# AIRPROX REPORT No 2013033

Date/Time:	<u>e</u> : 12 May 2013 1329Z (Sunday)		pilot reports
<u>Position</u> :	5228N 00101E (5.1nm W of Tibenham)		NM Wensem LAKES FELTHORPE EGSH 119 4917 TILEBRIDGE 1200 NDB 119.350 Wrox
<u>Airspace</u> :	London FIR	( <u><i>Class</i></u> : G)	Derehand NORWICH CTA
	<u>Reporting Ac</u>	Reported Ac	NORWICH
<u>Type</u> :	ASW27 Glider	PA31-350	IG-::: 1500'-FL50 NORFOLK FIG Cathedra
<u>Operator</u> .	Civ Pte	Civ Comm	210 SHIPDHAM
<u>Alt/FL</u> :	2800ft QFE	3100ft NK	NOTAM (ME ACTIVATED NORWICH CTA DI Wymondham
Weather.	VMC CLBC	VMC CLBC	2500'-FL50 VRP R'ABOUT 1384
<u>Visibility</u> :	20km	>10km	Airprox 837 ::: 2 Airprox
Reported Separation:			Location CSV (627) Tacoineston/ SEET
	25ft V/100ft H	100ft V/NR H	O 194
Recorded Separation:			HEATH RATION TIBENHAM 186 172 HARD
	NR V/.0.1nm H		The PRIORY Fm /3.2 NORWICH 178 LARS 0 119.350

#### PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE ASW27 GLIDER PILOT** reports flying VFR in his white glider equipped with FLARM from Tibenham, thermalling in a 'weak climb' turning to the L and in contact with Tibenham Radio. When he reached around 2800ft he saw a dark-coloured low-wing twin engine ac approaching from the N at what he initially thought was a reasonable distance. The glider pilot reports that he had not fully assimilated the speed of the other ac and when he had completed another 180° of his thermalling turn he observed the other ac passing around 100ft to the 'west side' of his 'thermalling turn' heading to the S. He does not report taking any avoiding action.

He assessed the risk of collision as 'High'.

**THE PA31 PILOT** reports flying his silver and black ac with recognition lights and strobes turned on, VFR from Norwich to Fairoaks in VMC at 3100ft under a TS from Norwich APP. He was heading 220°, cruising at 160kt and had transponder modes 3/A, C and S selected on. He had briefed with the other crew member about the risks of flying outside CAS; they had selected an 'unusual' cruise altitude of 3100ft, requested a TS from APP and both crew members maintained a good lookout. They received TI from APP on possible glider activity and spotted a glider 500-800m away to their R in a L descending turn. The PA31 pilot reports that he maintained visual contact with the glider and remained ready to disengage the autopilot and take avoiding action at any time. The glider passed 100ft below his level and to his left without the need for avoiding action.

He assessed the risk of collision as 'Low'.

**THE APP CONTROLLER** reports that the Airprox was not reported to him at the time and that he does not recall the event.

**THE ATC UNIT INVESTIGATOR** reports that the PA31 departed at 1321:00 on a VFR flight to Fairoaks. The pilot requested and was placed under a TS on leaving CAS. At 1327:54 the pilot was informed in general terms, "[PA31]c/s *traffic left 11 o clock through to left 9 o clock range 3 to 5 miles, multiple contacts no height information, believed to be gliders from Tibenham just keep a good look out.*" The information was acknowledged by the pilot and at 1328:47 more specific TI was passed, "[PA31]c/s *Traffic 12 o clock range half a mile intermittent contacts no height information.*" The pilot replied, "*er wilco look out for traffic got him on the TCAS* [PA31]c/s."

TI was accurately passed to the crew of the PA31 and the 'at the glass' radar replay reflects the information passed. The aircraft left the frequency for Farnborough North at 1333:00.

From an ATC viewpoint the ac was correctly identified and was placed under a TS on leaving CAS. Relevant TI was passed in both general and specific format. The incident contacts were intermittent and called at a late stage having moved from the initial block of traffic that was called at 1327:54.

ATSI reports:

Background:

The AIP page ENR 5.5-11 (10 Jan 2013) promulgates the Tibenham gliding site as a circle of 2nm radius, with an upper winch limit of 3000ft active during the hours of daylight.

The PA31 was operating VFR on a flight from Norwich to Fairoaks and was in receipt of a TS from Norwich APP on frequency 119.350MHz, squawking Mode 3/A 3701.

The Glider was operating VFR on a local flight from Tibenham gliding site and in communication with Tibenham Radio on the common glider frequency 129.975MHz.

CAA ATSI had access to Norwich RTF and radar recordings, together with area radar recording and written reports from the pilots concerned. No Airprox report was made to Norwich ATC and therefore no controller report was available. However the Norwich ATSU provided a summary of their investigation. The area radar recording did not show the glider involved in the Airprox but an intermittent contact was shown on the Norwich Radar recording.

The Norwich weather is provided:

METAR EGSH 121320Z 27013KT 9999 SCT040 14/04 Q1013 NOSIG=

Factual History:

At 1325:19, having departed from Norwich, the PA31 contacted Norwich APP requesting a TS. The PA31 reported passing altitude 3000ft and a TS was agreed as the PA31 left controlled airspace.

At 1327:53 APP passed TI advising the PA31 pilot that, from the 11 o'clock position through to the left 9 o'clock at a range of 3 to 5 miles with no height information, there were believed to be gliders operating from Tibenham (Figure 1). The pilot was advised to keep a good lookout and he acknowledged this.



Figure 1 – Norwich Radar at 1327:53

At 1328:47, APP passed TI, "[PA31]c/s *Traffic twelve o'clock half a mile two intermittent contacts no height information.*" The PA31 pilot responded, *"er wilco look out for traffic got him on TCAS (PA31)c/s.*" The Norwich radar recording showed intermittent contacts crossing ahead of the PA31 from left to right and shortly afterwards (1329:05) all the blips were seen to merge. The PA31 pilot did not make any further comment on the other traffic in the vicinity. It was not clear which aircraft the PA31 pilot had observed on TCAS (Figure 2).



Figure 2 – Norwich Radar at 1328:47

The PA31 pilot's written report indicated that the glider was sighted slightly below and to the R. He reported keeping the glider in sight with no requirement to take avoiding action as the glider was observed in a left hand descending turn passing below and to the left.

At 1333:11 APP instructed the PA31 pilot to squawk Mode 3/A 7000 and the radar service was terminated. The PA31 was then transferred to Farnborough LARS(N) on frequency 132.800MHz.

Analysis:

The PA31 was in receipt of a TS. The glider involved in the Airprox did not show on the area radar and was intermittent on the Norwich Radar. APP provided generic TI on the glider activity, with advice to keep a good lookout. This was followed by updated and specific TI regarding the intermittent contacts crossing ahead of the PA31. CAP744, Chapter 3, Page 1, states:

'Paragraph 1,

A Traffic Service is a surveillance based ATS, where in addition to the provisions of a Basic Service, the controller provides specific surveillance-derived traffic information to assist the pilot in avoiding other traffic...the controller is not required to achieve deconfliction minima, and the avoidance of other traffic is ultimately the pilot's responsibility.'

'Paragraph 5,

The controller shall pass traffic information on relevant traffic, and shall update the traffic information if it continues to constitute a definite hazard, or if requested by the pilot...'

CAP774, Chapter 1, Page 1, Paragraph 2, states:

'Within Class F and G airspace, regardless of the service being provided, pilots are ultimately responsible for collision avoidance and terrain clearance, and they should consider service provision to be constrained by the unpredictable nature of this environment.'

## Conclusions:

The Airprox occurred when the PA31, in receipt of a TS, and the glider came into proximity within Class G airspace. APP had passed generic TI regarding gliding activity in the area and then provided a warning and updated TI when the intermittent contacts appeared ahead of the PA31.

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

Information available to the Board consisted of reports from the pilots and the controller as well as radar recordings and the RT transcript. Although it is highly likely that one of the primary returns shown on the radar recording was the ASW27 the Board could not be certain of it and decided to judge this Airprox based on the separation reported by the pilots.

The glider pilot had misjudged the speed of the approaching PA31 and may otherwise have chosen not to continue his turn; under the Rules of the Air the PA31 crew had a responsibility to give way to the unpowered glider but it is always unwise to assume that one's aircraft has been spotted until the other pilot's actions confirm it. In the event the PA31 pilot had spotted the glider at a range of 500-800 meters and, having assessed that it was descending, considered that no avoiding action was necessary. However, the glider was in a gentle climb, and Pilot Members agreed that 100ft vertical separation was not sufficient to allow for an unexpected manoeuvre by the glider and was unwise. The Board agreed that the Airprox was caused when the PA31 pilot flew close enough to cause the ASW27 pilot concern.

In assessing the risk some Members assessed that safety had not been assured due to the reported separation of between 25 and 100ft. However, other Members noted that Norwich APP had given accurate TI and that the PA31 crew were alert to the likelihood of meeting gliders and always in a position to react if the situation had deteriorated, albeit the selected miss distance left little reaction time. . After considerable discussion the Board concluded by a majority that the PA31 pilot's early visual sighting had effectively removed the risk of a collision.

The Board agreed that the safety barriers pertinent to this Airprox were ATC and aircrew rules and procedures, visual sightings, controller and aircrew action and situational awareness gained from RT. It was agreed that most of these barriers had been effective but the aircrew action barrier had not achieved the expected level of effectiveness; overall the Board assessed that the barriers had a 'limited' effect and the Airprox was allocated a score of 21 on the Event Risk Classification Matrix.

## PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: The PA31 pilot flew close enough to cause the ASW27 pilot concern.

Degree of Risk: C.

ERC Score: 21.