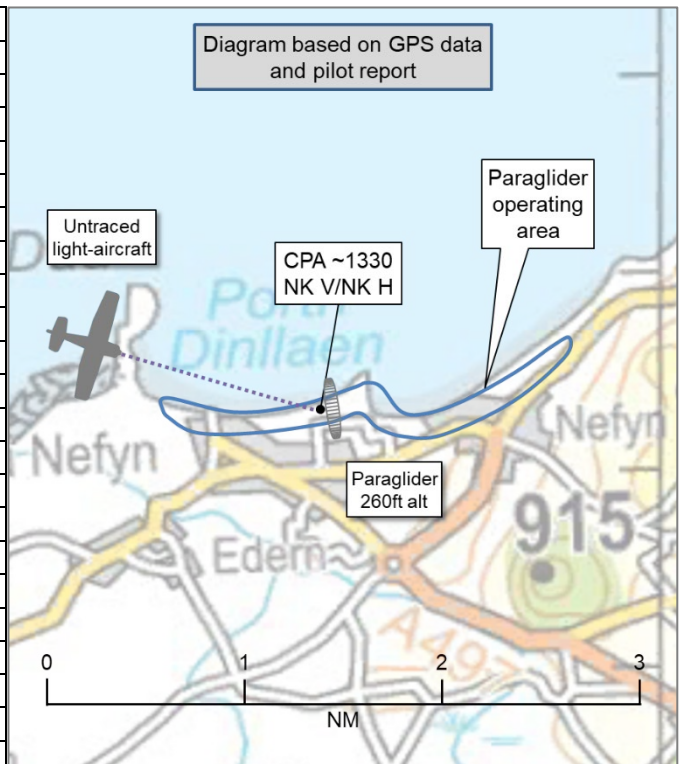


AIRPROX REPORT No 2021236

Date: 23 Nov 2021 Time: ~1330Z Position: 5256N 00433W Location: Porth Dinllaen beach

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|--------------------------|--------------------|--------------------|
| Aircraft | Paraglider | Unk light-aircraft |
| Operator | Civ Hang | Unknown |
| Airspace | London FIR | London FIR |
| Class | G | G |
| Rules | VFR | NK |
| Service | None | Unknown |
| Altitude/FL | 260ft | NR |
| Transponder | Not fitted | None |
| Reported | | |
| Colours | Green, grey, white | NK |
| Lighting | Nil | NK |
| Conditions | VMC | NK |
| Visibility | >10km | NR |
| Altitude/FL | 80m (~260ft) | NK |
| Altimeter | QNH (NK hPa) | NK |
| Heading | 270° | NK |
| Speed | 25kt | NK |
| ACAS/TAS | FLARM | Unknown |
| Alert | Information | N/A |
| Separation at CPA | | |
| Reported | 170ft V/0m H | NK |
| Recorded | NK V/NK H | |



THE PARAGLIDER PILOT reports that they were soaring back and forth above the Morfa Nefyn/Porth Dinllaen beach on their paraglider, reaching altitudes mostly between 70m and 100m [~230-300ft] QNH. As it was a last minute decision to fly, they had not submitted a NOTAM this day. Visibility was good and cloudbase was approximately 550m [~1800ft] amsl. They carry a Skytraxx 2.1 GPS/Alti-Vario with [an electronic conspicuity] capability. They launched from the back of the beach at 1148. At 1330 they saw and heard a single prop aircraft that they believe was a Texan (they fly a lot around the Llyn Peninsula where the paraglider pilot lives). The aircraft appeared to be heading on a straight flightpath towards them (its heading was approximately ESE or 100°) and at first seemed to be at their altitude as well, which was 80m [~260ft] QNH. At first sight, it was approximately 1.5km distant from their position. The paraglider pilot’s heading was approximately 270°. Due to the closing speed of the aircraft, it was difficult to assess which direction to make an evasive turn. They briefly made a turn to the left, but then felt this was not correct and then turned right but, by then, the aircraft was already at their position. They can only assume that the other pilot did not see them as the aircraft appeared to make no alteration from its straight flight towards them. Fortunately, the aircraft passed above them but not by much – approximately 170ft. They prepared themselves for rotor turbulence which could have collapsed their wing, but fortunately did not experience anything other than alarm at the close pass of the aircraft. They continued to fly until 1451 but did not hear or see the other aircraft again.

The pilot assessed the risk of collision as ‘High’.

THE LIGHT-AIRCRAFT PILOT could not be traced.

Factual Background

The weather at RAF Valley was recorded as follows:

METAR EGOV 231320Z 35005KT 9999 BKN018 09/06 Q1033 NOSIG RMK WHT WHT=

Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken. Neither the paraglider nor the unknown light-aircraft were recorded on the NATS radars. The paraglider pilot provided GPS data from the flight to the UKAB Secretariat and this has been used to construct the diagram at the top of page 1 of this report. Enquiries with RAF Valley (the only RAF base to operate Texan aircraft) confirmed that there were no Texans operating in the vicinity of the paraglider at the time of the Airprox.

The Paraglider and untraced light-aircraft 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 head-on or nearly so then both pilots were required to turn to the right.² If the incident geometry is considered as converging then the untraced light-aircraft pilot was required to give way to the paraglider.^{3, 4}

Comments

BHPA

The BHPA commends the paraglider pilot's situational awareness, keen hearing and the fact that they were carrying a device with some form of EC capability. We are most concerned that the pilot of the GA aircraft appeared to be flying so low whilst in such close proximity to both the paraglider pilot and the town of Nefyn.

The pilot of the GA aircraft didn't appear to see the paraglider pilot and it was fortuitous that a more serious incident or collapse of the paraglider canopy didn't occur. The BHPA would like to remind the GA community that paragliders are slow moving and unable to take radical evasive manoeuvres. Furthermore, it is imperative that all pilots keep a good lookout, especially in conditions and areas where soaring pilots may be operating.

The BHPA advises its members to perform wingovers/spiral dives (if they are competent to do so and space permits) so that they provide more of an eye-catching 'moving picture' to other pilots. We also strongly recommend that our members submit a CANP at the earliest opportunity for the area in which they are operating. Many GA pilots use SkyDemon (and other navigational Apps) which update whilst airborne and can show NOTAMed areas on a pilot's track line.

Summary

An Airprox was reported when a paraglider and an unknown light-aircraft flew into proximity over Porth Dinllaen beach at ~1330Z on Tuesday 23rd November 2021. The paraglider pilot was operating under VFR in VMC and not in receipt of an ATS. The light-aircraft pilot could not be traced.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the paraglider pilot, radar photographs/video recordings and GPS data from the paraglider. 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 noted that the possibility of the other aircraft being a Texan had been eliminated and that the UKAB Secretariat had been unable to trace the light-aircraft and had only the paraglider pilot's

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.

³ (UK) SERA.3210 Right-of-way (c)(2) Converging.

⁴ (UK) SERA Regulation, Article 2, Definitions, para 117 '*sailplane*' means a heavier-than-air aircraft which is supported in flight by the dynamic reaction of the air against its fixed lifting surfaces, the free flight of which does not depend on an engine, including also hang gliders, paragliders and other comparable craft.

account of the Airprox. Although information for the Board was sparse, members heard from a GA pilot member that it is quite common to encounter light-aircraft flying along the coast, for many of the same reasons paraglider pilots enjoy coastal soaring flights. The Board was also heartened to hear that the paraglider pilot had been carrying electronic conspicuity equipment which had initially alerted them to the presence of the light-aircraft (**CF2**), albeit the situational awareness that this had provided to the paraglider pilot had only been generic (**CF1**). The Board wished to highlight to pilots the utility of this equipment, and 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 2023.⁵

The Board was grateful to the paraglider pilot for having supplied GPS data for their flight but, given that there was no information available from the light-aircraft pilot and that the event had taken place below the coverage of the NATS radars, members felt that there had been insufficient information available to place a classification of risk on this Airprox, albeit it was clear to the Board that the paraglider pilot had been concerned by the proximity of the light-aircraft (**CF3**). Therefore, the Board assigned a Category D (Risk not determined) to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

| 2021236 | | | | |
|---|---------------|--|---|---|
| CF | Factor | Description | ECCAIRS Amplification | UKAB Amplification |
| Flight Elements | | | | |
| • Situational Awareness of the Conflicting Aircraft and Action | | | | |
| 1 | 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 | | | | |
| 2 | Contextual | • Other warning system operation | An event involving a genuine warning from an airborne system other than TCAS. | |
| • See and Avoid | | | | |
| 3 | 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 |

Degree of Risk: D

Safety Barrier Assessment⁶

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the paraglider pilot had only generic situational awareness of the approaching late-aircraft, gained from their electronic conspicuity equipment.

⁵ <https://www.caa.co.uk/general-aviation/aircraft-ownership-and-maintenance/electronic-conspicuity-devices/>

⁶ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

| Airprox Barrier Assessment: 2021236 | | Outside Controlled Airspace | | | | | |
|--|--|-----------------------------|-------------------|---------|------|----------------------------|----------|
| Barrier | Provision | Application | Effectiveness | | | | |
| | | | 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 | ■ | ■ | ■ | ■ | ■ | ■ | ■ |