AIRPROX REPORT No 2014177 Diagram based on radar data Date/Time: 6 Sep 2014 1433Z (Saturday) and pilot reports Position: 5154N 00105W Aerials (1nm NE of Bicester Glider Site) Croughton 6.4 1431:13 Bonanza London FIR (<u>Class</u>: G) Airspace: DR400 + ASK21 Aircraft 2 Aircraft 1 UPPER DR400 Beech A36 HEYFORD Type: + Glider Bonanza Stratton Audley O Civ Club Civ Pte Operator. INTENSE BIS 1433:21 ARACHUTING DR400 Pilot's 2300ft 2100ft Alt/FL: Reported track agl (1014hPa) QNH Conditions: VMC VMC DR400 Pilot's WESTON ON 20nm 10km Visibility: estimated Airprox G 37 THE GREEN Position 282 Reported Separation: § D129 NM 3 Oft V/50-100ft H 200ft V/200m H FL120 Note 1 Recorded Separation: ORD/ NK V/NK H

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE DR400 PILOT reports towing an ASK21 glider, VFR, in a red and white aircraft, with strobe, navigation and taxi lights illuminated; the transponder was unserviceable and so was turned off. His intension was to tow the glider to 4000ft to the north and east of Bicester but there was 'cloud and an area of murk' there which he assessed to be unsuitable for VFR flight, so he elected to head to the south instead. After take-off the DR400 pilot turned right 'on a noise abatement climb' and routed to the north of Stratton Audley before turning onto a heading of 200°. When he was passing around 2000ft in the climb, the pilot noticed a Bonanza to the rear of his right wing-tip, around 50m away, at the same height, which was turning 'hard to the right' and climbing, with around 40-60° of bank. The DR400 pilot then saw the Bonanza descend below the tug-and-glider combination, roll to the left, and pass 'in front and below' his aircraft before heading off to the southeast. The DR400 pilot did not have time to take any action; the glider pilot prepared to release the cable, but the encounter was over before he could act. Whilst noting that they were flying in Class G airspace, the DR400 pilot observed that the Bonanza pilot would have had to approach from an area between Weston-on-the-Green, Hinton-in-the-Hedges and Turweston, in which he had observed the poor weather during his departure. Furthermore, he observed that Bicester is an extremely busy glider site operating winch and tug launches as well as motor-gliders, and that flying too close past the airfield would significantly increase a pilot's chances of experiencing an Airprox.

He assessed the risk of collision as 'Medium'.

THE BONANZA PILOT reports flying a red and white aircraft VFR in VMC, with the tail beacon and strobe lights illuminated, and squawking Modes 3/A, C and S, he recalled. He had been speaking to Birmingham ATC but was no longer under an ATS¹ from them and had not yet established contact with Farnborough Radar. The pilot reports that he frequently flies this route but, because of cloud in the Birmingham area, he had elected to transit at 2100ft QNH, which was lower than his usual altitude. He noted that the cloud had broken up as he passed to the south of Birmingham and, as he approached Bicester, he could see activity at the glider site and saw a glider on approach. He continued to scan and, as he passed Bicester, he saw a tug towing a glider in his 10 or 11 o'clock;

¹ Air Traffic Service

the combination was 'low and slow', and he assessed that was 'no risk of dangerous proximity' even with no change of course; however, 'to be safe', the Bonanza pilot elected to turn right and climb until the other aircraft were clear and he could continue on his route.

He assessed the risk of collision as 'None'.

Factual Background

The weather at Brize Norton at 1350 was recorded as:

METAR EGVN 061350Z 30004KT 9999 FEW030 SCT060 BKN090 20/14 Q1014 BLU NOSIG

The weather at Coventry at 1350 was recorded as:

METAR EGBE 061350Z 35006KT 310V020 6000 FEW016 SCT025 20/15 Q1014

The weather at Birmingham at 1350 and 1420 was recorded as:

METAR EGBB 061350Z 31007KT 290V350 9999 SCT020 19/12 Q1014 METAR EGBB 061420Z 01006KT 330V040 9999 SCT028 20/13 Q1014

Analysis and Investigation

UKAB Secretariat

The Bonanza can be seen clearly on the radar recording, routing to the northeast of Bicester glider site and to the southwest of Stratton Audley. The DR400 pilot's description of his routing indicates that the Airprox occurred just to the west or southwest of Stratton Audley.

Whilst both pilots had equal responsibility for avoiding collisions and for ensuring that they do not fly in such proximity to other aircraft as to create a danger of collision², the aircraft were reported to be converging so the pilot of the Bonanza was required to give way to the DR400, which was towing a glider³.

Comments

BGA

Transiting close to gliding sites always requires extra vigilance; the Bonanza's reported track and altitude took it in close proximity to the busy gliding airfield at Bicester, thus increasing the likelihood of an Airprox.

Summary

An Airprox was reported around 1nm to the northeast of Bicester gliding site, in Class G airspace, between a Beech A36 Bonanza and a DR400 tug, which was towing an ASK21 glider.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of aircraft, radar photographs/video recordings, and reports from the BGA.

The Board first discussed the actions of the Bonanza pilot and agreed that, whilst he had not flown directly over the glider site, he was flying close-by and below the published maximum launch height, and so he would have been wiser to have given such a busy site a wider birth. Nonetheless, the

² Rules of the Air 2007, Rule 8, Avoiding Aerial Collisions

³ Rules of the Air 2007, Rule 9(2), Converging

Airprox occurred in Class G airspace, where pilots are required to look out and avoid each other. The Board noted that the Bonanza pilot was required by the Rules of the Air to avoid the DR400 and Glider combination. They also observed that the Bonanza pilot had reported that he saw the other aircraft and assessed that there was no risk of collision, but that he took action anyway. Board members noted his assessment and emphasised that powered aircraft pilots should give a wide berth to gliders being towed because they usually have little ability to manoeuvre and the glider might be released at any point after which a tug is then likely to make swift manoeuvres to return to the glider site and collect the next glider.

Notwithstanding the Bonanza pilot's assessment of the risk, the Board noted that both the DR400 and the glider pilot had a different view; the glider pilot was about to emergency release from the tug but did not have time. The Board therefore agreed that the cause of the incident was that the Bonanza pilot had flown in to confliction with the DR400 tug and glider whilst in close proximity to a promulgated and active gliding site. When discussing the degree of risk, the Board thought there was potential for this occurrence to be classified as an A because it appeared that safety margins had been considerably reduced, and the tug and glider pilots had seen the Bonanza close-aboard at a very late stage indeed. Notwithstanding, members recognised that the Bonanza pilot had seen the tug and glider combination, albeit perhaps quite late, and had taken effective action to prevent the situation worsening. The Bonanza pilot had assessed the minimum separation as 200m, and the tug/glider crews as 50-100ft; as a result, it was agreed that the degree of risk was Category B in reflection of the proximity of the incident to the tug and glider combination, which had very restricted ability to manouevre.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u> :	The Bonanza pilot flew into conflict with the DR400 tug and glider whilst in close proximity to a promulgated and active gliding site.
Degree of Risk:	В.
ERC Score ⁴ :	20.

⁴ Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.