AIRPROX REPORT No 2014013

Date/Time	22 Feb 2014 152	1Z (Saturday)	A NUMBER OF A	Diagram based on radar data
<u>Position</u> :	5227N 00109E (Tibenham)		ADEOPHAM GREEN	and pilot reports
<u>Airspace</u> :	Lon FIR	(<u>Class</u> : G)	And And Andrew	
	<u>Aircraft 1</u>	<u>Aircraft 2</u>	194 01.0	ASK21
<u>Type</u> :	ASK21	PA28	UCKENH	AM Detrarto
<u>Operator</u> .	Civ Club	Civ Pte	NM -2	CPA1521
<u>Alt/FL</u> :	1500ft QFE (NK hPa)	2000ft QNH (1008hPa)	FER FIELD	20:16 20:32 1520:00
Conditions	: VMC	VMC	The second second	A share want
<u>Visibility</u> :	>10nm	>10km		PA28 PSR only
Reported S	Separation:			The harden
	Oft V/50ft H	Not Seen	CALCER -	1 Denter
Recorded	<u>Separation</u> : NK		X-Y's	GVS/2.7 TOWN Em

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE ASK21 PILOT reports conducting a winch launch at Tibenham on an instructional sortie. The white aircraft was not fitted with external lighting, an SSR transponder or a TAS. The pilot was operating under VFR in VMC, 1500ft below the cloudbase, and was not in receipt of an ATS. He was listening out on 129.975MHz¹. Nearing the top of the launch, heading 210° at 70kt and 45° nose-up, still in a full climb, the front-seat student hurriedly stated "aircraft". The instructor almost immediately saw a blue and white single-engine, low-wing, tricycle-undercarriage light aircraft, straight-and-level on a reciprocal heading at the same height. He immediately took control of the glider and released from the launch as he considered the opposing aircraft to be a real collision risk, being about 50ft away and at same height. After the aircraft had passed, the instructor completed a right turn and noted that the aircraft was flying down the western side of RW03/21, on a heading of about 030°. The instructor stated that had the aircraft been on a collision course there would have been insufficient time between first sighting the conflicting aircraft and it passing for him to have been able to avoid it.

He assessed the risk of collision as 'High'.

THE PA28 PILOT reports conducting a transit flight. The blue and white aircraft lighting state was not reported. The SSR transponder was selected on with Modes A and C²; the aircraft was not fitted with a TAS or ACAS. The pilot was operating under VFR in VMC, 200ft below cloud, initially in receipt of a Basic Service from Lakenheath. He had turned overhead Bury St Edmunds and was heading 038° at 105kt, intending to track over Old Buckenham on the way towards Norwich. Passing Knettishal he was given traffic information on another PA28 on a reciprocal track and of potential gliding activity 'near Tibenham'. He turned right on to 045° with the intention of passing between the approaching PA28, on his left, and Tibenham, on his right. When the PA28 passed down his left hand side he informed Lakenheath that he had seen the previously notified traffic and that he was switching to Norwich RAD. As he passed Tibenham he noticed that his track was 'further overhead than he had intended'. He saw a glider lined-up on the runway but neither he, nor his passenger, who were both constantly looking for traffic, saw any other traffic in the vicinity. He did not make an assessment of risk of collision.

Factual Background

¹ The CAA allocated Glider Ground Station - Common Field Frequency. Used as a control frequency within a 10nm radius and up to a height of 3000ft above certain approved airfields (BGA Laws and Rules Edition 18, dated November 2012). ² SSR responses were not observed for some of the aircraft's flight, see UKAB Secretariat Analysis and Investigation.

The weather at Norwich was recorded as follows:

METAR EGSH 221520Z 22012KT 190V260 9999 FEW034 10/04 Q1009 NOSIG

Tibenham Glider Site is promulgated in the UK AIP ENR 5.5-13, dated 9 Jan 2014, as an aerodrome with winch and aerotow, upper limit 3000ft, site elevation 186ft and active during the hours of daylight.

Analysis and Investigation

UKAB Secretariat

Both pilots shared an equal responsibility for collision avoidance³ and the PA28 pilot was required to conform to the pattern of traffic at Tibenham, or to remain clear⁴.

The subject PA28 was observed with SSR from the point of departure to a point near Lakenheath when the SSR ceased and PSR only was observed. The PSR return faded at 1520:48, 1nm south-southwest of Tibenham Glider Site. The PA28 track reappeared as an SSR at 1523:19, 4nm north-northeast of Tibenham. Interpolation of the PA28 track indicated it passed through the Tibenham overhead at about 1521.

Summary

An Airprox was reported when an ASK21 glider and a PA28 flew into proximity at 1521 on 22nd February 2014. Both pilots were operating under VFR in VMC, the PA28 pilot in the process of switching ATS and the winch-launching ASK21 pilot not in receipt of an ATS but listening out on the Glider Ground Station Common Field Frequency.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

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

The Board first considered the actions of the ASK21 pilot. The front-seat student alerted him to the presence of the PA28 and he took immediate avoiding action by releasing from the winch launch. The Board opined that it was fortuitous the student had seen the other aircraft at all, given the glider's 45° nose-up attitude during launch and the associated restricted view forwards. Considering the geometry of the encounter, the Board agreed that the PA28 had been seen at, or very shortly before, CPA: although the glider pilot's actions had been instinctive and correct, in all likelihood the PA28 was too close at that point for his manoeuvre to have increased the separation to any meaningful degree. The Board questioned whether the glider site ground party could have seen the approaching PA28 prior to the winch launch and delayed until it was clear. The glider member stated that at the reported height and speed of the PA28 it would in all likelihood have been too far away to be seen at the commencement of the winch launch.

Turning to the PA28 pilot, the Board agreed that he had used his ATS to advantage, had constructed an accurate mental air picture of the other approaching PA28, and had formulated an effective plan of action to avoid it whilst planning to remain clear of other airspace users. Unfortunately, the execution of the plan had not been accurate, with the result being that in avoiding the PA28 he had over-flown Tibenham glider site and generated a confliction with the winch-launching ASK21.

The Board noted that, whilst in overall terms a glider pilot has an equal responsibility for collision avoidance³, to do so during a winch launch introduced significant additional flight risk due to the

³ Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).

⁴ ibid., Rule 12 (Flight in the vicinity of an aerodrome).

criticality of that flight regime. The result is that, for all practical purposes, it is the responsibility of other pilots to remain clear of promulgated and active winch-launching glider sites. The Board noted that this Airprox had followed a trend of similar incidents in recent months and wondered whether there was sufficient education of GA pilots in understanding glider operations, and specifically the risks associated with glider winch-launching. The Board resolved to recommend that the CAA considers using their instructor seminar sessions to highlight the need to enhance GA understanding of glider operations.

Given the reported separation, the fact that the ASK21 pilot had effectively taken avoiding action only at CPA, and that the PA28 pilot did not see the winch-launching glider, the Board agreed that chance had played a major part in events and that separation had been reduced to the minimum. In short, the aircraft missed each other through providence, and the PA28 pilot also came close to colliding with the winch cable, with equally probable fatal results.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: The PA28 pilot flew over a promulgated and active glider site and into conflict with the ASK21, which he did not see.

Degree of Risk: A.

ERC Score⁵: 20

<u>Recommendation(s)</u>: The CAA considers use of Instructor Seminars to enhance GA understanding of glider operations.

⁵ 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.