Position: 5145N 00200W Location: ivo Cirencester

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Ozone Delta 2	PA30
Operator	Civ Pte	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	NK
Service	None	Traffic
Provider	N/A	Brize Radar
Altitude/FL	2600ft	2900ft
Transponder	Not fitted	A, C, S
Reported		
Colours	Orange, lime green	White, blue
Lighting	Not fitted	Nav, beacon
Conditions	VMC	VMC
Visibility	>10km	~6km
Altitude/FL	2500ft	~3000ft
Altimeter	QNH (NK hPa)	NK
Heading	360°	~040°
Speed	27kt	150kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	80ft V/0m H	500ft V/200ft H
Recorded	~400ft V/ 0.1nm H	



THE OZONE DELTA 2 PILOT reports in the cruise on a constant heading with about 1m/s rate of descent when he briefly became aware of a loud engine noise approaching from behind before the other aircraft flew directly overhead. He identified it as a blue and white twin-engine light-aircraft.

He assessed the risk of collision as ‘High’.

THE PA30 PILOT reports being in straight-and-level cruise in hazy conditions with about 6km forward visibility when he saw a dark paraglider canopy in the left 11 o'clock position, 500m ahead and below his level, passing rapidly on an opposing track he thought. He estimated about 6 secs between first contact and passing overhead, during which time he assessed that although he was not comfortable being that close, evasive action was unnecessary as there was sufficient separation to avoid a collision. He reported the paraglider almost immediately to Brize Radar, to make them aware of the traffic and to highlight its presence to other airspace users on frequency, as it appeared not to be visible on their radar and no mention of it was made to him under their service.

He assessed the risk of collision as ‘Low’.

THE BRIZE LARS CONTROLLER reports that he was informed of the Airprox about a week after the event and could not recall any details, apart from it being a busy day for LARS and the PA30 pilot reporting something below him, which the controller acknowledged.

THE BRIZE ATCO I/C reports that the LARS frequency was busy and that he was monitoring the Zone frequency. He did not recall anything being mentioned at the time.

Factual Background

The weather at Brize Norton was recorded as follows:

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METAR EGVN 141550Z 20003KT 9999 FEW040 SCT250 17/07 Q1014 BLU NOSIG=  
METAR EGVN 141520Z NIL=  
METAR EGVN 141450Z 17005KT 9999 FEW040 SCT250 16/07 Q1015 BLU NOSIG=
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Analysis and Investigation

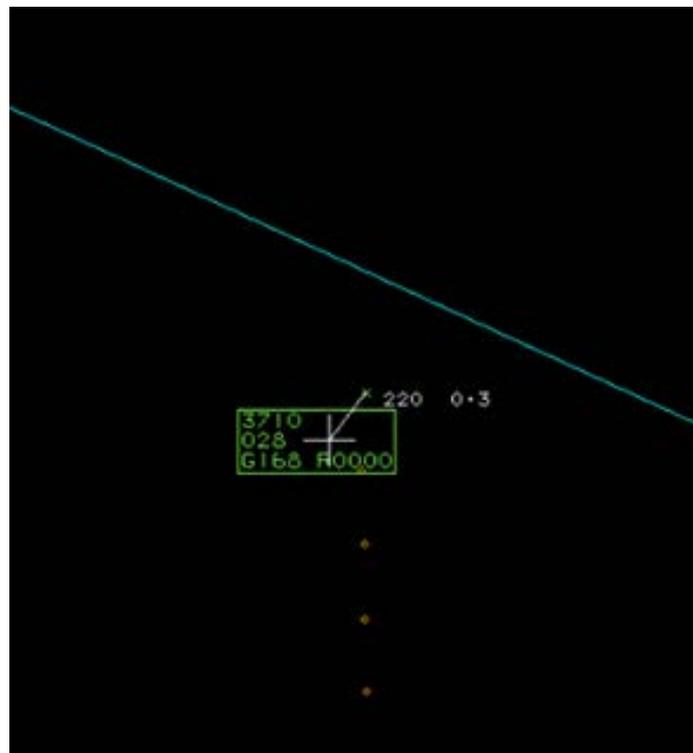
Military ATM

An Airprox occurred on 14 Apr 18 at approximately 1500 UTC, near RAF Brize Norton between a PA30 and a paraglider. The PA30 pilot was receiving a Traffic Service from Brize LARS, it is not known if the paraglider was receiving a FIS.

The PA30 pilot contacted the Brize LARS Controller at 1500 and, following formal identification, a Traffic Service was agreed. In the following 8min, Traffic Information was passed on 5 occasions on conflicting traffic. At 1508:23, the PA30 pilot reported a paraglider 500ft below his aircraft and the Brize LARS Controller confirmed that the paraglider was not showing on radar. The Airprox was not reported on frequency, the Brize LARS Controller was not informed of the incident until 8 days later and therefore had no specific recollection of the incident.

The Brize LARS Controller noted their workload as high-to-medium with multiple aircraft on frequency at the time of the incident. Given that Traffic Information was passed to the PA30 pilot on 5 occasions leading up to this incident it is reasonable to assume that had the paraglider been showing on radar then Traffic Information on the paraglider would have been passed.

The screenshot below is taken from a NATS radar replay and is not representative of the radar picture available to the Brize LARS Controller. The NATS radar replay indicates the paraglider pilot's reported Airprox position with a white cross but the paraglider does not appear as a primary track.



Screenshot timed at 1508:38

UKAB Secretariat

The paraglider and PA30 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 overtaking then the paraglider pilot had right of way and the PA30 pilot was required to keep out of the way of the other aircraft by altering course to the right².

Summary

An Airprox was reported when a paraglider and a PA30 flew into proximity at 1509 on Saturday 14th April 2018. Both pilots were operating in VMC, the PA30 pilot in receipt of a Traffic Service from Brize LARS and the paraglider pilot operating under VFR, not in receipt of a FIS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, a transcript of the relevant R/T frequency, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC authority.

Members agreed that the nature of paragliding operations was such that situational awareness through R/T or radar surveillance would likely not be effective and therefore that the imperative of see-and-avoid was all the more important. In this occurrence, the paraglider pilot was unsighted to the PA30 approaching from behind but was alerted by its sudden noise. For his part, the paraglider would have been presented to the PA30 pilot looking against a dark background and likely a difficult target to acquire until relatively close in when target apparent growth and colour become more prevalent. The PA30 pilot reported the paraglider as 500ft below his altitude and the paraglider GPS track showed that vertical separation was of the order of 400ft. Members opined that the paraglider pilot's perception of separation at CPA (80ft vertically) was significantly underestimated probably due to the natural startle response of the PA30 passing overhead in proximity.

Turning to the cause, members agreed that the PA30 pilot had seen the paraglider at a late stage (no doubt hindered by the prevailing visibility), and that although the paraglider pilot had seen the PA30, he had only done so after CPA and could not therefore have acted to increase separation; effectively a non-sighting. Members discussed the risk, with some observing that collision had only been averted by the aircraft circumstantially being at different altitudes. Notwithstanding, during this discussion it was noted that although neither pilot had planned to fly at a different altitude, the fact of the matter was that they had been, and were therefore separated vertically. The risk pertaining to any incident could at least partly be quantified in terms of the 'what-ifs' but it was the Airprox Board task to ascertain the risk 'in the event'. In this event, because separation had not been reduced to the bare minimum, members felt that the vertical separation was such that it was more than providence that they had avoided a collision. As a result, the Board agreed that the reality was that there had not been a risk of collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by the PA30 pilot and effectively a non-sighting by the Ozone Delta 2 pilot.

Degree of Risk: C.

¹ SERA.3205 Proximity.

² SERA.3210 Right-of-way (c)(3) Overtaking.

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:

ANSP:

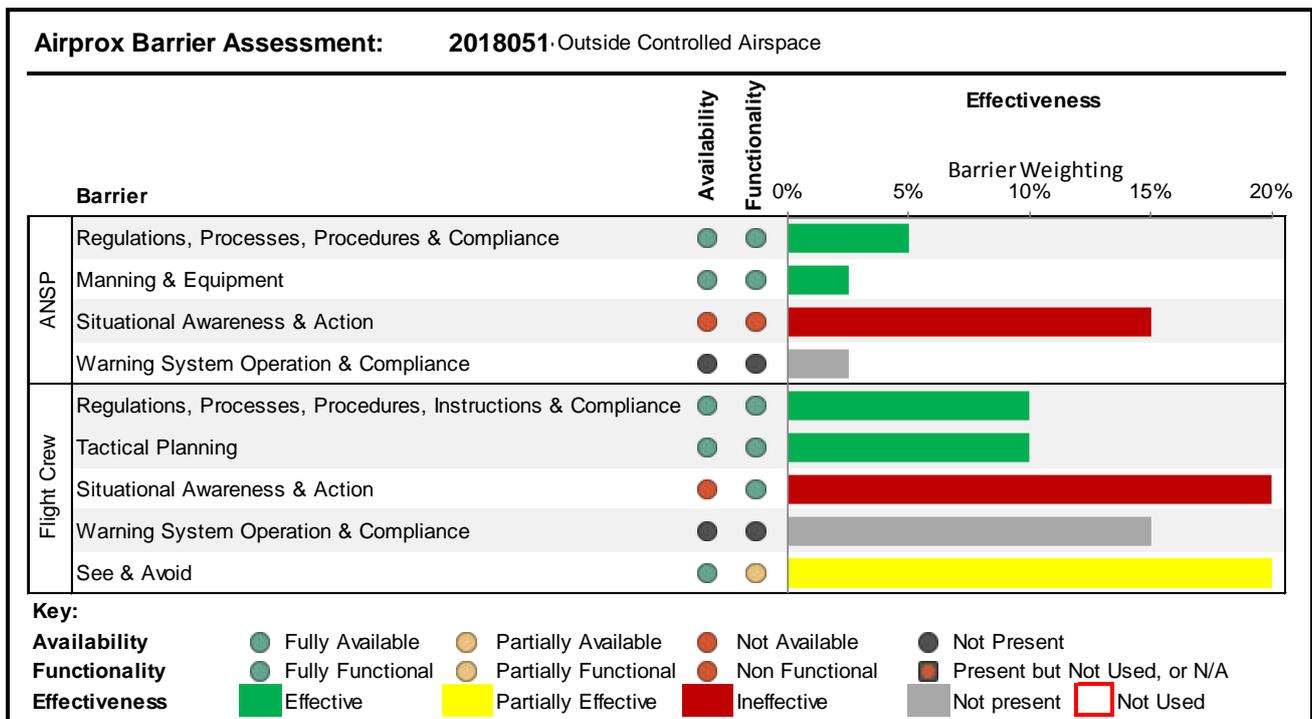
Situational Awareness and Action were assessed as **ineffective** because surveillance limitations resulted in the controller not being aware of the presence of the paraglider and hence conflict resolution was not possible.

Flight Crew:

Situational Awareness and Action were assessed as **ineffective** because neither pilot was aware of the proximity of the other aircraft prior to visual/aural acquisition.

Warning System Operation and Compliance were assessed as **not used** because neither aircraft was fitted with a TAS.

See and Avoid were assessed as **partially effective** because the paraglider pilot did not see the PA30 until after CPA and the PA30 pilot only saw the paraglider at a late stage.



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