## AIRPROX REPORT No 2016053

Date: 31 Mar 2016 Time: 1245Z Position: 5111N 00212W Location: Warminster

# PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2	Rudge
Aircraft	Chinook	Paramotor	Diagram based on radar data and pilot report
Operator	Civ Comm	Unknown	Marsh Sel P
Airspace	London FIR	London FIR	
Class	G	G	MBerkley
Rules	VFR		Scutamore 71 + S * D'
Service	Traffic		Chapmanslade 0 1 2 3
Provider	Boscombe Down		Corsley
Altitude/FL	2000ft		682 682
Transponder	A, C, S		CPA ~1242 41:40 649 6
Reported		Not reported	41:16 March 11/1
Colours	NK		804 1242:04 41:16 Mortor Bayest
Lighting	Nav, white		40:52 Sution
	strobes, landing		WING Fm 40:28 Chinook
Conditions	VMC		2000ft alt
Visibility	NK		
Altitude/FL	1500ft		933 430 Brixton Boyton
Altimeter	QFE (1016hPa)		E Sherrington
Heading	280°		Peveril Monkton
Speed	140kt		IE PARK PROPERTY IN ESTOP AW ENG
ACAS/TAS	Not fitted		EUNDON INFORMA
Separation			X 697 13.1 738 124.750
Reported	100-300ft	NK	Chicklade
	V/<0.5nm H		
Recorded NK			

**THE CHINOOK PILOT** reports that he was conducting a maintenance sortie flying straight-and-level at 140kt and 1500ft on the QFE near the town of Warminster [UKAB note: approximately 1100ft agl]. At the completion of a test point, just as they started a 180° turn, they spotted a 'powered hang-glider' at an altitude that appeared below but near to the level of their helicopter (estimated 100-300ft below) and within 0.5nm. The 'hang-glider' was approximately on their original flight path, and therefore it was fortunate that they had decided to turn back prior to their next test of the airspeed. They did not take any avoiding action because they had already initiated a turn. The change in the relative aspect visually distinguished the contact from cultural ground clutter. He commented that had they not turned, they would have had to have taken aggressive evasive action to avoid collision. He had not expected to see a 'paraglider' at their height. Its presence was reported to Boscombe Approach.

He assessed the risk of collision as 'Medium'.

### THE PARAMOTOR PILOT could not be traced

**THE BOSCOMBE DOWN APPROACH CONTROLLER** reports that he could not recall the event; an Airprox was not declared on the frequency.

### Factual Background

The weather at Boscombe Down was recorded as follows:

METAR EGDM 311250Z 35014KT 9999 SCT038 12/02/Q1015 BLU NOSIG=

## Analysis and Investigation

## Military ATM

An Airprox occurred on 31st March 2016 at 1245 between a Chinook and an untraced Paramotor. The Chinook pilot was under a Traffic Service with Boscombe Approach. The RAC were unable to capture the Paramotor on radar replay.

The Chinook pilot was placed under a Traffic Service at 1232:57. At 1239:18, Boscombe Approach transmitted, "[Chinook C/S] *intermittent contact North West one and a half miles no height information.*"

The Closest Point of Approach (CPA) was estimated by the RAC at 1241:50, based upon the Chinook pilot's reported height and location.

At 1242:01, the Chinook pilot stated, "[Chinook C/S] has a (pause) had a powered hang glider approximately one thousand feet just West of our position, just for your information." ATC confirmed that The Park Glider Site was active.

The incident was not captured on radar replay and it is not known which returns were displaying on the Boscombe Approach Controller's radar screen at the time of the incident; the controller could not recall the event, and an Airprox was not declared on frequency. It is unlikely that the Paramotor would appear on the radar screen, and this lack of conspicuity removed the barrier of Traffic Information from ATC. Boscombe had provided information on an intermittent contact but it was not acknowledged by the crew. Controllers and crews are aware of the site locally, and information will be passed by ATC if intermittent returns are detected on radar.

The Chinook pilot reported being at 1500ft QFE, near Warminster, when the Paramotor was spotted slightly below within 0.5nm. The pilot also commented that a turn had provided a change in relative aspect that allowed sighting of the Paramotor; had the turn not occurred, the respective air systems would have come a lot closer. In the occurrence report, the crew commented that they were not expecting to see a Paramotor at that height. The only barrier to preventing loss of safe separation on this occasion was the crew lookout and they were fortunate that a turn allowed them to distinguish the Paramotor from ground clutter to visually acquire it.

## UKAB Secretariat

The Chinook and Paramotor pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard<sup>1</sup>.

### Comments

## JHC

This is a prime example of the dangers of conducting air operations when conspicuity of air systems cannot be guaranteed from either a ground station or from installed traffic collision systems. The Chinook pilot was utilising the correct ATC Service; however, the pilot did not respond to the report from the controller regarding possible traffic, this could be a result of the on-going vectoring and busy 2-way communication with another callsign. It was fortuitous that the Chinook pilot conducted a turn and was able to identify the paramotor using good lookout; no other available means to separate these air systems was evident. Unfortunately there is no ability to obtain comment from the paramotor pilot to identify what equipment was fitted to provide conspicuity on that system, or if they had visibility of the Chinook (therefore conducting a degree of self-separation). The confusion with filing the Airprox and therefore the lateness of ATC to report is noted and a reminder will be sent to all JHC Units via suitable publications.

<sup>&</sup>lt;sup>1</sup> SERA.3205 Proximity.

## Summary

An Airprox was reported when a Chinook and a Paramotor flew into proximity at 1245 on Thursday 31<sup>st</sup> March 2016. The Chinook pilot was operating under VFR in VMC, in receipt of a Traffic Service from Boscombe Down. He had been advised of an intermittent contact about 1.5nm away and subsequently reported observing a Paramotor 100-300ft below at a range of less than 0.5nm. The Paramotor pilot has not been traced.

## PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the Chinook pilot, area radar and RTF recordings and reports from the appropriate ATC and operating authorities.

The Board noted that the Chinook pilot had been conducting a maintenance sortie in the Warminster area at a height of 1500ft and had appropriately been in receipt of a Traffic Service from Boscombe Down. Although he was entitled to operate there in Class G airspace, some members wondered if there might have been a more suitable area to conduct the maintenance flight given that the Wylie Valley is a known area of high activity as aircraft circumnavigate the Salisbury Danger Areas and Boscombe Down/Old Sarum ATZs. Military Pilot members commented that anywhere in the Boscombe Down local area can be busy from a variety of civil and military flying taking place, and that it can be difficult to find a clear operating space in order to conduct test flights that often require non-deviating tracks and heights. Additionally, they commented that it is not often practical to conduct such flights in the Danger Areas because maintenance flights are unpredictable in their scheduling requirements, have no priority, would have to be booked some time in advance, and the Danger Areas may be too constricted for the task. Some other members wondered if the flight could have been made at a higher level, but it was pointed out that the level would probably have been specific to the task's required parameters.

The Board noted that although the Chinook pilot had been in receipt of a Traffic Service, paramotors do not usually show on a radar display due to their low radar cross-section and slow speed (ATC radars have a speed filter below which radar returns are removed so that vehicles do not cause display clutter). Consequently, the Chinook crew were reliant on good look-out to observe such traffic. Some members wondered whether the maintenance task had involved increased scanning inside the cockpit, and whether this could have impacted the pilots' look-out. However, the Board also recognised that paramotors are not always easy to see, especially against the variable contrast of towns and terrain when looking down upon them. The Board was disappointed that the Paramotor pilot could not be traced; as a result, it was not possible to tell whether he had seen the Chinook and/or had considered it necessary to have taken avoiding action anyway.

Turning to the cause and risk, the only information available was from the Chinook pilot. Members noted that the Chinook pilot had only seen the paramotor after he had turned, probably due to the changing aspect as it tracked across the nose of the helicopter. Unable to determine the paramotor pilot's perspective of what he had, or had not, seen, the Board were therefore left with only enough information to state the probable cause of the Airprox as being a late sighting by the Chinook pilot. Although it is not always possible to determine the risk without having a report from both pilots involved, on this occasion the Board considered that the Chinook pilot's report was sufficiently comprehensive to be able to categorise the risk. The Chinook pilot had only seen the paramotor after he had turned away from it at the end of the test point, and he reported that, at this time, he had not needed to take any avoiding action. Although members considered that safety had been degraded, at 0.5nm estimated separation, they felt that there had been no risk of a collision because of the Chinook's fortuitous turn. Therefore the Board categorised the Airprox as risk Category C.

### PART C: ASSESSMENT OF CAUSE AND RISK

Cause:

A late sighting by the Chinook pilot.

Degree of Risk: C.