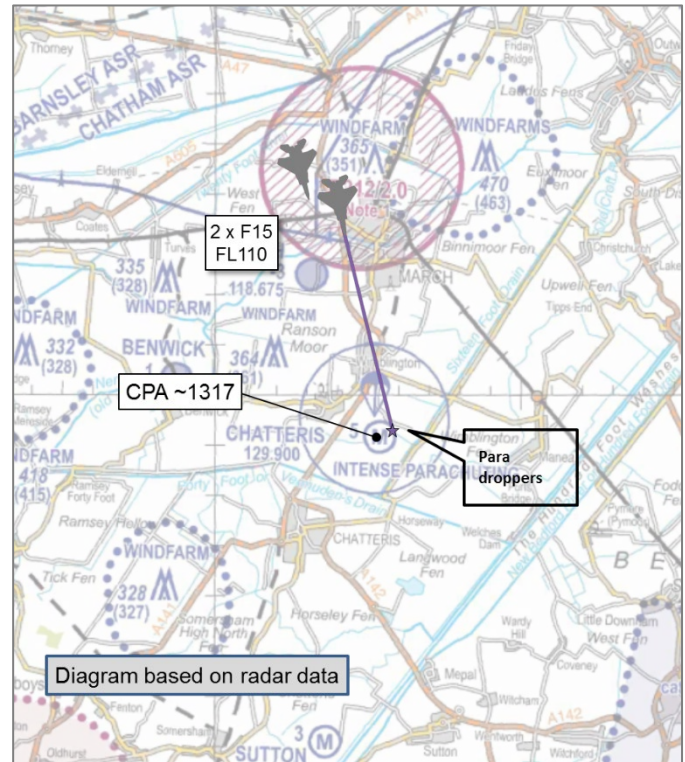


AIRPROX REPORT No 2019077

Date: 17 Apr 2019 Time: 1317Z Position: 5229N 00005E Location: Chatteris

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Parachutist	F15
Operator	Civ Para	Foreign Mil
Airspace	London FIR	London FIR
Class	G	G
Rules	N/A	IFR
Service	None	Traffic
Provider		Lakenheath App
Altitude/FL		FL110
Transponder	N/A	A, C, S
Reported		
Colours		Grey
Lighting		Anti-Cols, Nav
Conditions		VMC
Visibility	10km	50km
Altitude/FL	12,900ft	FL100
Altimeter		1013 hPa
Heading		180°
Speed		300kt
ACAS/TAS		Not fitted
Separation		
Reported	N/K	Not Seen
Recorded	NK	



THE PARACHUTIST reports that 2 parachutists in freefall were carrying out a jump over Chatteris airfield when they saw 2 F15 aircraft travelling north to south directly over the airfield and beneath the parachutists in freefall. The Skydivers were travelling at approximately 120mph vertically. A Go-Pro camera fitted to one of the parachutists captured video of the F15s.

He assessed the risk of collision as 'Medium'.

THE F15 PILOT reports that he was the lead aircraft in a formation of two. He took avoiding action from a KC135 that was on a collision course with the formation and climbed from FL100 to FL110. He was not aware that Chatteris were active and this was not mentioned by ATC.

THE LAKENHEATH CONTROLLER did not file a report.

Factual Background

The weather at Marham was recorded as follows:

METAR EGYM 171250Z 09011KT 8000 HZ FEW035 17/08 Q1019 BLU NOSIG=

Analysis and Investigation

UKAB Secretariat

The NATS area radar shows the F15s, squawking 0442, as they flew over Chatteris at FL110 (Figure 1). The paradrop aircraft can be seen in the vicinity at FL151.

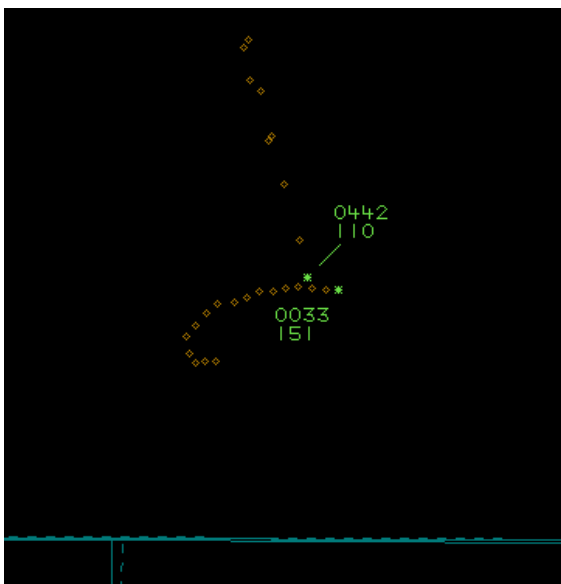


Figure 1 1317:30

The UK AIP ENR 1.1, 5.5.4.1 and 5.5.4.3 states:

Intensive free-fall parachuting may be conducted up to FL 150 at any of the Drop Zones listed at ENR 5.5 and in several Danger Areas. Listing of a Drop Zone does not imply any right to a parachutist to use that Drop Zone. Some Government and licensed aerodromes where regular parachuting takes place are included in the list but parachuting may also take place during daylight hours at any Government or licensed aerodrome. Drop Zone activity information may be available from certain Air Traffic Service Units (ATSUs) but pilots are advised to assume a Drop Zone is active if no information can be obtained.

Visual sighting of free-falling bodies is virtually impossible and the presence of an aircraft within the Drop Zone may be similarly difficult to detect from the parachutists' point of view. Parachute dropping aircraft and, on occasions, parachutists may be encountered outside the notified portion of airspace. Pilots are strongly advised to give a wide berth to all such Drop Zones where parachuting may be taking place.

UK AIP ENR 5.5 has the following information about Chatteris:

<p>CHATTERIS, CAMBS A circle, 1.5 NM radius, centred at 522919N 0000512E</p>	<p>Upper limit: FL150 Lower limit: SFC</p>	<p>Phone: 01354-740810. London Control (Swanwick): 01489-612420.</p>	<p>Activity notified on the day to London Control (Swanwick). Alternative contact: 129.905 MHz. Hours: Normally during daylight hours Tue-Sun & PH.</p>
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Summary

An Airprox was reported when a formation of F15s flew into proximity with two parachutists freefalling at Chatteris at 1317hrs on Wednesday 17th April 2019. The F15 pilots were operating under IFR in VMC, and in receipt of a Traffic Service from Lakenheath.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the parachutists and the F15 pilots, radar photographs/video recordings and reports from the appropriate operating authorities. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

The Board first heard from the USAFE advisor and were told that the previous USAFE representative had retired at short notice, which had led to a gap in post, during which a report from the controller had

been overlooked. A full-time liaison officer had been recruited and was due to be in post in the coming months; in the meantime, the post was being covered by other personnel. Despite the lack of report, he was able to provide the Board with details about the circumstances and described how the F15s were handed over to Lakenheath ATC from RAF Coningsby, and that during the handover a turn was given to keep the F15s clear of a KC135. The Lakenheath controller was aware of the position of Chatteris, and the Board were told that each morning Chatteris called ATC to advise when they are active; the paradropping aircraft also calls on the frequency when they are airborne with parachutists. The controller believed he would have plenty of time to change the heading of the F15s when they came on frequency. However, the frequency became busy just as they transferred and so, by the time the F15 pilots checked in with the controller, they were already about to fly over Chatteris. When asked whether the pilots should be aware of Chatteris, the Board were told that it was included in their arrival training at Lakenheath, and that, as a result of this incident, the unit was re-briefing all of its crews to ensure they were all aware of its status. The Board were heartened to hear that proactive measures had been taken to remind all the crews of the need to avoid Chatteris parachuting site.

Having heard that Chatteris call Lakenheath each morning to advise that they are active, the RAF Swanwick representative explained that they also received a call each morning. The Board commended the Chatteris operators for their pro-active approach and thought that there was very little more that Chatteris could have done from an operational perspective to prevent the Airprox. Without the RT recording, it could only be assumed that normal procedures were also followed by the paradropping aircraft pilot by calling on one of the Lakenheath frequencies once airborne. The parachutists themselves were not able to alert the F15 pilots, and it was noted that the para-dropping aircraft was wearing the appropriate paradropping squawk (0033) which would normally act as a reminder to controllers that paradropping was underway. The Board was shown Go-Pro footage filmed from the helmet of one of the parachutists and could clearly see the F15s passing beneath, although it was difficult to assess the actual distance because of lack of information about the likely wide-angle lens focal-plane foreshortening. Once the parachutists had seen the F15s there was very little they could do to avoid the situation, having no control over their speed or direction whilst in free-fall (CF8), although some members wondered whether if it had been a particularly close encounter then the parachutists may well have been prompted to open their parachutes early to arrest their descent.

Turning to the F15 pilots, and noting that the F15s were under a radar derived ATS, members thought it unfortunate that the pilots had not received any warnings from ATC about Chatteris due to the completion of the handover at a busy time (CF7). However, given Chatteris' location in their local operating area, members also thought that the crew should have known about its position and activities as part of their normal briefing routine. As such, the Board felt that they should either have questioned ATC on whether it was active before overflying it, or avoided it anyway until they could determine its status (CF4, CF5, CF6). As they overflew the drop site, it was unlikely that the pilots would have been able to see the parachutists and take avoiding action, and in this case they were unaware that they had flown beneath them (CF8).

Looking at the role that the Lakenheath controller had to play, the Board thought that it was unfortunate that the controller had not realised the F15s were heading towards Chatteris prior to them calling on the frequency and therefore was not able pre-empt their call and provide a warning to the previous controlling agency (CF1, CF2); members thought that this was likely to be because the controller was busy and therefore distracted by other work-related tasks (CF3). Some members wondered whether Coningsby should have queried the heading given to the F15s, but were told that Chatteris is some way off their radar screens and so the Coningsby controller was unlikely to have any awareness of it.

Finally, the Board assessed the risk of the Airprox. They were unable to reliably determine how close the F15s had been to the parachutists from the video but the F15s were clearly distinguishable in some detail and so there followed an extended debate about whether there had been a risk of collision. Some members opined that although safety had been degraded it appeared to them that there had been no risk of collision. Others thought it had been much closer. In the end, the Chair called a vote and the latter view prevailed; accordingly, the risk was assessed as Category B, safety had been reduced much below the norm.

PART C: ASSESSMENT OF CAUSE AND RISK**Contributory Factors:**

2019077-Barriers.x			
CF	Factor	Description	Amplification
Ground Elements			
• Situational Awareness and Action			
1	Human Factors	• Conflict Detection - Not Detected	
2	Human Factors	• Traffic Management Information Provision	Not provided, inaccurate, inadequate, or late
3	Human Factors	• Distraction - Job Related	
Flight Elements			
• Regulations, Processes, Procedures and Compliance			
4	Human Factors	• Flight Crew ATM Procedure Deviation	Regulations/procedures not complied with
• Tactical Planning and Execution			
5	Human Factors	• No Decision/Plan	Inadequate planning
6	Human Factors	• Aircraft Navigation	Flew through promulgated and active airspace
• Situational Awareness of the Conflicting Aircraft and Action			
7	Contextual	• Situational Awareness and Sensory Events	Pilot had no, only generic, or late Situational Awareness
• See and Avoid			
8	Human Factors	• Monitoring of Other Aircraft	Non-sighting or effectively a non-sighting by one or both pilots

Degree of Risk: B.

Safety Barrier Assessment¹

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

Ground Elements:

Regulations, Processes, Procedures and Compliance were assessed as **ineffective** because ATC did not advise the F15 pilots that Chatteris was active.

Situational Awareness of the Confliction and Action were assessed as **ineffective** because ATC did not provide the F15 pilots with sufficient information to allow them to keep clear of Chatteris due to the timing of the handover during a busy period for the controller.

Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **ineffective** because the F15s flew over the Chatteris paratropping site whilst paratropping was in progress.

Tactical Planning and Execution was assessed as **ineffective** because the F15 pilots should have known that Chatteris was active prior to getting airborne.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the F15 pilots had no situational awareness that Chatteris was active with paratropping.

¹ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

See and Avoid were assessed as **ineffective** because the F15 crews did not see the parachutists and neither the F15 crews nor the parachutists were able to take any action.

Airprox Barrier Assessment: 2019077		Outside Controlled Airspace					
Barrier	Provision	Application	Effectiveness				
			Barrier Weighting				
			0%	5%	10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✗	[Red bar from 0% to 5%]			
	Manning & Equipment	✓	✓	[Green bar from 0% to 2.5%]			
	Situational Awareness of the Confliction & Action	✓	✗	[Red bar from 0% to 15%]			
	Electronic Warning System Operation and Compliance	○	○	[Grey bar from 0% to 2.5%]			
Flight Element	Regulations, Processes, Procedures and Compliance	✓	✗	[Red bar from 0% to 10%]			
	Tactical Planning and Execution	✓	✗	[Red bar from 0% to 10%]			
	Situational Awareness of the Conflicting Aircraft & Action	✗	✓	[Red bar from 0% to 20%]			
	Electronic Warning System Operation and Compliance	○	○	[Grey bar from 0% to 15%]			
	See & Avoid	✓	✗	[Red bar from 0% to 20%]			
Key:			Full	Partial	None	Not Present	Not Used
Provision	✓	○	✗	○			
Application	✓	○	✗	○		○	
Effectiveness	■	■	■	■		□	