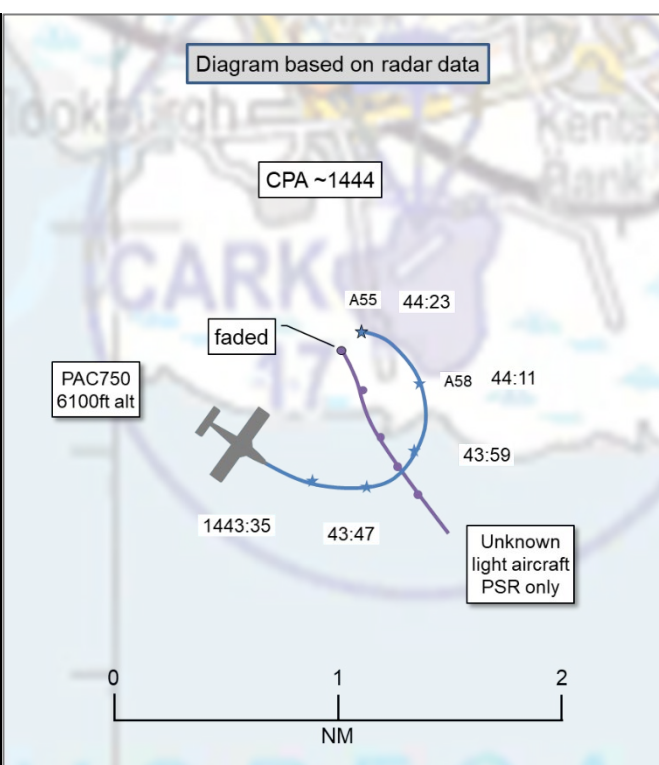


AIRPROX REPORT No 2022200

Date: 27 Aug 2022 Time: 1444Z Position: 5409N 00258W Location: Cark parachute site

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Parachutist	Light aircraft
Operator	Civ Para	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	N/A	NK
Service	N/A	None
Provider	N/A	N/A
Altitude/FL	NK	NK
Transponder	Not fitted	None
Reported		Not reported
Colours	NK	
Lighting	Not fitted	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	NK	
Altimeter	N/A	
Heading	N/A	
Speed	N/A	
ACAS/TAS	Not fitted	
Alert	N/A	
Separation at CPA		
Reported	'800m'	NK
Recorded	NK	



THE PAC750 PILOT reported the Airprox on behalf of the student parachutist. Having dropped the third and final static line student at 6500ft, they commenced the climb to altitude for the next drop. Whilst turning south they noticed a single-engine aircraft with a low elliptical wing, of fibreglass type construction and already within the Cark DZ protected zone [sic] at 1NM due south (overhead the southern tip of the holiday park). It was at an altitude of approximately 2500ft and on a course of roughly 330°, heading straight for the area with student parachutists in the air. The PAC750 pilot was already talking to 2 other aircraft in the vicinity and contacted the most likely [pilot] who said they were much further south and provided a turn to identify themselves. The aircraft in question maintained course and was therefore not who was initially suspected. Several calls were made to the aircraft and the DZ controller to alert them to the situation but unfortunately no reply or change of course was forthcoming. Thankfully the aircraft did not hit any student parachutists but, having talked with the student afterwards, they did see the aircraft and estimated it to be approximately 800m away.

THE UNKNOWN LIGHT AIRCRAFT PILOT could not be traced.

Factual Background

The weather at Blackpool was recorded as follows:

METAR EGNH 271450Z 35011KT 320V020 9999 FEW039 19/11 Q1020=
 METAR EGNH 271420Z 34012KT 320V020 9999 FEW039 19/11 Q1020=

Analysis and Investigation

UKAB Secretariat

Despite extensive tracing effort, it was not possible to establish contact with the light aircraft pilot.

Cark is referenced in the UK AIP ENR 5.5 as a parachute site, as follows:

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
CARK PARACHUTE SITE, CUMBRIA A circle, 1.5 NM radius, centred at 540946N 0025737W	Upper limit: FL145 Lower limit: SFC	Phone: 015395-58672. London Control (Swanwick) 01489-612420. Scottish Control (Prestwick) 01294-655300.	Activity notified on the day to Scottish Control (Prestwick) and London Control (Swanwick). Alternative contact: 129.905 MHz. Hours: Normally during daylight hours Sat, Sun & PH and weekdays by arrangement.

The circle around parachute sites on CAA 1:500,000 and 1:250,000 scale VFR charts depicts the 'lateral limits' of a parachute site. Despite common use of the term 'Drop Zone' or 'DZ', there is no zone or controlled, regulated or 'protected' airspace associated with a civilian parachute site, other than airspace that may already exist in the vicinity of the site and with which its notified lateral or vertical limits overlap. Article 23 of the ANO 2016 states that 'any parachute including a parasending parachute' is exempt from the provisions of the ANO 2016, apart from the following articles:

- PART 1 Interpretation and categorisation
 - CHAPTER 1 Interpretative matter
 - 2 (Interpretation)
- PART 5 Operations
 - CHAPTER 3 Specialised activities
 - 91 (Dropping articles for purposes of agriculture etc. and grant of aerial application certificates)
 - CHAPTER 4 Other aerial activities
 - 92 (Mooring, tethering, towing, use of cables, etc.)
 - 94 (Small unmanned aircraft)
 - 95 (Small unmanned surveillance aircraft)
- PART 10 Prohibited behaviour, directives, rules, powers and penalties
 - CHAPTER 1 Prohibited behaviour
 - 239 (Power to prohibit or restrict flying)
 - 241 (Endangering safety of any person or property)
 - CHAPTER 4 Powers and penalties
 - 257 (CAA's power to prevent aircraft flying) (apart from 257(2)(a))
 - 265 (Offences and penalties) [in relation to the above articles]

The requirements to comply with the Rules of the Air are stated at Article 249, an article from which a parachutist is exempt, and as such a person under a parachute is not required to comply with the Rules of the Air 2015. However, Article 241 specifies that 'A person must not recklessly or negligently cause or permit an aircraft to endanger any person or property'. (UK) SERA defines an aircraft as 'any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface'.

The unknown light aircraft pilot had responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹ and the parachutist was required not to recklessly or negligently cause or permit an aircraft to endanger any person or property.

Summary

An Airprox was reported when an unknown light aircraft and a parachutist flew into proximity at the Cark parachute site at about 1444Z on Saturday 27th August 2022. The unknown light aircraft pilot was operating in VMC without an ATS, most likely under VFR.

¹ (UK) SERA.3205 Proximity.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the PAC750 pilot and radar photographs/video recordings. 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 discussed the actions of the unknown light-aircraft pilot and agreed that their lack of consideration, and possibly planning, had resulted in them flying in close proximity to an active parachute site, at which parachuting had been in progress. Members noted that, contrary to the PAC750 pilot's understanding, there is generally no 'protected zone' around a parachute site. Lateral and vertical limits are promulgated in the UK AIP but that is not an indication of controlled, regulated or protected airspace. Nevertheless, members were unanimous in their opinion that the unknown light-aircraft pilot should at the very least have contacted Cark parachute site by radio to discuss their intentions and, given that parachuting had been in progress, to have routed in any case in a manner that afforded lateral separation from the parachuting activity. The parachutist had had no situational awareness of the approaching light-aircraft but the light-aircraft pilot should have had at least generic situational awareness from their VFR chart and, if they had planned the flight correctly, the warning of parachuting activity at Cark. In discussing the risk, members acknowledged that the parachutist had understandably been concerned by the proximity of the other aircraft, however, it was felt that the estimated separation of 800m indicated that there had been no risk of collision. This was not to diminish the potential consequences of flying unannounced through an active parachuting site, but in this case the separation had been such that there had not been a risk of collision.

CF1: The unknown light aircraft pilot flew through the promulgated and active Cark parachute site.

CF2: The parachutist had no situational awareness of the unknown light aircraft.

CF3: The parachutist was concerned by the proximity of the unknown light aircraft.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2022200				
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Flight Elements				
• Tactical Planning and Execution				
1	Human Factors	• Aircraft Navigation	An event involving navigation of the aircraft.	Flew through promulgated and active airspace, e.g. Glider Site
• Situational Awareness of the Conflicting Aircraft and Action				
2	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness
• See and Avoid				
3	Human Factors	• Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft

Degree of Risk: E

Safety Barrier Assessment²

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

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the unknown light aircraft pilot flew through the notified lateral and vertical limits of the Cark parachute site without contacting Cark.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the parachutist had no situational awareness on the unknown light aircraft.

Airprox Barrier Assessment: 2022200		Outside Controlled Airspace		Effectiveness				
Barrier		Provision	Application	0%	5%	10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	●	●	[Bar chart: 5% effectiveness]				
	Manning & Equipment	●	●	[Bar chart: 5% effectiveness]				
	Situational Awareness of the Conflicting & Action	●	●	[Bar chart: 15% effectiveness]				
	Electronic Warning System Operation and Compliance	●	●	[Bar chart: 5% effectiveness]				
Flight Element	Regulations, Processes, Procedures and Compliance	●	●	[Bar chart: 10% effectiveness]				
	Tactical Planning and Execution	●	●	[Bar chart: 10% effectiveness]				
	Situational Awareness of the Conflicting Aircraft & Action	●	●	[Bar chart: 20% effectiveness]				
	Electronic Warning System Operation and Compliance	●	●	[Bar chart: 15% effectiveness]				
	See & Avoid	●	●	[Bar chart: 20% effectiveness]				
Key: Full Partial None Not Present/Not Assessable Not Used Provision ● ● ● ● ○ Application ● ● ● ● ○ Effectiveness ■ ■ ■ ■ □								

² The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).