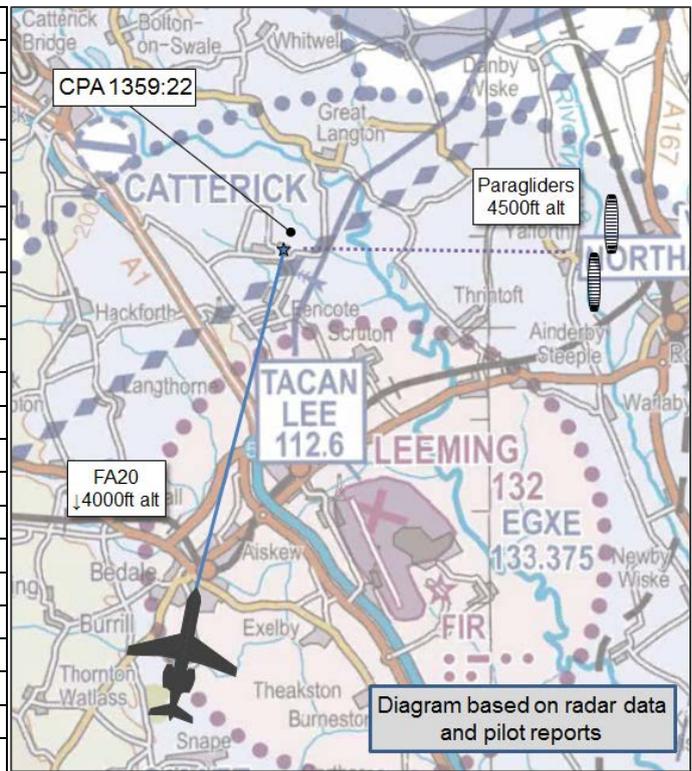


AIRPROX REPORT No 2017087

Date: 10 May 2017 Time: 1359Z Position: 5421N 00133W Location: Catterick

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	FA20	Paraglider
Operator	Civ Comm	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Traffic	None
Provider	Durham Tees	
Altitude/FL	FL049	
Transponder	A, C, S	Not fitted
Reported		
Colours	Blue, White	
Lighting	HISLs, Nav	Nil
Conditions	VMC	VMC
Visibility	20km	40km
Altitude/FL	4000ft	4500ft
Altimeter	QNH (1005hPa)	1013 hPa
Heading	020°	090°
Speed	240kt	25kt
ACAS/TAS	TCAS II	Not fitted
Alert	None	N/A
Separation		
Reported	0ft V/100m H	0ft V/500m H
Recorded	NK	



THE FA20 PILOT reports that he was in a visual descent into Durham Tees Valley airfield from the SW, for a VFR join to RW23. He was passing through 4000ft and the cloud was SCT/BKN layer between 4500-5500ft. He was receiving a Traffic Service from ATC and had been given Traffic Information on traffic recovering to Leeming and on arriving and departing traffic from Durham. He was adjusting his track to deconflict with departing fast-jet traffic when he passed very close to 3 paragliders (he thought), estimated to be 300ft laterally. The paragliders appeared to be in a formation, heading south to south-west at 4000ft. There was no time to take avoiding action, other than to maintain his safe vector past the paragliders; he did not believe that the wake of the aircraft affected the paragliders. The ATC frequency was busy and the controller had not called the paragliders to him. He did not report the Airprox at that point but, after landing, called ATC to advise them of the incident.

He assessed the risk of collision as 'Medium'.

THE PARAGLIDER PILOT reports that he took off from the Yorkshire Dales, with another pilot, in good weather. They flew across to the Leeming area, making sure they did not enter either the Durham CTR or the Leeming MATZ. They traversed over the top of the Leeming MATZ stub at 4500ft and, after a few minutes of being above the Leeming MATZ stub, they saw the Falcon from the south tracking towards, about 500m ahead of them. It started to bank to avoid them and they turned away from it, although he noted that avoiding action at 25kts is not very effective. The Falcon passed by and they continued to their destination.

He assessed the risk of collision as 'Low'.

THE DURHAM TEES CONTROLLER reports that no conflicting traffic was seen on the radar, and therefore no avoiding action was given, nor observed to take place. There was no report over the RT

at the time and he was notified about the incident several days afterwards; whilst he was aware that a crew member had contacted ATC by telephone after landing to report that they had seen paragliders, no mention was made that it was an Airprox.

Factual Background

The weather at Durham Tees Valley was recorded as follows:

EGNV 101350Z VRB02KT 9999 FEW035 16/06 Q1005

Analysis and Investigation

CAA ATSI

The Airprox was reported by the FA20 pilot when it came into proximity with some paragliders approximately 10nm southwest of Durham Tees Valley airport. The FA20 was in receipt of a Traffic Service from Durham Radar. The paragliders were not known to be in receipt of any ATC service. The FA20 had been previously working Swanwick(Mil), until at 1356:50 (Figure 1), when the FA20 (code 7061) called Durham Radar and a Traffic Service was agreed. After asking what type of Approach the pilot would like, the controller issued a clearance to join VFR for a left hand circuit for RW23.

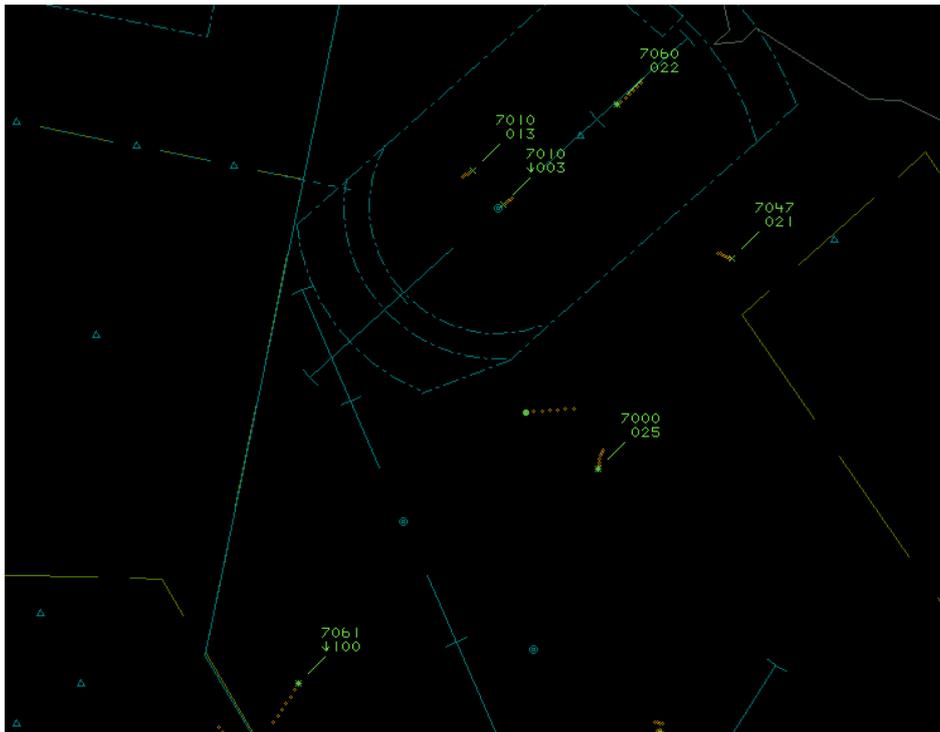


Figure 1 – 1356:50

At 1357:52 the controller advised the FA20 about an aircraft which was making an approach to RW23 before departing to the south. The FA20 pilot then requested a right-hand circuit in order to deconflict their flight path from the imminent departure from Durham. The controller agreed to the request and re-cleared the FA20 for a right-hand circuit.

At 1359:48 (Figure 2) the FA20 had passed 4000ft. There was no evidence on the NATS radar recording of the paragliders and no report was made at the time by the crew of the FA20 about the Airprox.

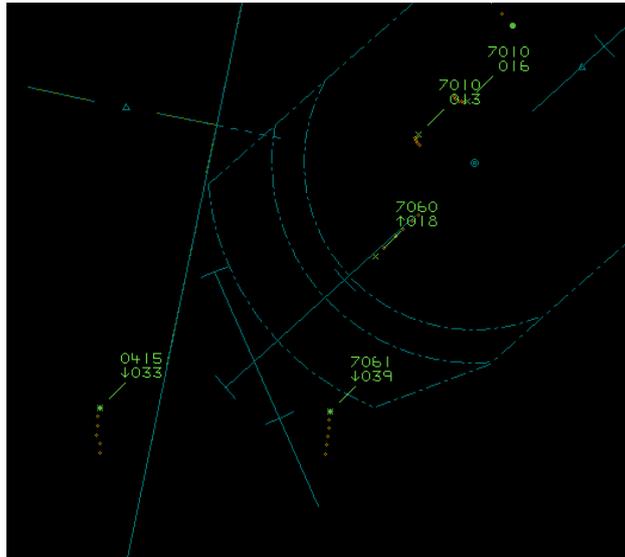


Figure 2- 1359:48

ATSI also had access to the local radar recording from Durham Radar. On this radar there was evidence of some form of contact still ahead of the FA20 after it had passed 4000ft but the contacts were intermittent. There was further extensive evidence of such radar ‘clutter’ around the display, and the contacts observed close to the track of the FA20 had no discernible ‘history’ and remained an intermittent contact, suggesting they were interference known as anomalous propagation. But it was not possible to produce a copy of that screenshot for this report. The Durham controller had previously passed Traffic Information to the FA20 pilot about unknown aircraft operating outside controlled airspace. Under a Traffic Service the pilot was responsible for his own separation.

UKAB Secretariat

The FA20 and paraglider 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 FA20 pilot was required to give way to the paraglider².

Summary

An Airprox was reported when a FA20 and a paraglider flew into proximity at 1359 on Wednesday 10th May 2017. Both pilots were operating under VFR in VMC, the FA20 pilot in receipt of a Traffic Service from Durham Tees and the paraglider pilot was not receiving 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 appropriate ATC and operating authorities.

The Board first looked at the actions of the FA20 pilot, he was receiving a Traffic Service from Durham Tees as he approached them from the south-west. He had received Traffic Information on other aircraft departing and was adjusting his track to deconflict from that traffic when he saw the paragliders. In Class G airspace see-and-avoid is paramount and the Board noted that the paragliders might have been difficult to see depending on their aspect to the FA20. The pilot reported that, after spotting them, it was too late to take avoiding action, but he could see that he was on a safe vector to pass by them. For their part the paraglider pilots were entitled to operate where they were (above the Leeming MATZ, clear of the overhead) and had chosen a sensible route between

¹ SERA.3205 Proximity.

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

the Durham Tees CTR and Leeming. They saw the FA20 approaching from the south, and took avoiding action, although the ability for a paraglider to avoid a fast jet is somewhat limited, they assessed the risk of collision as low.

The Durham-Tees controller was providing a Traffic Service but, in the absence of any radar signature or electronic conspicuity on the paragliders, and no reports from other aircraft or from the paraglider pilots themselves, the controller had no way of knowing the paragliders were there and so there was little more he could have done.

In assessing the cause of the Airprox, some Board members wondered whether this had been purely a conflict in Class G airspace where the pilots had seen each other as early as practically possible. Others argued that the aircraft and paragliders were there to be seen (especially given that paraglider canopies are usually brightly coloured) and that this had been a late sighting. In the end, after a prolonged discussion the latter view prevailed. However, when discussing the risk, it was decided that there had been enough separation, coupled with the action taken by the paraglider pilots, to assess that although safety had been degraded, there had been no risk of collision; Category C.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by all pilots.

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:

ANSP

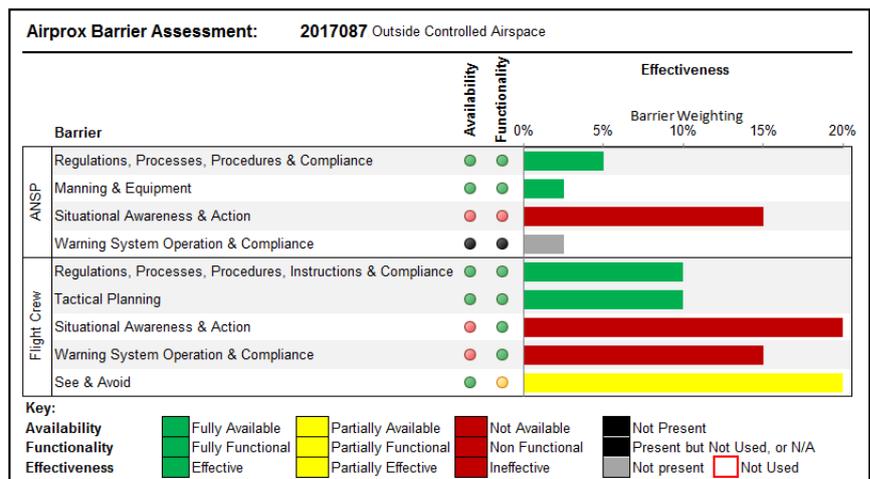
Situational Awareness & Action was assessed as ineffective because the paragliders did not show on the radar, therefore the controller was not aware of them.

Flight Crew

Situational Awareness & Action was assessed as ineffective because neither the FA20 pilot, nor the paraglider pilots had any information to tell them about the other.

Warning System Operation and Compliance was assessed as ineffective; although the FA20 had TCAS it would not have been able to warn him about the paragliders.

See and Avoid was assessed as partially effective; the FA20 pilot was not able to take avoiding action, although he could see that his vector would take him safely clear.



³ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](http://www.ukab.co.uk).