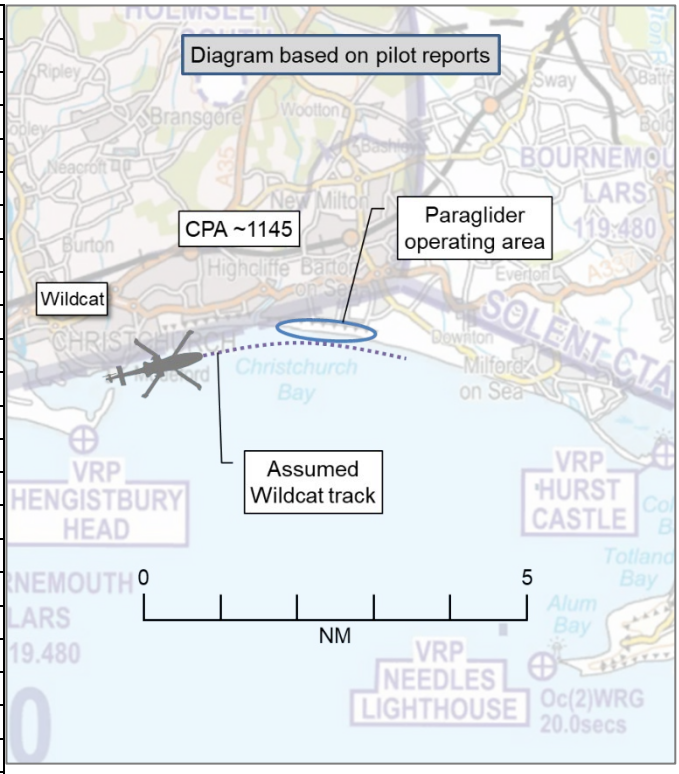
AIRPROX REPORT No 2022084

Date: 18 May 2022 Time: ~1145Z Position: 5044N 00140W Location: Barton on Sea

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Paraglider	Wildcat
Operator	Civ Hang	HQ JHC
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	Bournemouth
Altitude/FL	NK	NK
Transponder	Not fitted	A, C, S+
Reported		
Colours	Blue, red	grey
Lighting	Not fitted	HISL, land, nav
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	150ft estimated	1000ft
Altimeter	NK	QNH (1015hPa)
Heading	270°	090°
Speed	5kt estimated	100kt
ACAS/TAS	Not fitted	TCAS I
Alert	N/A	None
Separation at CPA		
Reported	100ft V/30m H	'500ft'
Recorded	NK	



THE PARAGLIDER PILOT reports flying along the cliffs at Barton on Sea, from east to west, when they saw a helicopter approaching head-on. They deliberately dipped the wing to improve visibility because they could not turn right safely. As it passed by, the wash from the rotors caused the wing to rock and descend before they recovered control and returned to land on the clifftop. Another paraglider pilot was also affected a few seconds afterwards and also landed. Prior to take off, they had notified Bournemouth ATC that they were flying on the cliffs and assumed they contacted the pilot to warn them. After landing, they immediately contacted ATC to report the incident as the helicopter continued along the coast before turning inland. A second Wildcat passed by a few minutes later on the same track as the first. Later, paragliders reported seeing them pass low and close at Bournemouth but with no effect on their wings.

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

THE WILDCAT PILOT reports that whilst transiting on the southern edge of Bournemouth Airport controlled airspace, ivo Barton on Sea, they observed multiple paragliders at a range of 2000m about 500ft below, utilising the updrafts from cliffs located on the coast. The paragliders were observed to be well below the transit height and offset by track. The transit continued without occurrence.

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

THE BOURNEMOUTH CONTROLLER reports that there was a military exercise along the coast, and there had been several calls from military helicopters west- and east-bound. The assistant took a phone call from the paragliding club that advised they were active along the coast. This was then displayed on the met screen for information. After their session in radar, there was a passing comment from an assistant that one of the paragliders had called to say they had been nearly washed away by a Merlin. There was no suggestion of anything being filed. [The Wildcat C/S] had been east-bound along the

coast at the time of the paraglider's report. The Wildcat pilot made no report of seeing or having an issue with a paraglider.

Factual Background

The weather at Bournemouth was recorded as follows:

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METAR EGHH 180920Z 19009KT 150V210 9999 SCT010 SCT014 15/12 Q1021=
METAR EGHH 180850Z 19006KT 140V230 9999 SCT010 BKN018 15/12 Q1021=
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NOTAM H2858/22 as follows:

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Q) EGTT/QWELW/IV/BO/W/000/020/5030N00054W053
AIR EXER. MULTIPLE MIXED FORMATION FLYING WI AREA BOUNDED BY:
510300N 0000800E - 505800N 0001500E - 501200N 0001500E -
500200N 0020200W - 504400N 0020200W - 505000N 0011800W -
505600N 0002500W - 510300N 0000800E (SOUTH OF UK, ENGLISH CHANNEL).
ACCESS TO CONTROLLED AIRSPACE SUBJ ATC CLR. ACFT MAY BE UNABLE TO
COMPLY WITH RAC. FOR INFO AND UPDATED TIMINGS CTC 07775 663822 /
07867 143256. 2022-05-0468/AS3.
LOWER: SFC
UPPER: 2000FT AMSL
FROM: 16 MAY 2022 09:40 TO: 20 MAY 2022 09:00
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Analysis and Investigation

UKAB Secretariat

The paraglider and Wildcat 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]. Neither aircraft appeared on surveillance near the position or time of the reported Airprox, however, the Wildcat did appear on surveillance at 0850 at a position approximately 9NM from that reported in the Airprox. It is therefore deduced that the Airprox occurred at about 0845.

Bournemouth Occurrence Investigation

Bournemouth Airport ATSU conducted a thorough and detailed analysis of the incident. The summary of findings were that:

- On the day of the reported incident, there was paragliding in two locations on the coast – between Southbourne and Sandbanks, and between Barton and Milford on Sea. Both activities are routine and documented by Letter of Agreement.
- The paraglider pilots correctly notified Bournemouth ATC of their activity on the day in accordance with the LoA. This was done at 0814 and 0826 respectively.
- The Tower ATSA who received the notifications recorded them correctly on the 'Notification of Unusual Activity' form, promptly added the information to the met screen and ATIS, and promptly informed the Radar controller by telephone at 0832. However, the information passed to the controller and added to the met screen omitted the Southbourne activity and incorrectly listed the Barton activity as being to Highcliffe, not Milford as notified by the pilot.
- An hour and twenty minutes later, at 0953, the met screen was amended to include the Southbourne paragliding previously omitted. The Radar controller was not informed of the correction.
- At 1113, [the pilot of the Wildcat C/S] first called Bournemouth Radar and was given a Basic Service, squawk, and QNH.
- At 1139, [the Wildcat C/S] passed Sandbanks, routing east along the coastline at low level. [the pilot of the Wildcat C/S] was not given a clearance to enter controlled airspace and was not

[1] (UK) SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.

informed of the paragliding activity between Sandbanks and Southbourne. The paragliding pilots operating in the area are reported as seeing the helicopter but not being in conflict with it.
- At 1145, [the Wildcat C/S] passed Barton on Sea at low level and turned inland. [The pilot of the Wildcat C/S] was not informed of the paragliding activity between Barton and Milford. Two paragliding pilots reported a close encounter (they estimate around 40m away) with the helicopter, experiencing wing shaking and some temporary loss of control as a result of rotor wash which forced them to make a landing. Both paraglider pilots were shaken but unhurt.
- At 1153, [another helicopter C/S] passed through Poole Harbour towards Sandbanks and was advised by the Radar controller of paragliding activity on the coastline.
- At the time that [the Wildcat C/S] had passed from Sandbanks to Barton on Sea, the Radar controller was experiencing moderate-to-busy traffic levels and additional workload caused by managing VFR flights during a period of non-VFR met conditions.

The investigation concluded that causal factors were:

1. The pilot of [the Wildcat C/S] flew into conflict with one or more paragliders which they did not see.
2. The pilots of the paragliders saw the helicopter but were unable to avoid the confliction.

And that contributory factors were:

1. The pilot of [the Wildcat C/S] was not given known information on coastal paragliding activity by the Radar controller.
2. The Radar controller was experiencing high workload at the time of the incident.

The following recommendations were made:

Recommendation 1
It is recommended that a visual indication of paragliding activity is added to the radar display system, similar to that used to indicate activity at Eyres Field gliding site.

Recommendation 2
It is recommended that refresher training on the specifics of paragliding activity and the geographical areas where it occurs is given to all ATSAs.

Recommendation 3
It is recommended that the specifics of paragliding activity is included in refresher training for all ATCOs, with particular focus on the geographical areas of operation and their vulnerability to rotor wash and late sighting.

Recommendation 4
It is recommended that the Letter of Agreement between Bournemouth ATC and Wessex Paragliding Club (Annex B of the Bournemouth MATS Part Two) is reviewed with both parties to ensure that it reflects current operations and expectation. In particular, consideration should be given to more specific actions in the event of early cessation of flying, and actions in the event of weather deterioration within controlled airspace.

Recommendation 5
It is recommended that Air Traffic Engineering is asked to check and report on the effectiveness of telephony recording. During the investigation it was found that, for telephone calls received on extension 150 at a desk phone, only the inbound audio is recorded and there is no recording of outbound audio. It would also appear that extension 327, which is often used by other ATSUs to call for coordination and during airshows, is not recorded.

Comments

JHC

Awaiting formal UKAB assessment of this Airprox; the Wildcat crew maintained visual contact with the paragliders and vertical separation was maintained.

Summary

An Airprox was reported when a paraglider and a Wildcat helicopter flew into proximity at Barton on Sea at about 1145Z on Wednesday 18th May 2022. Both pilots were operating under VFR in VMC, the Wildcat pilot in receipt of a Basic Service from Bournemouth and the paraglider pilot not in receipt of a FIS.

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 first noted the Bournemouth Occurrence Investigation and commended its author on a comprehensive report that established the Airprox circumstances and pertinent factors. Members agreed that it was unfortunate that the Bournemouth controller had not passed-on the information on paragliders at Barton on Sea to the Wildcat pilot (**CF1**, **CF3**) but noted that a number of other factors contributed to the omission, including that the controller had been experiencing 'moderate-to-busy traffic levels and additional workload caused by managing VFR flights during a period of non-VFR met conditions' (**CF4**), and that controllers have to prioritise their workload. In any case, the Wildcat pilot had been operating under a Basic Service (hence the controller had not been required to monitor its flight (**CF2**)) and its pilot reported having seen paragliders at a range of 2000m. Members were then reminded of the Airprox Board's remit, to analyse the risk of mid-air collision. Whilst a threat to life caused by potential paraglider canopy collapse at low-level due to helicopter wake turbulence is a serious matter, it is not within the Airprox Board's purview to analyse that risk. An extended discussion followed, on the risk of collision that might be inferred from a paraglider pilot's report of 'some temporary loss of control as a result of rotor wash'. Members were not able to recall a study or paper that might shed light on such circumstances and, after further discussion, were only able to offer that separation at CPA must have been closer to the paraglider pilot's assessment of 100ft and 40m than that of the Wildcat pilot's assessment of 500ft. Members wondered whether the Wildcat pilot had in fact seen the Airprox paraglider and, in light of the fact that the Wildcat did not appear as a primary or secondary return on the radar recording, thought that they had likely been operating at a lower level than that recalled in their report. A controller member wondered whether the Wildcat had been travelling at slow speed and had thus been filtered-out of the radar display by the MTI circuit, but the Board felt this was unlikely during a transit flight. Further discussion ensued; the Board agreed that neither pilot had had situational awareness of the other approaching aircraft (**CF5**) and that the paraglider pilot had not carried electronic conspicuity equipment and hence had not been compatible with the Wildcat TCAS (**CF6**). Members discussed the risk of the Airprox at length and eventually agreed that the Wildcat pilot had probably been operating at low-level and had probably not seen the Airprox paraglider. Some members thought that collision had only been averted by providence and some that the paraglider pilot had averted the risk of collision. However, the majority felt that the Wildcat pilot had flown into conflict (**CF7**) and that safety had been much reduced (**CF8**). Director UKAB reiterated that it was not within the Airprox Board's remit to analyse risk to life due to helicopter downwash but agreed with Board members that a recommendation be issued that, 'JHC, HQAC, RNHQ and the CAA refresh publicity regarding the hazard associated with rotor downwash on low-mass air vehicles'.

Lastly, the Board noted that the Bournemouth Occurrence Investigation had also established that some phone extensions were not recorded and made recommendations to rectify the situation. The Board once again commended the author for the thoroughness of their investigation.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2022084			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Ground Elements			
	• Regulations, Processes, Procedures and Compliance			
1	Human Factors	• ATM Regulatory Deviation	An event involving a deviation from an Air Traffic Management Regulation.	Regulations and/or procedures not fully complied with
	• Situational Awareness and Action			
2	Contextual	• ANS Flight Information Provision	Provision of ANS flight information	The ATCO/FISO was not required to monitor the flight under a Basic Service
3	Human Factors	• ANS Traffic Information Provision	Provision of ANS traffic information	TI not provided, inaccurate, inadequate, or late
4	Human Factors	• Task Monitoring	Workload	Controller engaged in other tasks
	Flight Elements			
	• Situational Awareness of the Conflicting Aircraft and Action			
5	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			
6	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			
7	Contextual	• Loss of Separation	An event involving a loss of separation between aircraft	Pilot flew into conflict
	• Outcome Events			
8	Contextual	• Near Airborne Collision with Aircraft	An event involving a near collision by an aircraft with an aircraft, balloon, dirigible or other piloted air vehicles	

Degree of Risk: B.

Recommendation: That JHC, HQAC, RNHQ and the CAA refresh publicity regarding the hazard associated with rotor downwash on low-mass air vehicles.

Safety Barrier Assessment[2]

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 **partially effective** because the controller did not pass on the message concerning paraglider activity at Barton on Sea.

Situational Awareness of the Confliction and Action were assessed as **ineffective** because, although the ATCO was not required to monitor the flights, the relevant information was not relayed.

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

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the Wildcat pilot was not aware of the paragliding activity at Barton on Sea.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the paragliders were not EC equipped and could not alert the Wildcat TCAS.

See and Avoid were assessed as **ineffective** because the Board felt that the Wildcat pilot flew close enough to result in a situation where safety was much reduced.