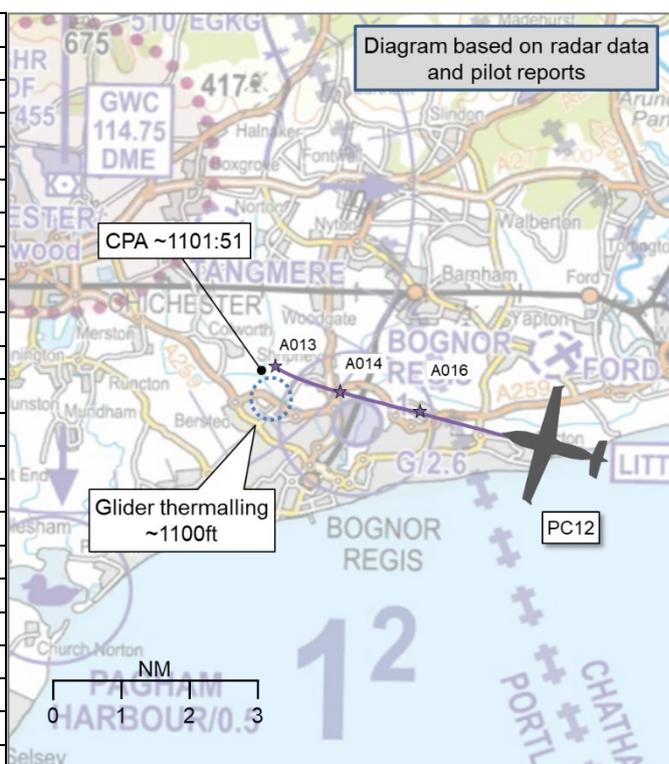


AIRPROX REPORT No 2022095

Date: 01 Jun 2022 Time: 1101Z Position: 5048N 00041W Location: Bognor Regis

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	DG1001	PC12
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	IFR
Service	None	Basic
Provider	NR	Goodwood
Altitude/FL	NK	1300ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White	Silver, Red
Lighting	None	'Standard'
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1100ft	NK
Altimeter	QFE	QNH
Heading	Thermalling	320°
Speed	50kt	175kt
ACAS/TAS	FLARM	PilotAware
Alert	None	None
Separation at CPA		
Reported	50ft V/100m H	1000ft V/1000ft H
Recorded	NK	



THE DG1001 PILOT reports that they saw the PC12 on a westerly heading. As they were to the west of the club in a thermal, and had been there for approximately one minute, they believed that the PC12 had overflowed the club prior to the event. They saw it turn towards Goodwood and couldn't change to the Goodwood frequency and so called Goodwood Tower directly on their phone. They had lost sight of the PC12 as the orbit continued and they assessed that due to the orbit they were not on a collision course. As they turned through further 120° they saw it again heading away from them. They believe that the PC12 flew directly over the glider site at 1100ft and it was lucky that they weren't winch launching at the time. Goodwood should be aware of the launch activity and should pass information on to inbound pilots. The pilot re-called Goodwood after the flight and Goodwood claimed not to know about the operation, however, they should be aware of regular glider flying on Wednesdays. The Goodwood AFISO said that the PC12 pilot had mentioned that they might get a call from a glider pilot, so they assumed that the PC12 pilot had mentioned the event to the AFISO on the radio.

The pilot assessed the risk of collision as 'High'.

THE PC12 PILOT reports that they were flying an IFR filed flight and were transitioning to a VFR approach and landing. As they approached Bognor they could see a glider which they believe launched from the old LEC runway. To maintain visual contact, they carried on with their course and altitude and at no time did they feel it necessary to take avoiding action. It was in uncontrolled airspace so obviously it was up to the individual pilots to maintain a good lookout. They had a collision warning system (CWS) on the aircraft but clearly, as the glider didn't have a transponder, it could not detect the glider. They noted that the area was generally quite busy with general aviation traffic so a good scan was essential. Goodwood aerodrome provides a Basic Flight Information Service to all aircraft who are flying from the airfield or who are transiting the general area. However, this only applies to aircraft that call up on frequency and let Goodwood know their intentions. They opined that it would be good practice for any glider pilots launching from the Bognor site to give Goodwood a call before launch to give a basic

summary of their airborne time and flight intention. That way, Goodwood could advise anyone on their frequency that there was glider activity in the local area. There was also the matter of non-transponding aircraft which did not display on CWS-equipped aircraft. Whilst they understood that this was mainly due to cost, still, they thought that to have a transponder on-board definitely enhanced safety. They had been flying in that area, in various aircraft types, for the last 30 years, so were very familiar with the area. At no time did they think there was a risk of collision.

The pilot assessed the risk of collision as 'Low'.

THE GOODWOOD SATCO reports that neither of the AFISOs on duty that day had any recollection of a reported Airprox. They did receive a phone call from the glider pilot, (whilst still in the air) reporting that a PC12 had flown through their airspace. Once the PC12 had landed, the pilot did comment on having seen a glider, but at that point nothing had been reported and the incident was well outside Goodwood's airspace.

Factual Background

The weather at Shoreham was recorded as follows:

METAR EGKA 011050Z 22009KT 9999 SCT039 13/08 Q1017=

Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radars was undertaken. The PC12 could be identified through Mode S data, unfortunately the DG1001 did not display on the radar at all. The radar QNH was 1017hPa. At Figure 1, the PC12 could be seen heading NW, indicating 2000ft.

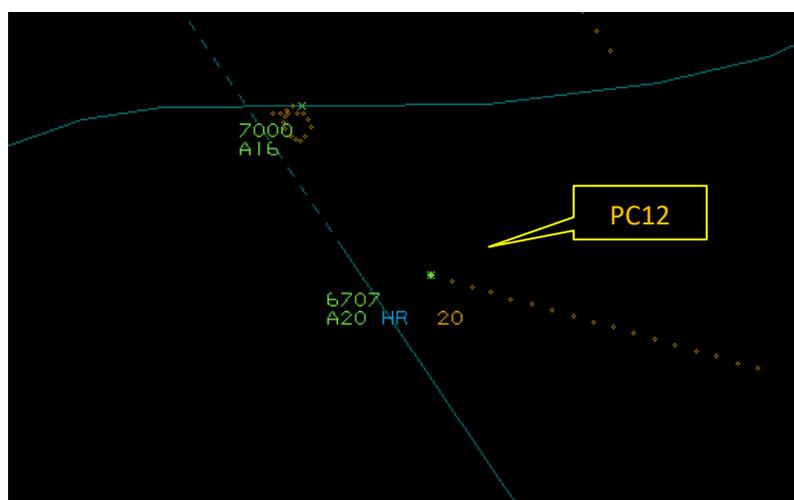


Figure 1 - 1059:03

By 1101:19 (Figure 2), the PC12 had descended to 1500ft. The position of Bognor Regis gliding club is marked on the screenshot with a white cross. The airfield elevation on the VFR chart is given as -1ft (although Pooley's Flight Guide gives an airfield elevation of 1ft). The PC12 continued the descent and was indicating 1300ft when 1km WNW of the gliding site, the position in which the DG1001 pilot reported that they were circling. However, the glider could not be seen on the radar so the exact separation could not be determined.

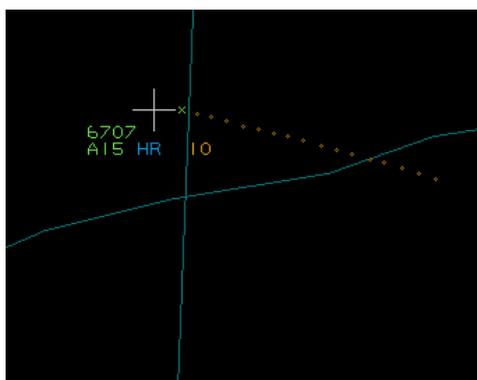


Figure 2 - 1101:19

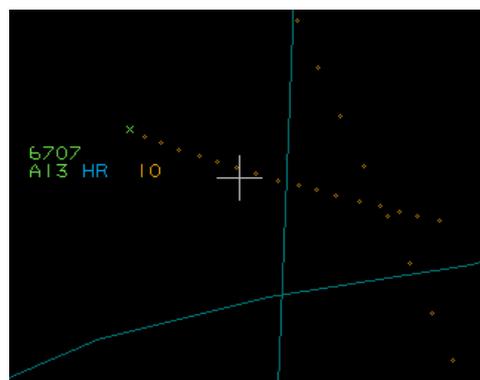


Figure 3 - 1101:51

The DG1001 and PC12 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 PC12 pilot was required to give way to the DG1001.³ If the incident geometry is considered as overtaking then the DG1001 pilot had right of way and the PC12 pilot was required to keep out of the way of the other aircraft by altering course to the right.⁴

Comments

AOPA

It is recommended to avoid glider sites, if this is not possible then good airmanship would be to make a radio call to improve everyone's situational awareness; most glider site frequencies are listed in the eAIP ENR 5.5 Aerial Sporting and Recreational Activities. Where possible pilots should report an Airprox on a suitable ATC frequency, although in this case the glider pilot had telephoned the expected destination of the PC12, if the pilot had reported the incident as an Airprox it would have helped the subsequent investigation.

BGA

UK glider launch sites are listed in UK AIP ENR 5.5 and labelled on the CAA 1:500,000 and 1:250,000 charts with a "G" symbol, as shown in Figure 4. A greater density of gliders may be expected nearby at any time during daylight hours, and at any altitude up to cloud-base. Where winch launching is used, the maximum winch launch altitude is listed in the AIP and marked on the chart; this is 2600ft AMSL at Bognor Regis, as indicated by the black arrow. Overflying a winch site below this maximum notified altitude during daylight hours risks encountering high tensile strength cable (Figure 4) connecting a launching glider to the winch on the ground.



Figure 4

Summary

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.

An Airprox was reported when a DG1001 and a PC12 flew into proximity in the vicinity of Bognor Regis at 1101Z on Wednesday 1st June 2022. The DG1001 pilot was operating under VFR in VMC, not in receipt of an ATS. The PC12 pilot was operating under IFR in VMC and in receipt of a Basic Service from Goodwood.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, reports from the air traffic controllers involved 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 discussed the event and agreed that the separation between the aircraft had been sufficient to ensure that there had been no risk of collision. Although members discussed that the PC12 pilot may have been better served by giving Bognor Regis gliding site a wider berth, they noted that the aircraft had not flown directly overhead the airfield. Furthermore, they assessed that the position of the Airprox, to the northwest of the gliding site, meant that the PC12's previous routing had had no bearing on this occasion. Both pilots had seen the other aircraft, and both had assessed that there had been no need to take avoiding action. Members were therefore satisfied that normal safety standards and parameters had pertained and as such, assigned a Risk Category E.

Members agreed on the following contributory factors:

CF1. The AFISO was providing a Basic Service without a surveillance radar and was not required to monitor the PC12.

CF2. Neither pilot had any situational awareness that the other was operating in the vicinity.

CF3. The EC equipment on both aircraft was not compatible, so no information was received by either pilot.

CF4. The DG1001 pilot had been concerned by the proximity of the PC12.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2022095				
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
Flight Elements				
• 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
• Electronic Warning System Operation and Compliance				
3	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				
4	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 Assessment⁵

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

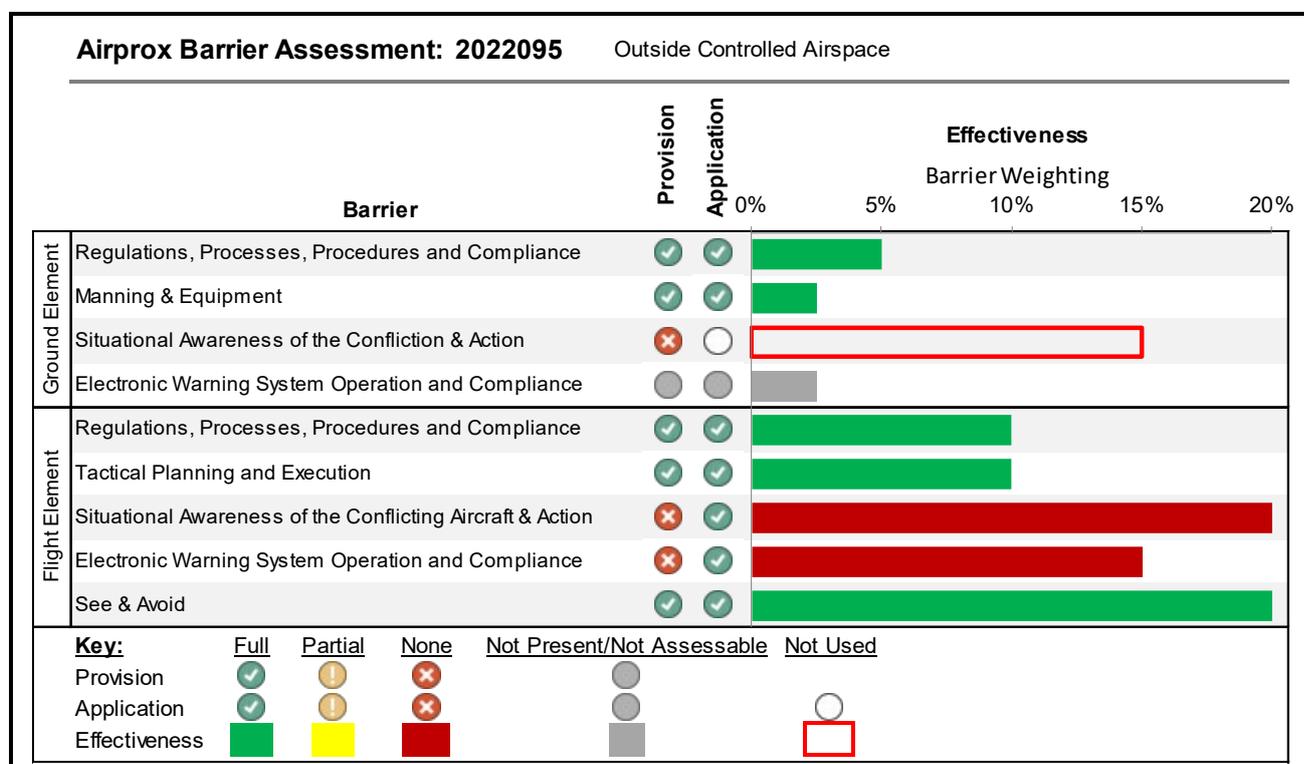
Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **not used** because the Goodwood AFISO was not required to monitor the PC12 under a Basic Service.

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had been aware that the other aircraft was in the vicinity.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the EC equipment on the two aircraft was not compatible.



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