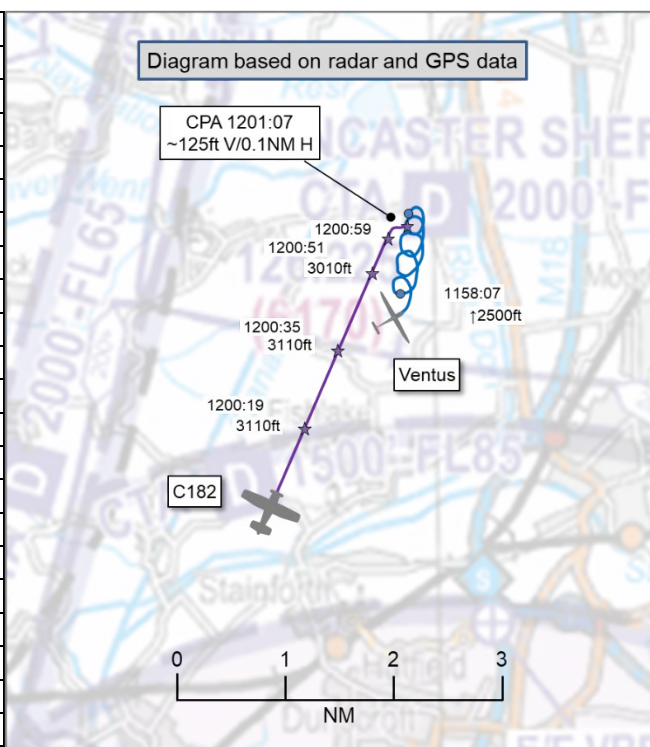


AIRPROX REPORT No 2025126

Date: 30 Jun 2025 Time: 1201Z Position: 5339N 00100W Location: 5NM southwest of Goole

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Ventus	C182
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	AGCS
Provider	N/A	Sherburn Radio
Altitude/FL	~3335ft	3210ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White	White, red, blue
Lighting	Red canopy bcn	Strobes, HISL, bcn
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	3000ft	3100ft
Altimeter	QNH	QNH
Heading	'circling'	NR
Speed	50kt	120kt
ACAS/TAS	FLARM	TAS
Alert	None	TA
Separation at CPA		
Reported	0ft V/150m H	0ft V/0.5NM H
Recorded	~125ft V/0.1NM H	



THE VENTUS PILOT reports that it had been good visibility in partly cloudy skies. The cloudbase was approximately 4500ft. They had been thermalling to the left (circling tightly under a cloud) with an airspeed of approximately 45-50kt and climbing at a rate of about 300-400fpm. The other aircraft appeared in their line of sight when approximately 150m away. At that moment, it was slightly left of their "head-on", and the Ventus pilot was banked approximately 45°. They continued their thermalling turn and the other aircraft was already banked and turning right, away from their direction. [The Ventus pilot opined that] the other aircraft must have seen them whilst they were still pointing away from them. After one further turn (by the Ventus), the other aircraft had opened the distance between the two aircraft by a significant amount and was continuing its track to the north or northwest. The other aircraft may not have seen them at first as the Ventus pilot reports that they had been below its level and climbing up to their level fairly quickly.

The pilot assessed the risk of collision as 'Low'.

THE C182 PILOT reports that they had been pilot-in-command under supervision, undertaking an IR(R) revalidation test with the instructor in the righthand seat. They had been flying solely by instruments for about 20min and had completed a series of manoeuvres in the uncontrolled airspace which was formerly Doncaster Class D and tracking northerly to commence the RNP approach to Sherburn, RW28. They had PPR for this procedure and had been within the time slot and in communication with Sherburn A/G radio having announced that they were inbound via RUDUD. The RNP procedure specified being in communication with Sherburn and reporting at that point. The C182 pilot had not, at any point in the flight, been within the active radius of a gliding site (the nearest one would have been Burn). In the earlier part of the flight there had been multiple traffic information [alerts] from the TAS, displayed as the appropriate symbols on the PFD, which was the major part of their instrument scan. The contacts had all appeared in the normal way, at the edge of the map background to the HSI. At the time, this had been set to a 3NM radius. At about 5NM from RUDUD, there had been an audio traffic warning and

simultaneous solid yellow diamond on the PFD - FIRST APPEARANCE AT ONLY ONE MILE [pilot's use of capitals]. The pilot looked up (they had not been wearing vision limiting goggles) and saw, after a delay, a glider end on to them which turned into a clear overhead view in a very steep bank. The PIC pilot made a steep right turn and said something they cannot recall. The C182 instructor pilot said "*keep it going*", meaning the steep turn. After a mile or so on the new heading, the PIC looked back through the side and rear windows and slowly returned onto a track for RUDUD. There were no further TAS warnings. They cannot recall the range at which the glider warning ceased to show (astern of them) on the display. [They note that] they had been well and alert at the time. All the aircraft equipment had been working correctly. There were no portable uncertificated devices nor active mobile phones onboard. The windscreen was clean. The glider was down sun of them and not under a cloud shadow. The instructor had been in a normal position to see out and there were no screens or other obstructions. The C182 pilot [opines that] the late TAS warning was related to factors on the glider – it was in an extreme bank compared to what they usually see of gliders, and perhaps its antenna had been blanked by this. [They consider that] this was a less severe encounter than the usual glider conflict when there is no electronic warning at all.

The pilot assessed the risk of collision as 'Low'.

THE SHERBURN AIR/GROUND OPERATOR reports that unfortunately Sherburn Radio was not aware of the Airprox and therefore has no information to assist the investigation.

Factual Background

The weather at Humberside Airport was recorded as follows:

METAR EGNJ 301150Z 17013KT 9999 FEW041 29/17 Q1017=

Analysis and Investigation

UKAB Secretariat

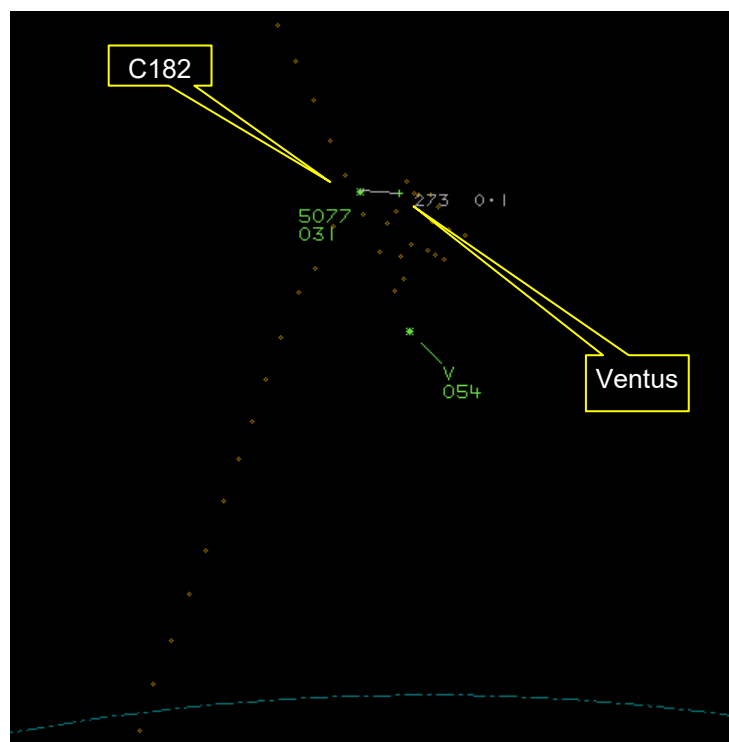


Figure 1: At CPA (1201:07)

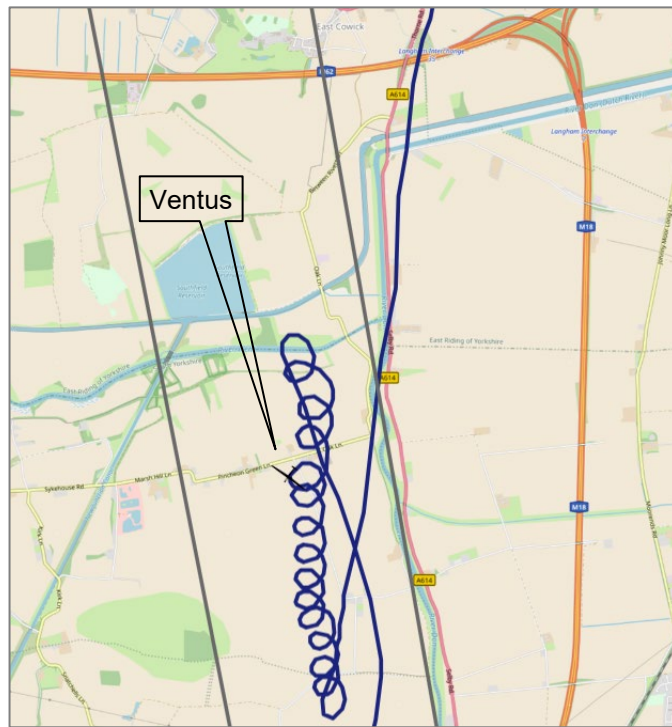


Figure 2: From the pilot-provided IGC file at 1201:07 – 3335ft AMSL

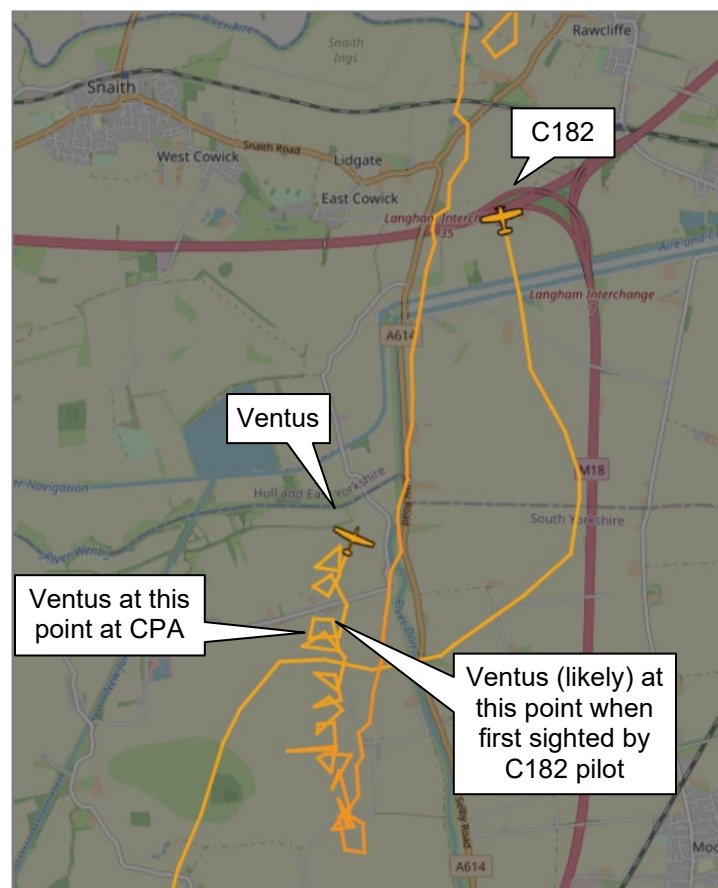


Figure 3: From an open-source tracker at 1202:30 showing the avoidance path flown by the C182 pilot.

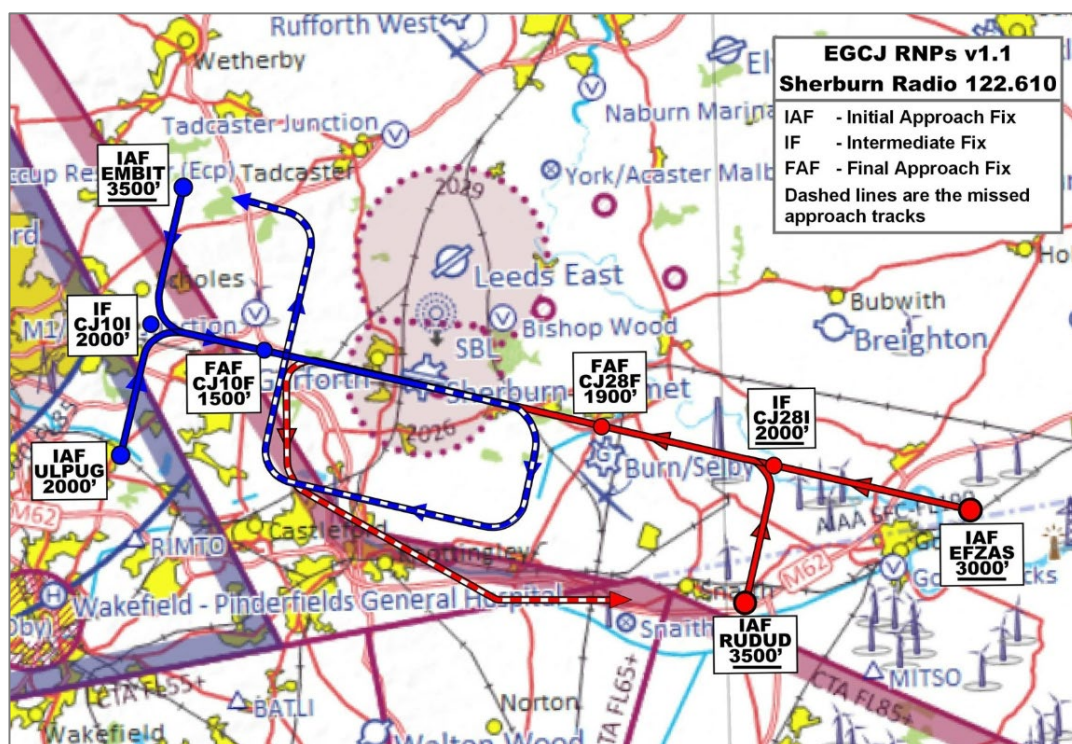


Figure 4: RNP for Sherburn – Waypoint 'RUDUD' – CPA 2.5NM south of RUDUD

Both aircraft were tracked by radar and identified through Mode S data. Figure 1 appears to show the C182 passing to the left of the Ventus whilst heading north, but both pilot reports and figure 3 indicate that the C182 passed the Ventus from left-to-right across its nose whilst heading easterly, with the C182 pilot having initiated their reported avoiding action.

The Ventus and C182 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

Comments

AOPA

This Airprox shows how effective electronic conspicuity can be for mid-air collision avoidance, the EC barrier could have been more effective had the Department for Transport made their decision in this area. The aviation community also awaits the CAA decision regarding the publication on VFR charts showing RNP approaches and fixes.

BGA

The C182 pilot had obtained permission to use the Sherburn RW28 RNP Instrument Approach Procedure (IAP) in >10km visibility with cloudbases above 4000ft AMSL. AIC Y 083/2023 (Introduction of RNP IAPs: Sherburn-In-Elmet Aerodrome (EGCJ) and Leeds East Airport (EGCM)), linked from the Sherburn Aero Club website, states (Section 2.4): "In the case of EGCJ, the IAP is only for use when required due to local weather conditions. When the cloudbase is greater than 1200ft AGL, aircraft will be expected to follow visual joining procedures."

Regardless of whether the Ventus pilot could have expected the Sherburn IAP to be active in the prevailing weather conditions, there is no official overview of IAP tracks in uncontrolled airspace that would help non-participating pilots plan routes that mitigate their risk of encountering IAP traffic operating in VMC. In late 2022 the CAA accepted the Board's recommendation that "The CAA

¹ (UK) SERA.3205 Proximity.

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

facilitates the production of a consolidated data file, in a suitable electronic format, which permits the display of published Instrument Approach Procedures for aerodromes in Classes E, F and G airspace on moving map devices” (Airprox Report 2022030). Such data would help mitigate the risk of similar Airprox in future and is eagerly awaited.

There are about 80 permanent UK glider launch sites, listed in AIP ENR 5.5. They are represented on CAA VFR charts by a letter "G" inside a 1NM radius circle, but the latter is not an airspace boundary, nor is there any specific active radius for a gliding site. As noted in AIP Y 027/2023 (Gliding activity in the UK), gliders routinely make extended cross-country flights; in this case the Ventus was over 35NM from its launch site.

A glider climbing in a thermal typically completes one 360° turn every 20 seconds, during which time an aircraft approaching at 120kt would cover 0.7NM. The pilot of a thermalling glider must look for aircraft approaching from every direction; although continuously turning facilitates 360° lookout, it also leaves the pilot unsighted in any specific direction for about half the time. The difficulties of sighting another aircraft approaching head-on with little relative motion are well-known and may also have contributed to the late sighting by the glider pilot.

This Ventus is equipped with a 130-watt Class 2 transponder with an external “rod and ball” antenna on the starboard underside of the GRP fuselage, which is transparent at transponder frequencies. However, the antenna’s location beneath the glider’s retracted engine, aluminium fuel tank and aluminium oxygen cylinder may have intermittently shielded it from the C182 TAS receiver as the glider turned. This antenna would also have suffered significant polarization mismatch loss in a steeply-banked turn.

Summary

An Airprox was reported when a Ventus and a C182 flew into proximity 5NM southwest of Goole at 1201Z on Monday 30th June 2025. The Ventus pilot was operating under VFR in VMC and had not been in receipt of a Flight Information Service, and the C182 pilot was operating under VFR in VMC and had been in receipt of an Air/Ground Communications Service from Sherburn-in-Elmet.

PART B: SUMMARY OF THE BOARD’S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS track data for the flight of the Ventus and a report from the Air/Ground Operator involved. 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 firstly considered the actions of the Ventus pilot, noting that they had been in a left-hand thermalling turn heading in a northerly direction. Members noted that the pilot had not been in receipt of a Flight Information Service but recognised that, in that area, there is a paucity of options. The Board did note that the pilot had selected a 7000 (VFR conspicuity) squawk to highlight their position to others and had carried electronic conspicuity (EC) equipment commonly favoured amongst glider pilots to aid their own situational awareness (SA) but, unfortunately in this case, that equipment had not been compatible with that carried by the C182 (**CF3**) and had left the Ventus pilot with no SA regarding the presence of the C182 (**CF2**). The pilot reports that they had first seen the C182 as the two aircraft had been almost ‘head-on’, with the C182 already in an apparent avoidance turn. Members judged that to have been a late sighting by the Ventus pilot (**CF5**).

Turning to the actions of the C182 pilot, members noted the nature of their flight and that there had been two pilots onboard. The C182 pilot had been in RT contact with Sherburn AGCS at the time of the incident and members felt that had they utilised an active service with Humberside LARS as they had progressed northward and as described in the pilot brief for RNP approaches into Sherburn (**CF1**), they may have received advance Traffic Information regarding the presence of the Ventus as it had been squawking and would most likely have been presented on a controller’s radar screen. However, as the C182 had been EC equipped, they had received a Traffic Alert from the glider (**CF4**) which had allowed them to focus their lookout and visually acquire the Ventus, leading them to make a hard right-hand

avoidance turn which the Board members deemed to have been timely action following late SA (CF2) and a late sighting (CF5), and praised the C182 crew for their decision-making.

In considering the role played by the Sherburn Air/Ground Operator, members noted that the event had taken place approximately 13NM from their overhead with the C182 at that point progressing towards the first notified reporting point (RUDUD) for the RNP and therefore had no SA of the event.

As the C182 pilot had not been in communication with Humberside, it had led to a wider discussion by Board members on the C182 pilot's compliance with the published instructions for the procedure undertaken. Members noted that the UK AIP entry for RNP approaches to Sherburn includes at paragraph 6(d):

Sherburn Operations will provide a briefing document relating to IAP. Pilots are to abide by the procedures in the briefing document when executing the IAP.

That referenced pilot briefing document is available via the Sherburn-in-Elmet website³ and offers a link to RNP at that airfield, within which are further links to the Pilot Brief referenced above, a Pilot crib sheet and AIC Y 083/2023. Whereas the AIC has now been withdrawn, Board members noted a critical difference in the pilot brief and the AIC documents which, if read by those wishing to operate within the Sherburn locale, could lead to a misunderstanding of the likelihood of traffic operating into the airfield using RNP approaches.

AIC Y 083/2023 (as linked on the Sherburn-in-Elmet website) states:

2.4 In the case of EGCJ, the IAP is only for use when required due to local weather conditions. When the cloud base is greater than 1200 FT AGL, aircraft will be expected to follow visual joining procedures. Unofficial weather reports are available from 'Sherburn Radio' 122.610MHz and Leeds East on 'Fenton Radio' 120.710MHz.

The Pilot Brief states:

2.5 The IAP is only available when the cloud base is at or below 1200ft at SAC, other than for training purposes and emergencies. At other times a VFR overhead join at 2000ft is the normal procedure at SAC.

Additionally, Board members noted that, at CPA, the C182 pilot had been on the Sherburn AGCS frequency which, as the CPA had been only 2.5NM from the waypoint RUDUD, was not deemed to have been unreasonable. Prior to that position, however, the pilot had not followed the direction within the Pilot Brief where, within paragraph 4.2, it states that:

Prior to arrival at the chosen IAF, aircraft commanders should contact either Leeds Bradford Radar (134.580MHz) or Humberside LARS (119.130MHz) to request an appropriate air traffic service outside of controlled airspace (UK FIS), and (if required) a transit of controlled airspace to the intended IAF. NOTE neither Leeds nor Humberside ATC's will sequence RNP traffic.

The Pilot Crib sheet is more definitive and states:

Contact Humberside Radar 119.130MHz inside 25NM from IAF (RUDUD/EFZAS). Request Traffic Service & state intent to fly RNP RWY 28.

In either case, had the C182 pilot established contact with Humberside LARS, they may have been offered Traffic Information regarding the presence of the Ventus as that aircraft had carried and utilised a Mode A/C/S transponder.

³ Flying Club & Flight Training Leeds, West Yorkshire

Turning to risk, members agreed that the C182 pilot had been alerted to the presence of the Ventus through their EC equipment, had gained visual contact and had taken an avoiding turn which, although in closer proximity than desirable, the Board judged that they had been visual with the Ventus in sufficient time that any risk of collision had been averted, Risk C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025126			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	Flight Elements			
	• Tactical Planning and Execution			
1	Human Factors	• Communications by Flight Crew with ANS	An event related to the communications between the flight crew and the air navigation service.	Pilot did not request appropriate ATS service or communicate with appropriate provider
	• Situational Awareness of the Conflicting Aircraft and Action			
2	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			
3	Technical	• ACAS/TCAS System Failure	An event involving the system which provides information to determine aircraft position and is primarily independent of ground installations	Incompatible CWS equipment
4	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
	• See and Avoid			
5	Human Factors	• Identification/Recognition	Events involving flight crew not fully identifying or recognising the reality of a situation	Late sighting by one or both pilots

Degree of Risk: C.

Recommendation: Sherburn remove the expired AIC Y 083/2023 from their website and ensure the RNP Instrument Approach Procedures 'Pilot Brief' and 'RNP Pilot Crib Sheet' are consistent.

Safety Barrier Assessment⁴

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

Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **ineffective** because the Sherburn Air/Ground operator had not been involved in the Airprox.

Flight Elements:

Tactical Planning and Execution were assessed as **partially effective** because the C182 pilot could have sought an Air Traffic Service from Humberside Radar in accordance with the instructions for the procedure.

⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the Ventus pilot had no situational awareness of the presence of the C182 and the C182 pilot gained only late situational awareness of the proximity of the Ventus.

Electronic Warning System Operation and Compliance were assessed as **partially effective** because the equipment carried by the Ventus pilot had been incompatible with that utilised by the C182.

See and Avoid were assessed as **partially effective** because both pilots had achieved only a late sighting of the other aircraft.

