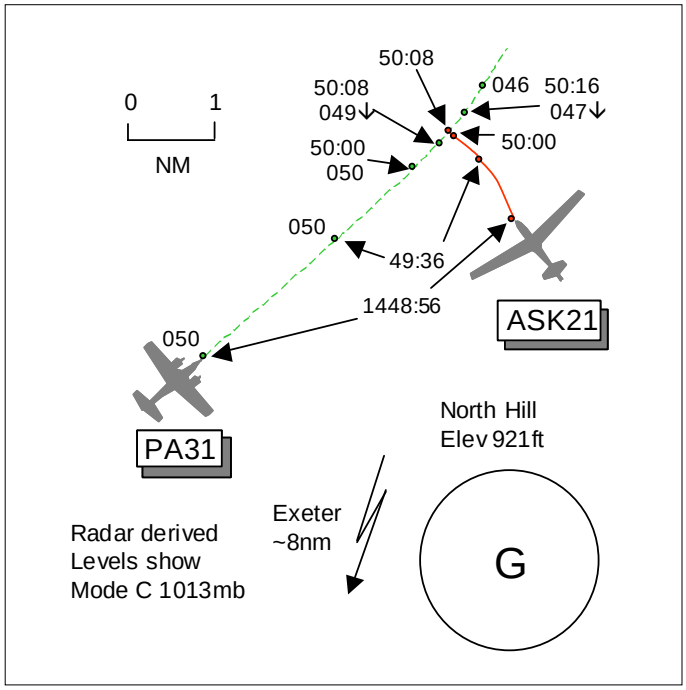
AIRPROX REPORT No 2010077

Date/Time:	27 Jun 2010 1450Z (Sunday)	
Position:	5056N 00318W (5nm NNW North Hill G/S - elev 921ft)	
Airspace:	LFIR	(*Class: G*)
	Reporting Ac	*Reported Ac*
Type:	PA31	ASK21
Operator:	Civ Pte	Civ Club
Alt/FL:	FL50	2500-3500ft (QFE)
Weather:	VMC CLBC	VMC CLBC
Visibility:	10km	50km
Reported Separation:	300ft V/Nil H	500ft V/Nil H
Recorded Separation:	<0·1nm H	



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PA31 PILOT reports flying solo in the cruise at FL50 heading 050° at 180kt and in receipt of a TS from Exeter, squawking an assigned code with Modes S and C. The visibility was 10km flying 1000ft below cloud in VMC and the ac was coloured white/orange with nav and strobe lights switched on. There seemed to be a lot of gliding activity and he was given a series of traffic warnings, the latest being on 2 contacts "12 o'clock and 2 o'clock, height and type unknown". He spotted the one to his R (surprisingly) at the same level and probably about 1nm away but the other was not seen until a white glider appeared in his RH windscreen about 200m away flying straight and level at or slightly above his level. He took immediate avoiding action by diving his ac, estimating he passed 300ft below it, assessing the risk as high. He thought that he saw the second glider late as it was in the blind spot caused by the rib which divides the LH and RH windscreens. Also, his attention dwelt on the glider to the R rather than immediately resuming his scan for the as yet unseen one. He was surprised by the number of gliders that day at that altitude. He thought that the radar service provided by Exeter was of a high standard and believed that the controller repeated the call on the glider that was not seen initially. He offered 2 further observations. First, gliders are hard to spot so it would be safer if they were obliged to carry Mode C transponders so that ATC can better assess the risk of confliction. During this 1hr 15min flight he thought he probably received warnings on about 20-30 ac, most of which he never saw; this 'crying wolf' fosters inattention in the pilots so warned. Second, in order to mitigate blind spots when looking out, he has been reminded by this incident to move his head and not just his eyes in this and similar ac.

THE ASK21 PILOT reports flying dual on a local sortie with another pilot from North Hill and in communication with North Hill Radio on 129·9MHz. The visibility was 50km flying 500-1000ft below cloud in VMC and his ac was coloured white with green nose and wing-tips; no transponder was fitted. Heading 330° at 60kt and between 2500 and 3500ft QFE, he thought, he was flying a steady course between thermals on a good soaring day between North Hill and junction 27 on the M5 motorway (5nm NW of North Hill). They both became suddenly aware that a fast-moving light ac had passed underneath their glider by about 500ft having approached from the Exeter direction. It passed from behind their port wing and they first saw it when it was slightly ahead and to the R of the glider's nose.

ATSI comments that the PA31 was en route from Plymouth to an airstrip near Peterborough. The pilot contacted Exeter Approach just before 1442, already squawking the Exeter squawk 0424. The

flight was placed on a TS and the pilot confirmed maintaining FL50. TI was issued some 3min later at 1445:40, *"PA31 c/s unknown in your half past eleven at five miles right to left slow moving no height information"*. The pilot reported looking. Shortly afterwards at 1446:15, further information was issued, *"PA31 c/s they're numerous primary contacts all unknown to me in your one o'clock between eight and thirteen miles probably gliders as North Hill is active*." The PA31 pilot replied, *"Er we're looking PA31 c/s."* At 1448:55 the TI was updated *"PA31 c/s two unknown primaries in your half past twelve both at four miles probably gliders no height information"*; again the pilot replied, *"Er looking PA31 c/s"*. About 30sec later at 1449:35 the pilot was informed, *"PA31 c/s one of those unknowns is now in your half past twelve at one and a half miles"*. After the pilot reported visual, shortly afterwards, the controller continued, *"...roger in fact there's a pair there"*. Initially, the pilot reported sighting one but not the other before he then reported visual with both, just after 1450:00.

The MATS Part 1, Section 1, Chapter 11, Paragraph 4, defines a TS: '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. Controllers may provide headings and/or levels for the purposes of positioning and/or sequencing; however, the controller is not required to achieve deconfliction minima, and the avoidance of other traffic is ultimately the pilot's responsibility. 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. However, high controller workload and RTF loading may reduce the ability of the controller to pass traffic information, and the timeliness of such information.'

On this occasion, the Exeter controller passed appropriate and timely TI to the PA31 pilot, about the unknown ac he could observe on his radar display.

UKAB Note (1): Met Office archive data shows the Exeter METAR as 1450Z 27/06/10 EGTE 271450Z 18009KT 140V230 9999 FEW045 25/14 Q1018=

UKAB Note (2): The Burrington radar recording at 1448:56, when Exeter Approach passed updated TI to the PA31 flight, shows the PA31 4·25nm NW of North Hill tracking 050° level at FL50 with a primary return, believed to be the ASK21 glider, in its 1230 position range 3·8nm tracking 330°. The ac continue to close on a line of constant bearing, separation reducing to 1·8nm at 1449:36 when the TI is again updated. At 1450:00, just as the PA31 pilot reports seeing the second glider as well, the ASK21, separation is 0·5nm. Eight seconds later the PA31 is seen commencing a descent passing FL49 with the ASK21 just L of its 12 o'clock range 0·2nm. On the next sweep at 1450:16 the ASK21 is not seen whilst the PA31 is descending through FL47 0·25nm NE of the ASK21's last seen radar return. Taking into account the ASK21's speed up to the Airprox, it is estimated the ac passed within 0·1nm of each other during the incident.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequencies, radar video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC authorities.

A gliding Member advised that it was not unusual to find gliders at such height, flying below but up to the cloud base, during the summer months. Given that this encounter occurred in Class G airspace, both pilots had equal responsibilities for maintaining their own separation from other ac through see and avoid. Exeter Approach gave good TI to the PA31 pilot, which supplemented his lookout, and it facilitated him acquiring the subject ASK21, albeit late, a part cause of the Airprox. This was possibly owing to the glider initially blending into the cloud backdrop but may have been exacerbated by obscuration by the ac's structure, which the pilot alluded to. Members concurred with the pilot's 'lesson learnt' of moving ones head to mitigate the risk from known blind spots. The ASK21 pilot only saw the PA31, as it appeared just ahead, below and diverging, having already passed, which was effectively a non-sighting, another part of the cause. Although the PA31 pilot's sighting had been

late, his prompt and robust action was enough to allow the Board to conclude that the risk of collision had been quickly and effectively removed.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Effectively a non-sighting by the ASK21 pilot and a late sighting by the PA31 pilot.

Degree of Risk: C.