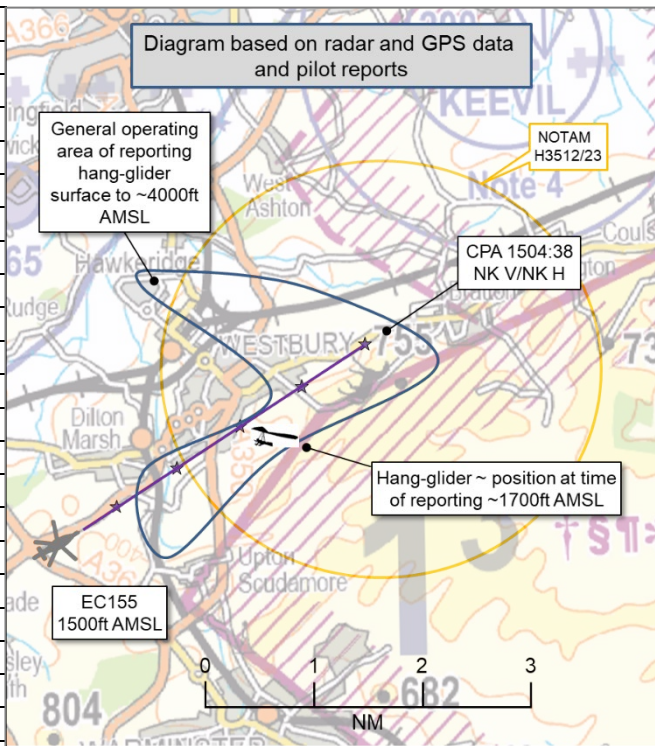


AIRPROX REPORT No 2023130

Date: 22 Jun 2023 Time: 1505Z Position: 5115N 00208W Location: Westbury White Horse

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Hang-glider	EC155
Operator	Civ Hang	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	Boscombe Down
Altitude/FL	NR	A013
Transponder	Not fitted	A, C, S
Reported		
Colours	White	Dark Grey
Lighting	N/R	Standard
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1500ft	1500ft
Altimeter	NK	QNH
Heading	Circling	060°
Speed	20kt	150kt
ACAS/TAS	Not fitted	TAS (ACAS)
Alert	N/A	Information
Separation at CPA		
Reported	100ft V/100m H	Not Seen
Recorded	NK V/NK H	



THE HANG-GLIDER PILOT reports that multiple hang-gliders and paragliders had been soaring at Westbury White Horse, with a CANP in place, at altitudes between ground and cloudbase (4700ft). A helicopter directly overflew the White Horse from the Westbury direction and directly between 2 soaring/circling hang-gliders at approximately 1500ft. One hang-glider steepened the circle so as to present the largest visible area, although the sighting had been so late that it probably made little difference. Although the risk of collision was [judged to be] low, the presence of D148 is forcing GA to overfly the hang-gliding launch by creating a pinch point between D148 and D123, thereby increasing risks. Perhaps a permanent NOTAM of intense hang-glider/paraglider activity in that area is required to avoid any further and more serious conflicts.

The pilot assessed the risk of collision as ‘Low’.

THE EC155 PILOT reports that during a positioning flight 30min from [departure point] to [destination airfield], it had been reported that the helicopter encountered 2 hang-gliders in the vicinity of the White Horse near Westbury at the time indicated. At that time, the helicopter had been under a Basic Service from Boscombe Down, transiting north of the Salisbury Plain Training Area, a common and recognised route for aircraft flying on easterly or westerly headings whilst remaining clear of the aforementioned Danger Areas. In addition, the crew had asked Boscombe Down for information on Danger Area (D148) and Keevil Glider Site prior to entry; both areas had been reported as having been inactive allowing the helicopter to route directly. During that part of the transit, the crew did not see or hear any other airborne traffic in the vicinity of the White Horse. The helicopter had remained on course with no deviation to altitude or speed with the crew maintaining a good lookout in the recognised and potentially busy airspace. The helicopter continued to its destination.

THE BOSCOMBE DOWN CONTROLLER reports that they had been the TC(LARS) controller during the Airprox. They have no recollection of the incident.

The controller perceived the severity of the incident as 'Low'.

THE BOSCOMBE DOWN SUPERVISOR reports that they have no recollection of the event and [recall that] they had been in the ADC position in the VCR around the approximate time of the occurrence, due to low traffic levels and approaching closing time they made the decision to stand people down and go to minimum controllers. Therefore, they had not been in the ACR at the time of the occurrence. Due to the occurrence having occurred several weeks previously they cannot say for certain, but this is their best recollection.

Factual Background

From the UK AIP:

EG D148 is implemented in AIP ENR 5.1 through AIRAC 06/2023, effective 15 June 2023. All activations of EG D148 will be via NOTAM and a Danger Area Crossing Service will be provided by Boscombe Down ATC. SFC to 3200ft alt.

EG D123 AMC Manageable. Vertical Limit 3000 FT ALT H24. Vertical Limit 23000 FT ALT Mon-Thu 0800-2359 (0700-2300), Fri 0800-1730 (0700-1630). Vertical Limit OCNL notified to altitudes up to 50000 FT ALT by NOTAM.

Activity: Ordnance, Munitions and Explosives / Para Dropping / Unmanned Aircraft System (VLOS/BVLOS) / Electronic/Optical Hazards.

Service: DACS: Boscombe Down ATC when open; at other times DAAIS via London Information.

The NOTAM/CANP covering the operation of para and hang-gliders is as shown below:

H3512/23 NOTAMN

Q) EGTQ/QWGLW/IV/M /W /000/029/5116N00209W003

A) EGTQ B) 2306220300 C) 2306222100

E) CIVIL AIRCRAFT NOTIFICATION PROCEDURE - MULTIPLE PARAGLIDERS OPERATING IN LOW FLYING AREA 1A WI 2NM RADIUS OF PSN

511545N 0020851W (WESTBURY, WILTSHIRE). 2000FT AGL.

CTC 07533479591. 23/06/167/LFC

F) SFC G) 2900FT AMSL

The weather at Boscombe Down was recorded as follows:

METAR EGDM 221450Z 27007KT CAVOK 26/13 Q1019 NOSIG RMK BLU BLU=

Analysis and Investigation

Military ATM

At 1459:41, the EC155 [pilot] had contacted Boscombe Down Lower Airspace Radar Service [controller] requesting a Basic Service for their transit flight at 1500ft from [departure point] to [destination airfield]. Included within the message had been their intention of routeing north of the Salisbury Plain Training Area just south of Keevil.

The Boscombe Down Lower Airspace Radar Service [controller] issued a Basic Service and confirmed the Portland Regional Pressure Setting. Clarification had then been provided regarding the Keevil airspace having become D148 and transit was approved.

The Airprox had not been reported on frequency by the EC155 [pilot] and subsequently the Boscombe Down Lower Airspace Radar Service [controller] had been unaware until notified by the UK Airprox Board.

Local BM Investigation(s)

No local investigation was conducted by MOD Boscombe Down as a result of them being unaware of the Airprox and there being no evidence to support an investigation.

2 Gp BM Analysis

With the hang-glider not being displayed on NATS Radars and justifiably no local investigation being conducted, there is no 2 Gp BM analysis of the Boscombe Down Lower Airspace Radar Service controller's actions.

UKAB Secretariat

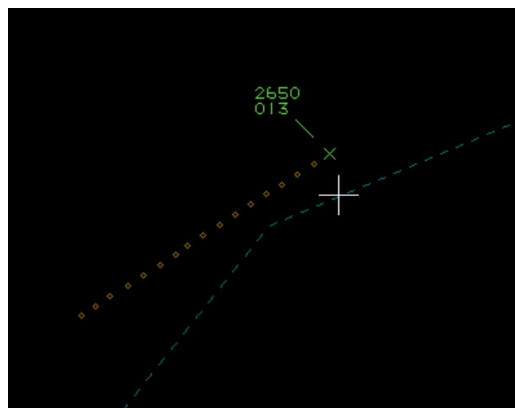


Figure 1 shows the path of the EC155 and its position at reported CPA of 1504:38. The white cross indicates Westbury White Horse

Information for this event was drawn from radar data, GPS files from the hang-glider pilot and written reports from both pilots and the Boscombe Down LARS controller. At no time did any of the hang-gliders operating in the general area show on radar. The indicated CPA is based on the reported time and position by both pilots.

The hang-glider and EC155 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 head-on or nearly so then both pilots were required to turn to the right.² If the incident geometry is considered as converging then the EC155 pilot was required to give way to the hang-glider.³ If the incident geometry is considered as overtaking then the hang-glider pilot had right of way and the EC155 pilot was required to keep out of the way of the other aircraft by altering course to the right.⁴

Comments

BHPA

The BHPA accepts that before D148 came into existence in 2023, the small gap between Keevil's parachuting activity zone and the SDA (D123) was a well-trodden route for many GA aircraft and helicopters flying westerly or easterly headings. This narrow corridor routeing inevitably brought

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.

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

⁴ (UK) SERA.3210 Right-of-way (c)(3) Overtaking.

aircraft in close proximity to hang-gliders and paragliders soaring the popular south-westerly to north-easterly facing slopes of Westbury's White Horse ridge to the SE of Westbury town.

On the day of the incident, D148 was 'inactive' and it is understandable that the EC155 [pilot] would choose to route through the gap. Hang-glider and paraglider pilots have always been aware of this narrow corridor that GA pilots route through and keep a vigilant look-out.

As the EC155 pilot admits to not seeing any hang-gliders/paragliders, it is fortunate that there was no incident on this day. Perhaps if the EC155 pilot had seen the NOTAM, they could have telephoned the CANP originator to warn of their intended routeing. However, it is disappointing that Boscombe Down ATC [did not] warn the EC155 [pilot] of the hang-gliding/paragliding activity on a well-established flying site due to the submitted NOTAM.

The BHPA, in consultation with the Avon Hang-gliding & Paragliding Club, would also like it recorded that summertime meteorological conditions often set up a late afternoon favourable sea-breeze, and some pilots fly Westbury White Horse at short notice and without submitting a CANP. It is therefore imperative that GA & helicopter pilots keep a good lookout when flying near this notified free-flying site.

Summary

An Airprox was reported when a hang-glider and an EC155 flew into proximity at Westbury White Horse at 1505Z on Thursday 22nd June 2023. Both pilots were operating under VFR in VMC, the hang-glider pilot was not in receipt of an air traffic service and the EC155 pilot was in receipt of a Basic Service from Boscombe Down.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings and a report from the air traffic controller involved. 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 firstly considered the report from the hang-glider pilot and the operating area in question, noting that the Westbury site was very popular and could at times attract upwards of 50 aircraft at one time. Members accepted that the area had always acted as a path for transiting traffic but opined that the establishment of the Keevil Danger Area had further complicated the area for non-soaring craft, noting that air traffic services were available to those transiting this particular gap and that pilots should actively seek a service to improve situational awareness. The Board praised the BHPA for its NOTAM discipline in this area.

Members then discussed the actions of the EC155 pilot; they considered the weather on the day and the pilot's choice to transit at a relatively low level to have been sub-optimal when the weather conditions had led to the likelihood of activity in the area and suggested that the EC155 pilot could have paid greater regard to the NOTAM'd warning of such activity, feeling that if a reroute had not been possible, then perhaps a higher transit would have reduced the likelihood of encountering hang-gliders and/or paragliders operating from the site (**CF3**).

Turning to the role of the Boscombe Down controller, Members recognised the limitations of a Basic Service (**CF1**) but stressed that perhaps more could have been done to remind the EC155 pilot of the activity NOTAM'd for the area. They again opined that the carriage and use of electronic conspicuity equipment by those operating in the Westbury area could have raised levels of situational awareness for the controller (**CF2**), and potentially alerted the EC155 pilot to other traffic, raising their situational awareness (**CF4**, **CF5**) and ultimately helping to avoid a non-sighting of other traffic in the area (**CF6**).

Discussion moved to the symbology on the VFR charts used by operating pilots and third party system providers, with Board members opining that the old hang-glider symbology might have helped in this case, but accepted that the decision to remove such markings had been discussed in the past and that a warning is present on hard copies of the charts as to why these symbols had been removed.

When determining the risk of collision the Board agreed that, although safety had been degraded, there had not on this occasion been a risk of collision as the hang-glider pilots, although concerned by the proximity of the EC155 (CF7), had had sufficiently early sighting to take timely and effective avoiding action to prevent the aircraft flight paths coming into conflict. As such, the Board assigned a Risk Category C to this Airprox.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2023130			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Ground Elements				
• Situational Awareness and Action				
1	Contextual	• ANS Flight Information Provision	Provision of ANS flight information	The ATCO/FISO was not required to monitor the flight under a Basic Service
2	Contextual	• Traffic Management Information Action	An event involving traffic management information actions	The ground element had only generic, late, no or inaccurate Situational Awareness
Flight Elements				
• Tactical Planning and Execution				
3	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				
4	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
• Electronic Warning System Operation and Compliance				
5	Technical	• ACAS/TCAS System Failure	An event involving the system which provides information to determine aircraft position and is primarily independent of ground installations	Incompatible CWS equipment
• See and Avoid				
6	Human Factors	• Monitoring of Other Aircraft	Events involving flight crew not fully monitoring another aircraft	Non-sighting or effectively a non-sighting by one or both pilots
7	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: C.

Safety Barrier Assessment⁵

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

Ground Elements:

⁵ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

Situational Awareness of the Confliction and Action were assessed as **ineffective** because the EC155 pilot was operating under a Basic Service and the ATCO was not therefore required to monitor the flight.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the EC155 pilot flew through an area of NOTAM'd activity.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the hang-glider pilot had no situational awareness of the presence of the EC155, and the EC155 pilot had only generic situational awareness - through the NOTAM of the activity - of the presence of the hang-glider.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because, although the EC155 was carrying TAS equipment, they received no signals from the hang-glider.

Airprox Barrier Assessment: 2023130		Outside Controlled Airspace							
Barrier	Provision	Application	Effectiveness						
			Barrier Weighting						
			0%	5%	10%	15%	20%		
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓	[Green bar to 5%]					
	Manning & Equipment	✓	✓	[Green bar to 2.5%]					
	Situational Awareness of the Confliction & Action	⚠	✗	[Red bar to 15%]					
	Electronic Warning System Operation and Compliance	⊙	⊙	[Grey bar to 2.5%]					
Flight Element	Regulations, Processes, Procedures and Compliance	✓	✓	[Green bar to 10%]					
	Tactical Planning and Execution	✓	⚠	[Yellow bar to 10%]					
	Situational Awareness of the Conflicting Aircraft & Action	✗	✓	[Red bar to 20%]					
	Electronic Warning System Operation and Compliance	✗	✓	[Red bar to 15%]					
	See & Avoid	✓	✓	[Green bar to 20%]					
Key:			Full	Partial	None	Not Present/Not Assessable	Not Used		
Provision	✓	⚠	✗	⊙					
Application	✓	⚠	✗	⊙	○				
Effectiveness	[Green]	[Yellow]	[Red]	[Grey]	[White]				