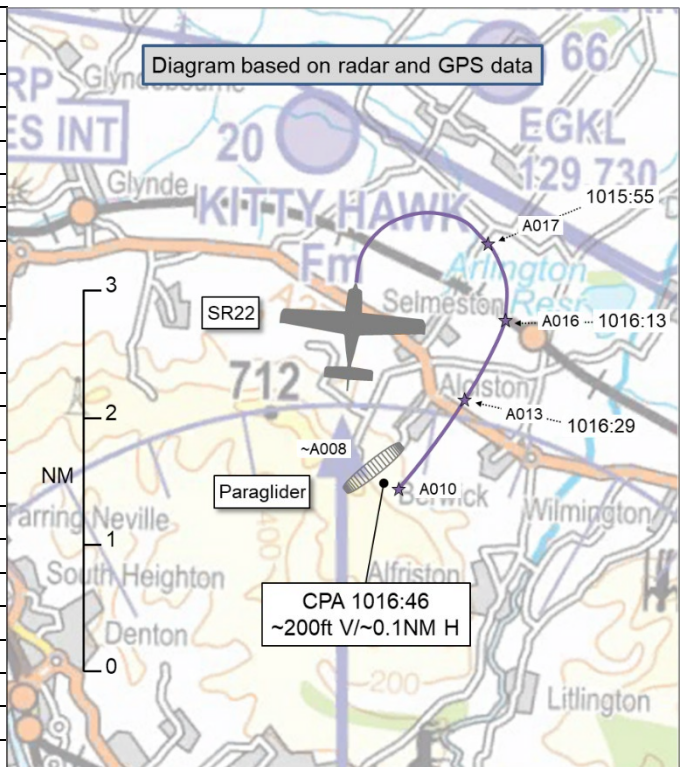


AIRPROX REPORT No 2022213

Date: 13 Sep 2022 Time: 1017Z Position: 5049N 00008E Location: 4NM NE Newhaven

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Paraglider	SR22
Operator	Civ Hang	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	IFR
Service	None	Traffic
Provider	N/A	Farnborough LARS East
Altitude/FL	~800ft	1000ft
Transponder	Not fitted	A, C, S
Reported		
Colours	Blue, yellow	White
Lighting	None	Strobes
Conditions	VMC	IMC
Visibility	5-10km	<5km
Altitude/FL	750ft	1100ft
Altimeter	QFE (NK hPa)	QNH (1012hPa)
Heading	'NNW'	200°
Speed	10kt	160kt
ACAS/TAS	Not fitted	TAS
Alert	N/A	None
Separation at CPA		
Reported	300ft V/150m H	500ft V/0.5NM H
Recorded	~200ft V/~0.1NM H	



THE PARAGLIDER PILOT reports that they had launched at 1009 from a site on the South Downs which is at 600ft AMSL. They had climbed 300ft toward the east of the site and [had travelled] 50-100m ridge-soaring in a north-easterly direction. Having descended to be approximately 150ft above their take-off point, they returned to the centre of the flying site. At 1015, they observed a light aircraft pass 150-300ft above and 50-150m east, heading south-southwest. The aircraft was heard before it was seen, [and there was] no time to assess [avoiding] action by the time of it passing. It appeared to be passing above and to the east; however, the proximity was sufficiently close to be a concern. The paraglider pilot pondered whether the fixed-wing pilot had known that paragliders had been flying from the hill in the position that they had passed. They were concerned that if a low-airtime club pilot flying a paraglider had seen the aircraft on such a low and close approach, it might have given cause to panic. This may have led to evasive manoeuvres, putting the paraglider at risk due to strong wind and proximity to the ground.

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

THE SR22 PILOT reports that they departed [departure airfield] at 0948 under IFR for an FAA Biennial Flight Review (BFR). The PIC was Instrument Rated and an FAA instructor was in the right-hand seat. After completing the manoeuvres required for the BFR around and to the north of SFD VOR, the pilot descended through a layer of cloud on a heading of 200° so as to be at 1000ft over the coast, west of SFD VOR. As they broke cloud, they noticed a microlight ahead and below. The instructor commented that "he should not be flying in these conditions" but there was no risk of collision, and no avoiding action was taken. The flight continued and was completed as planned.

The pilot assessed the risk of collision as 'None'.

THE FARNBOROUGH LARS EAST CONTROLLER reports that they have no recollection of the [Airprox] event.

Factual Background

The weather at Shoreham was recorded as follows:

METAR EGKA 131020Z 02007KT 9999 FEW012 18/16 Q1010

Analysis and Investigation

NATS FARNBOROUGH INVESTIGATIONS

[The pilot of the SR22] had been working LARS East at the time of the event, North and East were bandboxed in light traffic conditions.

The stored RT recordings for this event were reviewed and the ATCO involved [was interviewed] but they had no recollection of the event. This event was notified to the unit in October 2022 but the correct actions had not been carried out. The RT recording is correct but the wrong radar screens had been impounded. As the event occurred longer than 90 days ago, it is not possible to view the correct screens as shown to the controller at the time. The 4 hour impound of the event was sent to the CAA. The RT recording shows that [the pilot of the SR22] was on the LARS East frequency at the time of the event. The only transmissions available are shown below:

1010 Farnborough: “[SR22 callsign] *traffic 10 o'clock 6 miles slow moving no height information.*”

SR22 pilot: “[SR22 callsign] *looking no contact.*”

1013 Farnborough: “[SR22 callsign] *previously mentioned traffic now 10 o'clock 5 miles on a southwesterly track no height information.*”

(SR22 pilot did not respond)

[The pilot of the SR22], squawking 1730, was manoeuvring in the vicinity of SFD. The following radar images are Node Radar data supplied by Swanwick Investigations. It is not reflective of the radar image displayed to the Farnborough ATCO.

The first radar image (see Figure 1) corresponds with the first traffic call to the pilot of [the SR22]. [The pilot of the SR22] was squawking 1730. The other traffic, squawking 7000, was identified by Mode S as [callsign redacted]. However, it is not believed to be the aircraft involved in the reported Airprox.

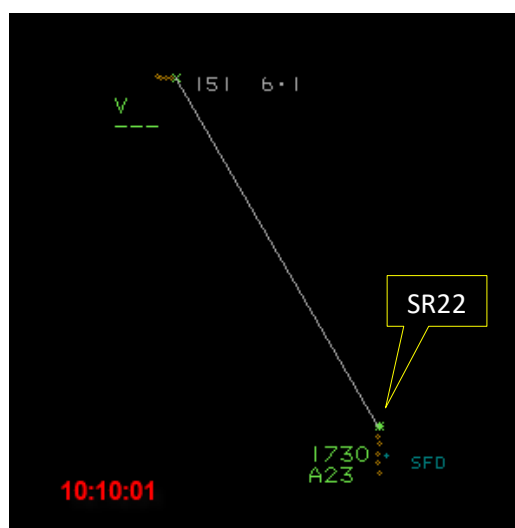


Figure 1 -1010:01

The following radar image (see Figure 2) corresponds with the second traffic call made to [the pilot of the SR22]. Again, the traffic is [callsign redacted].

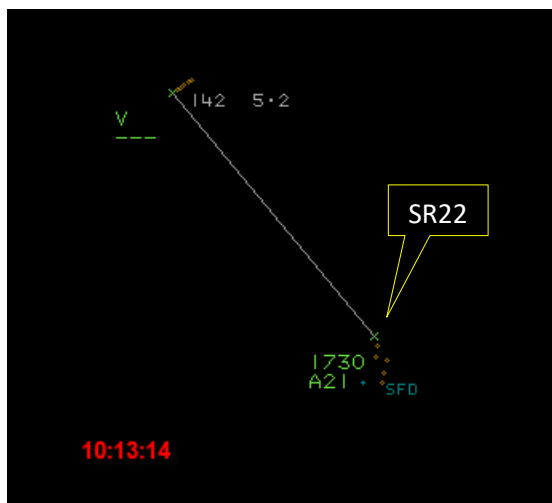


Figure 2 – 1013:14

On the following radar image (see Figure 3), the large cross indicates the location of the Bo-Peep paragliding site, as taken from their website.

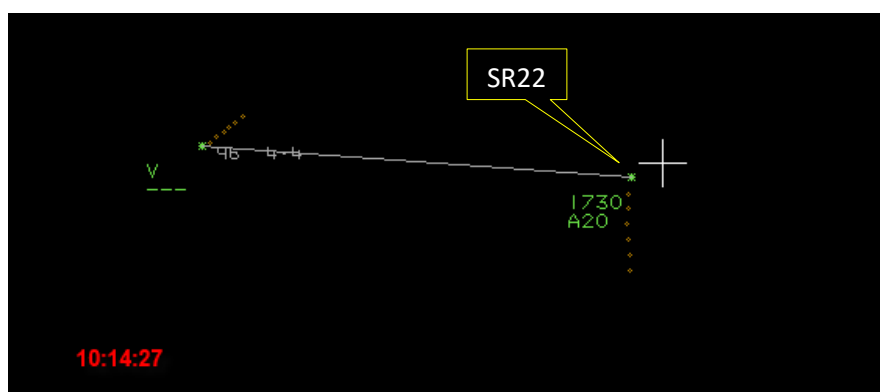


Figure 3 – 1014:27

There are no radar returns displayed, other than [the SR22], in the vicinity of the paragliding site. The closest return was the previously mentioned [aircraft, (callsign redacted)], 4.4NM away. It has not been possible to definitively determine where the Airprox occurred. No further investigation is possible, the investigation has been marked as completed.

CAA ATSI

ATSI has not been able to complete a full analysis of this event.

Farnborough ATC did not submit a report at the time of original notification and, although the unit did impound some RTF, it was for a short period only, and their radar replay for this period was not captured at all. After a request by ATSI the unit submitted an investigation report. ATSI reviewed the Farnborough RTF copy sent to the Transcription Unit which did cover the correct period of time. [The pilot of the SR22] was being provided with a Traffic Service and at 1010:20 the pilot was passed Traffic Information on another aircraft to the north-west of their position (*"10 o'clock 6 miles, left to right, slow moving, no level information"*.) This corresponded with an aircraft transponding Mode A 7000 subsequently identified as [redacted]. No reference to the Airprox was made on the frequency at the time. No contacts which might have been associated with the paraglider were observed on the area radar replay and therefore the Airprox could not be seen.

Farnborough ATC is reminded of its obligations under Regulation (EU) 2017/373 of 1 March 2017 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 ATM/ANS.OR.A.065 paragraphs (a) through (e), with regards to the initial submission of a mandatory occurrence report and any follow up reports within the specified timescales as defined within Regulations (EU) 996/2010 and 376/2014.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken. The SR22 could be positively identified from Mode S data (see Figure 4). The paraglider was not observed on radar.

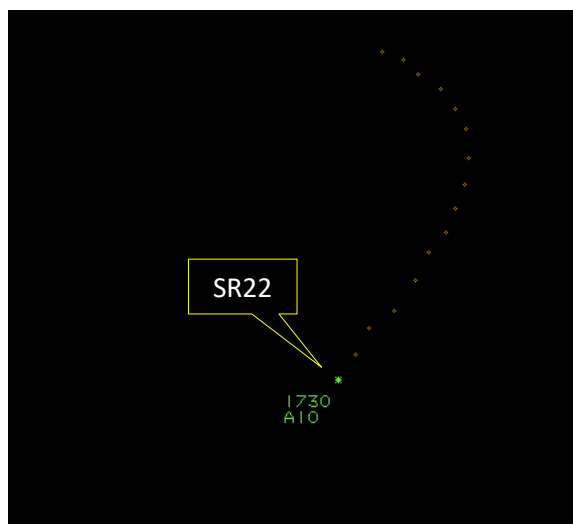


Figure 4 - CPA at 1016:46. No contacts were observed on radar in the vicinity of the SR22.

Both pilots kindly supplied GPS track files of their respective flights. Figure 5 shows the relative positions of the two aircraft from their GPS track data.

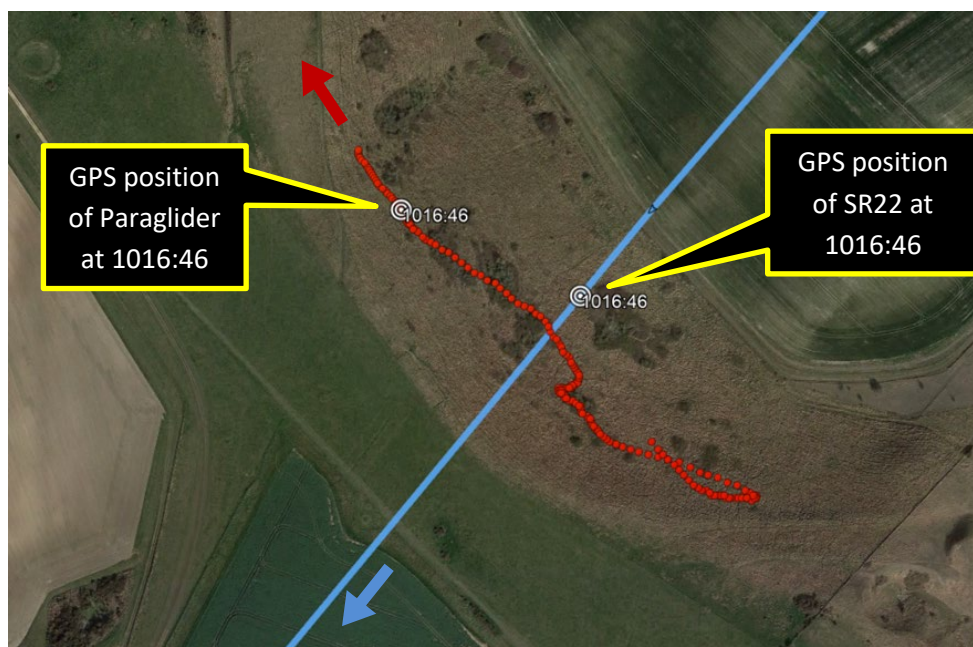


Figure 5 – 1016:46. Relative positions at CPA. The coloured arrows denote the direction of travel.

The diagram was constructed, and the separation at CPA assessed with reference to the radar and GPS track data.

The paraglider and SR22 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 converging then the SR22 pilot was required to give way to the paraglider.²

Comments

BHPA

The BHPA applauds the good fortune of the paraglider pilot in hearing a powered aircraft nearby and being far enough away to have not been in a collision once it was visually spotted. The BHPA strongly recommends that free-flying pilots should always try and submit a CANP the day before they plan to fly which may provide a NOTAM warning to other pilots.³ Additionally, we stress the need to maintain a keen lookout for other aircraft at all times.

The BHPA was most disappointed with the remarks by the FAA instructor that, "*he* [the paraglider pilot] *should not be flying in these conditions*". For clarification, the paraglider pilot was flying at ~150ft AGL (~750ft AMSL) in Class G airspace with winds ranging from 7-14kts in VFR conditions with few clouds around 1200-1400ft AGL and a visibility of 10+km. These are good flyable conditions for paragliding. Furthermore, the paraglider pilot wasn't near cloudbase at the time of CPA but could well have been. The BHPA wishes for a more tolerant attitude from pilots of bigger and faster aircraft towards slow moving and less manoeuvrable aircraft and stresses the need for extra vigilance when descending through cloud in uncontrolled airspace.

AOPA

It is heartening to see that a Traffic Service had been used as threat-and-error management for MAC avoidance. When flying around areas of known paragliding activity, regardless of the cloudbase, it is imperative, as this Airprox shows, that an effective lookout is maintained as some aerial systems do not show on radar. There is an appropriate EC system for most flying machines that is compact and compatible.

Summary

An Airprox was reported when a paraglider and an SR22 flew into proximity 4NM northeast of Newhaven at 1017Z on Tuesday 13th September 2022. Both pilots were operating under VFR in VMC, the paraglider pilot not in receipt of an ATS and the SR22 pilot in receipt of a Traffic Service from Farnborough Radar.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS track data for both aircraft, a report from the air traffic controller 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 first considered the actions of the pilot of the paraglider. A member with particular knowledge of paragliding operations remarked that it would be entirely understandable for a paraglider pilot to have been concerned upon hearing a powered aircraft nearby. In this particular instance, notwithstanding the limited and generic situational awareness that the paraglider pilot had garnered, members noted that there had not been any time to have assessed or effected an avoiding manoeuvre before the SR22 had passed (**CF4**).

¹ (UK) SERA.3205 Proximity.

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

³ The CANP (Civil Aircraft Notification Procedure) is intended for notifying other airspace users if 5 or more paragliding pilots are to be present at a site.

Turning their attention to the actions of the pilot of the SR22, some members expressed surprise that the flight had been conducted below the MSA over the rising ground of the South Downs. Given that the pilot of the SR22 had described having 'descended through cloud' and had been at 1000ft AMSL with a 'spot-height' approximately 1NM away of 712ft AMSL, members suggested that the clearance from terrain had been imprudent.

The SR22 had been fitted with a TAS but members concluded that that would not have provided an alert to the presence of the paraglider pilot (**CF5**). Members were heartened that the pilot of the SR22 had been in receipt of a Traffic Service and some members wondered whether a Deconfliction Service might have provided an even more suitable level of service.

Members noted that the instructor aboard the SR22 had reportedly opined that paragliders ought not to have been operating in the prevailing conditions, and wished to emphasise that a range of airspace users may be encountered within Class G airspace and that it is imperative that an effective lookout is maintained. Members' attention was drawn to the markings on the 1:250,000 and 1:500,000 navigational charts. Members observed the legend and noted that symbols depicting paragliding sites 'have been removed as they were not an accurate representation of the activity on any given day' (**CF3**). It was further noted that each chart warns airspace users that 'single or groups of soaring or motorised Hang/Paragliders can be found flying anywhere in Class G airspace up to 15,000ft, but concentrated around windward slopes and cliffs'.

Members next considered the actions of the Farnborough LARS East controller and agreed that the equipment in use at the unit would not have been expected to have detected the paraglider (**CF1**). As such, the LARS East controller had not had situational awareness of the proximity of the paraglider to the SR22 (**CF2**).

When determining the risk, the Board were in agreement that safety had been degraded, but members were satisfied that there had been no risk of collision. Consequently, the Board assigned a Risk Category C to this Airprox.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2022213				
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Ground Elements				
• Situational Awareness and Action				
1	Human Factors	• Conflict Detection - Not Detected	An event involving Air Navigation Services conflict not being detected.	
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	Organisational	• Flight Planning Information Sources	An event involving incorrect flight planning sources during the preparation for a flight.	
• 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

Degree of Risk: C

Safety Barrier Assessment⁴

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 **ineffective** because the Farnborough LARS East controller would not have been expected to have detected the presence of the paraglider.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the Bo-Peep paragliding site is not marked on the 1:250,000 or 1:500,000 navigational charts.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the paraglider pilot had generic Situational Awareness in that they had heard an aircraft approaching. The pilot of the SR22 had had no Situational Awareness of the presence of the paraglider.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the EC equipment fitted to the SR22 would not have been expected to have detected the paraglider.

Airprox Barrier Assessment: 2022213		Outside Controlled Airspace		Effectiveness				
Barrier		Provision	Application	Barrier Weighting				
				0%	5%	10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓					
	Manning & Equipment	✓	✓					
	Situational Awareness of the Confliction & Action	✗	✗					
	Electronic Warning System Operation and Compliance	○	○					
Flight Element	Regulations, Processes, Procedures and Compliance	✓	✓					
	Tactical Planning and Execution	⚠	✓					
	Situational Awareness of the Conflicting Aircraft & Action	✗	✓					
	Electronic Warning System Operation and Compliance	✗	✓					
	See & Avoid	✓	✓					
Key:		Full	Partial	None	Not Present/Not Assessable	Not Used		
Provision	✓	⚠	✗	○				
Application	✓	⚠	✗	○	○			
Effectiveness								

⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).