AIRPROX REPORT No 2022252

Date: 20 Oct 2022 Time: 1418Z Position: 5038N 00220W Location: 6.5NM NE Portland Bill



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PARAGLIDER PILOT reports that a group of Paraglider pilots were flying within the NOTAM'd area, which was submitted on 19th October 2022 for flying on 20th October 2022 Ref H8310/22. They spotted 2 Ospreys flying around Weymouth Bay, one flew within a short distance of White Nothe, Ringstead Bay, where they were flying, and [the Ospreys] flew through them [the group] at a horizontal distance of approximately 400ft, at a height and a vertical distance of approximately 600ft amsl. Then, another flew directly over others, flying over their normal take-off position on the ridge at Ringstead, at approximately 400ft above, approximately 800ft amsl. The Paraglider pilot immediately called Heli Operations at [nearby location] (Private Company) and asked if they knew of their presence, explaining that they would submit an Airprox as they considered the pilots' actions dangerous. The Operator said they were flying out of [departure airfield] and that they would report [the event] to [the departure airfield]. The Paraglider pilots were all using [EC equipment] on their Vario equipment and were in communication with one another. There were no accidents as a result, nonetheless the [Osprey pilots] flew through a NOTAM'd area.

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

THE OSPREY PILOT reports that they were conducting transit to refuelling operations during a training line. The aircrews observed the advisory NOTAM published regarding paraglider activity during mission planning and annotated the position as per chart standard markings. The Ospreys pilots'² approach to, and departure from, [the refuelling location] were conducted from an enroute altitude of 2000ft amsl over the water. Additionally, the aircrew were visual with the paragliders and maintained well clear throughout operations.

¹ Specialist onboard systems capable of detecting other aircraft.

² There had been two Osprey aircraft, their pilots had been operating as a pair and not in close formation.

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

THE YEOVIL APPROACH CONTROLLER reports that they recall a low intensity session. An Osprey had been worked transiting down to [a refuelling station] earlier in the session, and the pilot had contacted Yeovilton Radar for a Basic Service for their subsequent transit from [the refuelling location] to Salisbury Plain Training Area (SPTA). The Osprey pilot free-called enroute to SPTA on completion of their transit. Nothing was declared on frequency at the time [by the Osprey pilot].

The controller perceived the severity of the incident as 'Low'.

Factual Background

The weather at Bournemouth was recorded as follows:

METAR EGHH 201420Z 23005KT 170V250 9999 FEW019 17/12 Q1005

Relevant NOTAM information:

Group: RAF Swanwick / User: LFBC 1/1 UTC Time: 2022.10.31-15:42:59 AFP7989 191230 GG EGXPZXAO EGXSYWYO EGXTYWYL EGXTYWYO EGXTYXYW EGXTZXAO EGXWYWYF EGXWYWYO EGXWZGZX EGXWZXBO EGXYZGZX EGYDYWYF EGYDZGZX EGYDZXBO EGYDZXCO EGYEZGZX EGYEZXAO EGYHYWYO EGYMYWYF EGYMZGZX EGYMZXEO 191230 EUECYIYN (H8310/22 NOTAMN Q) EGTT/QWGLW/IV/M /W /000/027/5038N00221W003 A) EGTT B) 2210200600 C) 2210201730 E) CIVIL AIRCRAFT NOTIFICATION PROCEDURE - MULTIPLE PARAGLIDERS OPR IN LOW FLYING AREA 2 WI 2NM RADIUS OF PSN 503823N 0022037W (RINGSTEAD BAY, DORSET). 2000FT AGL. CTC 07713 126122. 22/10/140/LFC F) SFC G) 2700FT AMSL)



Analysis and Investigation

Yeovilton ATSU investigation Summary.

As part of their investigation, Yeovilton ATSU:

- Collected RT data from the time stated and transcribed for information.
- Checked the radar replay but [the incident was] not recorded due to lack of primary radar data, not a capability that Yeovilton currently has.
- Contacted the NOTAM office to see if there was a NOTAM regarding paragliding in the area there is no record as to whether that NOTAM was briefed in the ATC morning shares brief.

Sequence of Events

At 1416:54 [the Osprey pilot] recontacted Yeovilton on Yeovil Approach frequency requesting a Basic Service south of Portland. No height information was passed, and they stated that they were waiting 10min before being able to enter SPTA.

At 1417:06 The Yeovil Approach controller issued an SSR code and gave the pressure setting 29.56inHg.

At 1417:13 [The Osprey pilot] repeated the SSR code and pressure setting.

Due to the lapse in time, the controller cannot remember anything significant about the event.

There was no further communication from [the Osprey pilot] until 1423:49 when the pilot reported two way with SPTA and continued enroute.

Observations.

At the time of the incident, the Osprey was at the limits of Yeovilton's radar coverage. The controller was unable to provide Traffic Information on the possible location of the paragliders, as they were not present on the radar. Further, radar replays at Yeovilton can only utilise SSR data, therefore the radar replay did not show any sign of paragliding activity near the Ospreys' track for the duration of their transit.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and, although the Osprey pilots were operating as a pair, only one Osprey had been detected, and its radar return had been intermittent. The paraglider was not detected by the NATS radars, however, the paraglider pilot kindly supplied the UKAB Secretariat with a GPS data file detailing their flight. The diagram has been produced by combining the two data sources. It has not been possible to determine which of the Ospreys the radar detected nor, due to the intermittent radar return, its exact track and altitude at the time it passed the Paragliders' position. Therefore, only the lateral separation has been measured and this has been recorded as an approximation.

The Paraglider and Osprey pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.³ If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right.⁴ If the incident geometry is considered as converging then the Osprey pilot was required to give way to the Paraglider.⁵

³ (UK) SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.

⁴ (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on. MAA RA 2307 paragraph 13.

⁵ (UK) SERA.3210 Right-of-way (c)(2) Converging. MAA RA 2307 paragraph 12.

Comments

USAFE

The CV-22 (Ospreys) were operating away from home base and between [the refuel location] to the south of the occurrence and the training area to the north. This is a common area that the operating squadron uses for this kind of training. The crews planned to transit the vicinity of the occurrence several times during the training day and input the planned routes into the military low-fly booking system. It is noted from the crew reports that the NOTAMs (there were 2) had been seen and briefed. This area is encompassed by several Danger areas; D026 and D014 are most relevant in this event. The lateral space between the 2 danger areas is the usual arrival/departure route to/from [the refuelling location]. On this day the 2 above mentioned NOTAMs almost filled the lateral space between the edge of D026 (mandatory avoid with no crossing service available) and the congested area of Weymouth (a mandatory avoid for military aircraft and an avoid on the [refuelling location] visiting aircrew chart). It is apparent from the crew report and the radar returns that the Osprey crews elected to operate higher in the NOTAM'd area with full awareness of the paragliding operation. The crew gained visual with a group of Paragliders, pointed them out to the other formation member, and flew so as to keep them in sight and 'well clear'.

BHPA

Once again, the BHPA is most disappointed to hear that professional military pilots find it totally acceptable to fly through a NOTAM'd area containing paragliders which are both slow moving and notoriously difficult to spot. Even though a NOTAM is not an 'Avoid', the question of why the Osprey pilot decided to take a calculated risk by flying through an area of intense paragliding activity, is perplexing - especially as they knew of the NOTAM from their mission pre-planning and had annotated the area on their maps.

The Osprey pilot reports that they saw the paragliders but, did they see them all and, if they can't be certain, then why take the chance? The BHPA wishes to remind pilots of these large aircraft that it is not always the chance of collision that is paramount; the effects of their rotor downwash can be catastrophic to non-rigid paraglider canopies, often being flown by low airtime pilots who may not have the skills nor altitude to recover or throw their reserve parachute.

Summary

An Airprox was reported when a Paraglider and an Osprey flew into proximity 6.5NM northeast of Portland Bill at 1418Z on Thursday 20th October 2022. Both pilots were operating under VFR in VMC, the Osprey pilot in receipt of a Basic Service from Yeovil Approach and the Paraglider pilot not in receipt of an ATS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data, 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 considered the actions of the Paraglider pilot and had been encouraged that the group with which they had been associated had collectively completed the Civil Aircraft Notification Procedure (CANP), which had generated a NOTAM covering their activity. However, the Board was keen to stress that although a NOTAM does inform other airspace users of activity, it does not close, or give any exclusivity over, the airspace. The Board was further encouraged by the Paraglider pilot's use of EC equipment and, although on this occasion the equipment carried had been incompatible with the equipment carried by the Osprey pilot (CF3), members agreed that increased EC usage within the Paragliding community would have safety benefits, and whilst members appreciated that it was for pilots to decide on their own requirements for additional equipment according to their needs, the Board wished to highlight to pilots that additional funding has been made available for Electronic Conspicuity devices

through the CAA's Electronic Conspicuity Rebate Scheme, which has been extended until 31st March 2024.⁶ The Board then discussed what awareness the Paraglider pilot may have had regarding the Osprey, and agreed that they had not had any (**CF2**) and that, when the Paraglider pilot visually acquired the Osprey, its proximity had caused them concern (**CF4**).

Next, members discussed the actions of the Osprey pilot and noted that there had been limited options available to them regarding their routing due to the proximate Danger Areas and an 'Avoid' NOTAM'd area. However, members were encouraged that the pilot had carried out a detailed NOTAM brief prior to their sortie, giving them a generic awareness of the paragliding activity (**CF2**). Although the available information regarding the routing of the Osprey was limited, the Board was satisfied that the pilot had flown at an altitude which had kept them above the NOTAM's paragliding area, albeit by a small margin. A Paragliding pilot member then highlighted that Paragliders can, and do, exceed the dimensions of a notified activity area, and can be found up to cloudbase. They went on to state that most NOTAMs contain a telephone number which pilots can call to obtain more up-to-date information on the notified activity and possibly liaise with the pilots. The Board agreed that calling this telephone number could be advantageous, however also agreed that it is not always practical for pilots to do this during pre-flight planning, especially for extended or complicated routings and sorties.

The Board then turned its attention to the ground element involvement and a military air traffic controller member stated that the area of operation of the Osprey pilot had been on the extreme edge of the cover of the Yeovil Approach controller's radar, and that the radar would not have been able to detect the paragliders, adding that when delivering a Basic Service, which the Osprey pilot had been operating under, the controller is not required to monitor the flight (**CF1**).

Finally, the Board considered the risk involved in this event. Members wished to thank the Paraglider pilot for their report and to highlight that, with an intermittent radar return from only one of the Ospreys, assessing the risk in this event had required additional consideration. Members agreed that, although the Paraglider pilot had not had any prior awareness of the presence of the Osprey, the Osprey pilot had had prior awareness of Paragliding activity in the area. The Board then agreed that both the Osprey and the Paraglider pilots had become visual with the other aircraft early, and that their actions had been such that acceptable separation had been maintained throughout. Members concluded that normal safety standards had pertained and that there had been no risk of collision. Consequently, the Board assigned a Risk Category E to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2022252					
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					

⁶ https://www.caa.co.uk/general-aviation/aircraft-ownership-and-maintenance/electronic-conspicuity-devices/

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
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Degree of Risk:

Safety Barrier Assessment⁷

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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, under the Basic Service that the Yeovil Approach controller had been providing, they had not been required to monitor the flight of the Ospreys.

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as ineffective because the Osprey pilot had only had a generic awareness of the likelihood of the presence of the paraglider from the NOTAM, and the Paraglider pilot had not had any awareness of the presence of the Osprey prior to sighting it.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the EC equipment carried by the Paraglider pilot had been unable to detect, and therefore incompatible with, equipment carried by the Osprey pilot.



⁷ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.