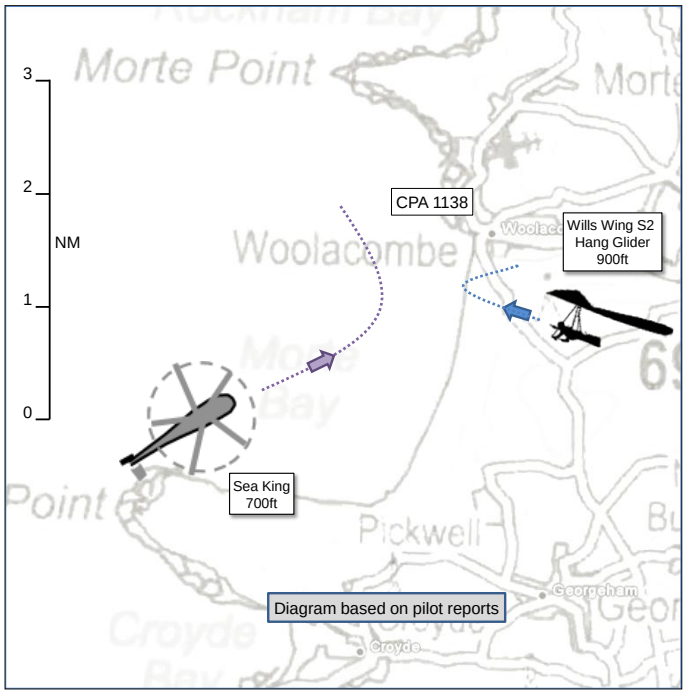
AIRPROX REPORT No 2013162

Date/Time: 9 Oct 2013 1138Z

Position: 5109N 00413W (5nm NW Chivenor)

Airspace:	LON FIR	(*Class*: G)
	Aircraft 1	*Aircraft 2*
Type:	Wills Wing S2	Sea King
Operator:	Civ Club	HQ Air (Trg)
Alt/FL:	900ft QNH (NK)	700ft QFE (NK)
Conditions:	VMC	VMC
Visibility:	10km	15km
Reported Separation:	200ft V/300ft H	200ft V/400m H
Recorded Separation:	NK	



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE WILLS WING S2 PILOT reports flying a red, white and blue hang-glider without lights or SSR fitted. A CANP was not filed as there were only 2 or 3 hang-gliders flying that day. He commenced flying at 1132 and, after gaining height, headed out over the sea at approximately 900ft. After about 5 minutes, he saw a yellow helicopter 200-400ft away, 100-200ft above, and moving south to north. He made a right-hand turn onto an easterly heading to take him back towards the launch site; at the same time he saw the helicopter turn left onto a northwesterly heading. Concerned about the downwash, he decided not to land but to turn onto south and into wind. Approximately two minutes later, he smelt a strong smell of aircraft fuel and encountered a 5 second spell of turbulence which he managed to control; once the danger from any downwash was over, he returned to land. The pilot reported that he was surprised not to have heard the helicopter, but assumed it was due to it coming from a downwind direction.

He assessed the risk of collision as 'Low'.

THE SEA KING PILOT reports flying a yellow aircraft with HISLs on, and SSR Mode A and C selected. He noted that he had submitted the report some weeks after the incident and therefore could not be precise with the facts. He was flying at 500ft MSD in communication with "Chivenor Radio" but not receiving an ATS. He had earlier scanned the Woolacombe Down area for glider activity and had not seen any. He first saw the hang-glider in his 2 o'clock position some 400m away; he did not think there was a risk of collision but, because they were converging slightly, he turned gently away to improve separation. The pilot reported that he considered the separation to be adequate, and acknowledged that he did not realise that the wake turbulence at that distance would affect the glider. Subsequent discussions between the Hang Glider Club and the squadron revealed that the hang-glider club thought that their site was marked on the low flying charts, and that the military were under remit to avoid them. Discussions also revealed that the club only NOTAM'd when more than 5 hang-gliders were launching. As a consequence of these discussions, the helicopter squadron has agreed to try and avoid the hang-gliders by 2000m and the hang-glider club are going to contact the squadron by telephone each morning of flying activities; both parties agreed to submit an Airprox report in order to highlight these issues to other users.

He assessed the risk of collision as 'Low'.

Factual Background

The weather reports at Cardiff and Exeter were reported as follows:

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METAR EGFF 091320Z 29013KT 9999 SCT024 SCT040 13/09 Q1020
METAR EGTE 091320Z 30011KT 280V340 9999 BKN030 14/09 Q1021
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Analysis and Investigation

Military ATM

The Sea King was in radio contact with Chivenor Radio but was not receiving an ATS; the air-to-ground frequency is manned by an ATM Flight Ops Assistant based on the Squadron. No radar replay data was available.

The Sea King pilot reported a late sighting of the hang-glider and a turn away at approximately 400m lateral separation; the hang-glider pilot estimates the lateral separation to be closer to 100m. The Sea King pilot reports being at a height of 700ft, clear of cloud and with good in-flight visibility. There was a delay between the incident and the Sea King pilot being made aware of the Airprox by the Hang-gliding Club and this may have affected the accuracy of the Occurrence Report. The Sea King pilot expressed concern over the lack of notification of the Hang-gliding activity and the lack of marking on Low Flying Charts. The incident has produced a number of internal recommendations, including improved notification of hang-glider activity, and clarification on safe separation criteria.

UKAB Secretariat

Both pilots were operating under VFR in Class G airspace, with an equal responsibility for collision avoidance[1], and the Sea King pilot was required to give way to the hang-glider[2].

Comments

HQ Air Command

The pilots of both aircraft detected a possible confliction and took immediate action to resolve the situation, once again emphasising the importance of an effective visual scan and early decisive action. However, this incident has highlighted a lack of appreciation of the margins by which helicopters should avoid hang-gliders and/or microlights due to the effect of downwash. Whilst this has been resolved locally, the pilots are to be commended on their submission of this report in order to inform the wider aviation community. Furthermore, at the time of the Airprox there was no depiction of hang-glider sites on military series low flying charts. In the time since this incident, the representation of hang-glider sites has been reintroduced onto the 1:500,000 scale Low Flying Charts but not yet onto the 1:250,000 Low Flying Charts; AIDU should look into resolving this inconsistency.

Summary

A Sea King and a Wills Wing S2 hang-glider flew into conflict 5nm NW Chivenor. Both pilots were flying in Class G airspace and were flying in VMC and VFR. Neither aircraft was in receipt of an ATS.

[1] Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions)
[2] ibid., Rule 9 (Converging)

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

The Board first commended both pilots for their honest filing of their reports in their desire to improve flight safety; there were clear lessons to be drawn from this incident for the benefit of the wider aviation communities.

In looking at the pilots' actions, the Board noted that both pilots were equally responsible for collision avoidance, although the Sea King was required to give way to the hang-glider. It was felt that the discrepancy in the reported separation distances in the two pilots' reports could well be due to the relative size of the two aircraft, with the Sea King being much larger and therefore appearing to be closer to the hang-glider than the hang-glider did to the Sea King. Although the Sea-King pilot thought he had given the hang-glider a wide berth, in reality it was close enough for the possibility of downwash to cause concern to the hang-glider pilot. The gliding members of the Board pointed out that many modern paragliders and hang-gliders can now operate in relatively light wind conditions which can make turbulence more of a problem. It was generally agreed by the Board members that more information to the wider helicopter community on the effects of rotor downwash on canopy-suspended air vehicles would be valuable; the Board therefore recommended that HQAC, JHC and NCHQ takes steps to re-emphasise this issue.

The Board members noted the Sea King pilot's and HQ Air Command's comments that the hang-glider site was not marked on the UK military 1:250000 low flying charts. Although it was recognised that not all sites were used frequently enough to warrant being added to the VFR charts, the Board opined that there was value in the more active sites being so annotated, and resolved to make a recommendation to that end regarding the 1:250000 charts in order to harmonise them with the 1:500000 charts. Furthermore, it was felt that the aviation community as a whole would benefit from more readily available information regarding the positioning of hang-gliding/paragliding sites along the coast of the UK, and the Board made a recommendation that the BHPA produce and publish an article in the popular aviation magazines providing information on such sites, including how the meteorological conditions and prevailing winds affect their selection. In turning to the reporting of activity of the hang-gliders, the Board noted that the hang-gliders at this club did not regularly use the CANP system unless 5 or more aircraft were flying; they welcomed the club's proposal to use the notification system more often in future, and commended this as good practise for other clubs.

Finally, in considering the cause and risk, the Board agreed unanimously that it was a late sighting by both pilots; they decided that the avoiding action taken had meant that there had been no risk of collision and assigned a Risk Category C.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by both pilots.

Degree of Risk: C

ERC Score: 4

Recommendations:

1. JHC, HQAC, NCHQ, AAC and the CAA publicise the effect of rotor downwash on canopy-suspended aircraft.

2. HQAC considers tasking UKLF Sqn/No 1 AIDU to annotate key hang-glider sites on 1:250000 VFR charts.

3. BHPA consider producing an article for the wider aviation community, regarding the correlation between the weather, wind and launch site usage.