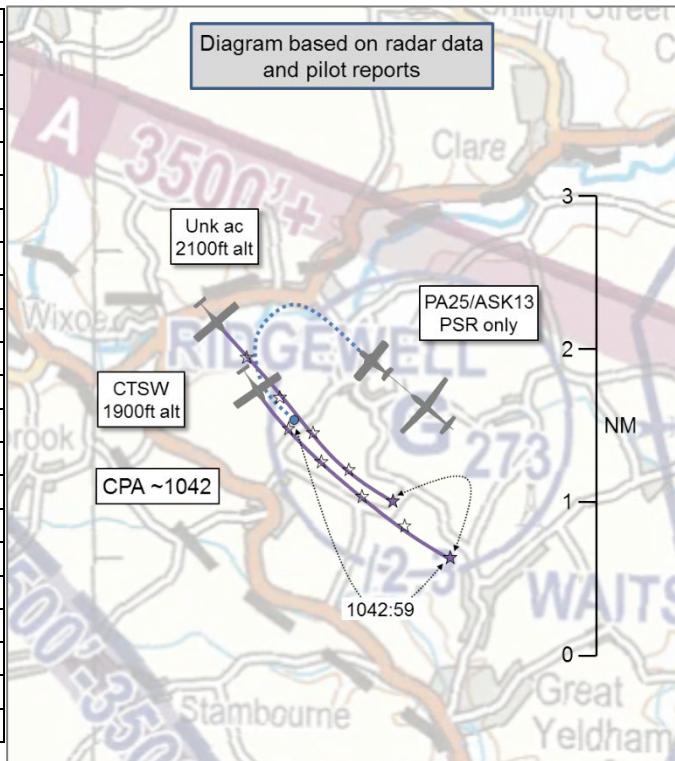


AIRPROX REPORT No 2018255

Date: 13 Sep 2018 Time: 1042Z Position: 5204N 00031E Location: 1nm NW Ridgewell Gliding Site.

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA25/K13 glider	CTSW
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Listening Out
Provider	N/A	Stansted
Transponder	Not fitted	A,C,S ¹
Reported		Not reported
Colours	White	
Lighting	HISL	
Conditions	VMC	
Visibility	50km	
Altitude/FL	1600ft	
Altimeter	QFE	
Heading	120°	
Speed	70kt	
ACAS/TAS	Not fitted	
Separation		
Reported	100ft V/<0.1nm H	
Recorded		NK



THE PIPER PA25 PAWNEE PILOT reports that he was in the climb towing a ASK13 glider. Two aircraft passed him close by. The first light-aircraft passed very close in front of him, which was the first time that he had seen it and a second, at a similar distance, 1 minute afterwards. The pilot's diagram shows the first aircraft, the CTSW, overtaking him on the right and then flying in front across his track. The second overtook him on his left-side. [It has not been possible to identify the second aircraft.]

He assessed the risk of collision as 'Medium'.

THE CTSW PILOT reports that as shown on his GPS track (Figure 1) he was 'well south' of Ridgewell gliding site. He did note a glider and tug in the distance, but did not see it as any issue. The CTSW pilot declined to submit a completed Airprox report form or to offer any information on the second aircraft.

¹ Squawking 7013-Stansted listening code.

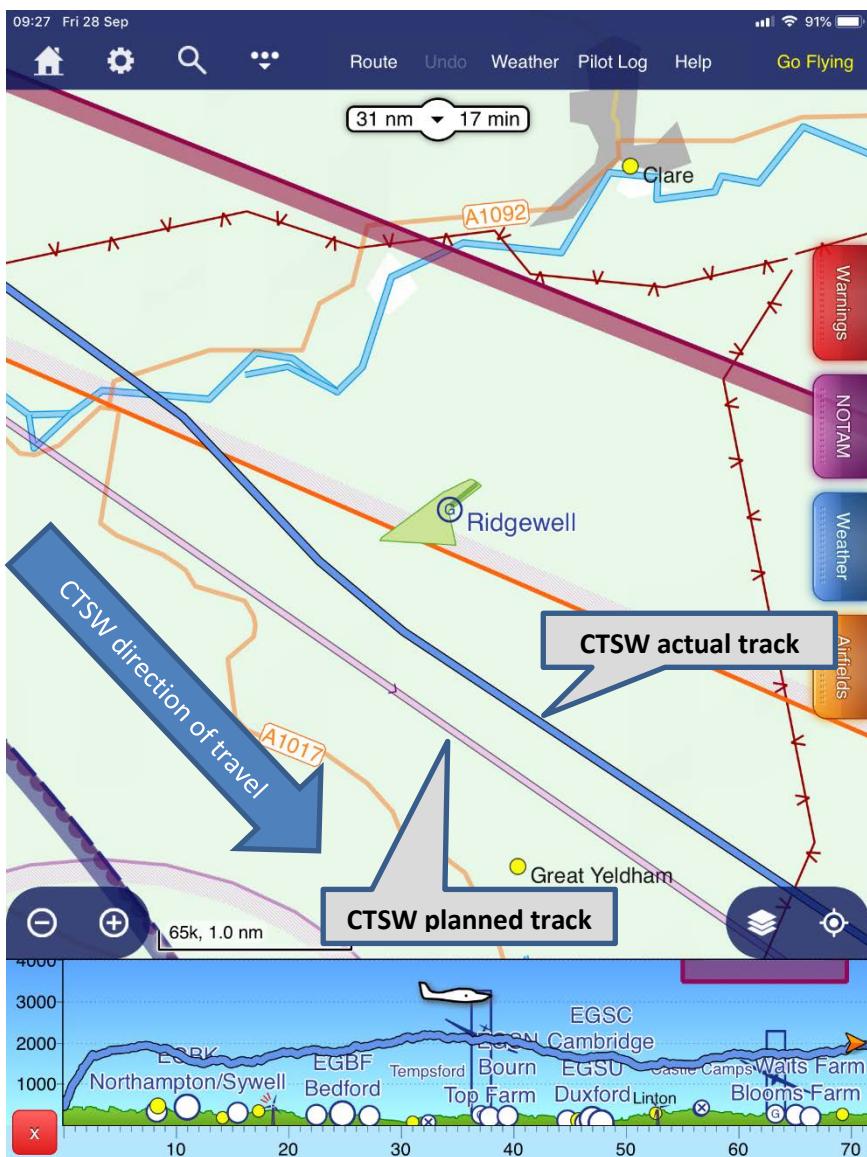


Figure 1 CTSW pilot's recorded GPS track.

Factual Background

The weather at Stansted was recorded as follows:

METAR EGSS 131020Z AUTO 28006KT 250V310 9999 16/08 Q1024=

Analysis and Investigation

UKAB Secretariat

The PA25 and CTSW pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard². If the incident geometry is considered as overtaking then the PA25 pilot had right of way and the CTSW pilot was required to keep out of the way of the other aircraft by altering course to the right³. If the incident geometry is considered as converging then the light aircraft were required to give way to the PA25 which was seen to be towing a glider⁴. An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation⁵.

² SERA.3205 Proximity.

³ SERA.3210 Right-of-way (c)(3) Overtaking.

⁴ SERA.3210 Right-of-way (c)(2) Converging.

⁵ SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Summary

An Airprox was reported when a PA25, which was towing a glider, and a CTSW flew into proximity near Ridgewell gliding site at 1042hrs on Thursday 13th September 2018. The PA25 was not receiving a Service, and the CTSW was listening out on the Stansted frequency. An unknown aircraft following the CTSW also flew into close proximity with the PA25.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the PA25 pilot, brief details from the CTSW pilot and radar recordings.

The Board first looked at the actions of the CTSW pilot. They were disappointed that he had declined to complete an Airprox report form because this meant that valuable contextual information was not available to the investigation. Notwithstanding, the information he supplied from his flight-log showed that his planned route would have taken him relatively close to the Ridgewell gliding site, and his actual route placed him even closer to it. The radar recordings indicate that he passed about 0.5nm west of Ridgewell and gliding members commented that this was exactly where numerous gliders might be soaring or positioning for recovery to the site. The Board considered that, notwithstanding that the pilot had to remain clear of Stansted's airspace to the west, it would have been prudent for him to have routed further away from Ridgewell gliding site, which was promulgated and active. Members noted that the CTSW pilot reported seeing a glider being towed 'in the distance', which they deduced was highly likely to have been the subject PA25/ASK13 combination because Ridgewell only has one towing aircraft.

Turning to the PA25 pilot, the Board noted that he had reported that he had been overtaken by two aircraft as he headed southeast. He had reported that the first one passed on his right, and this was established to be the CTSW from its Mode S transponder return. Unfortunately, the other aircraft that overtook him on his left could not be identified. The PA25 pilot's estimate of separation ('very close and separated by only 100ft vertically') varied greatly from the CTSW pilot's comments about a tug and glider being seen 'in the distance'. This led some members to wonder whether the CTSW pilot had seen a different tug/glider combination; however, given that Ridgewell only had one tug, this was thought to be unlikely. Unfortunately, the Airprox did not show on the radar recording because the PA25 was not equipped with a transponder and its primary radar return was not visible apart from one intermittent return. Notwithstanding, the Board felt that the PA25 pilot's description of the incident did not correlate with 'in the distance' as described by the CTSW pilot.

Turning to the cause, the Board noted that irrespective of whether the light aircraft were either converging with or overtaking the PA25, they were required to avoid it because it was towing a glider at the time. Unable to conclusively determine whether the 2 aircraft had attempted to avoid the PA25, the Board could only conclude that, even if they had, then they had not done so sufficiently to prevent concern to the PA25 pilot. Accordingly, in determining the cause of the Airprox, the Board could only say that the CTSW and unknown aircraft pilots flew close enough to cause concern to the PA25 pilot. Turning to the risk, despite having flown closer to the PA25 and glider than ideal, the Board noted that the CTSW pilot at least had reported that he had been visual with them, and they presumed so had the pilot of the other aircraft. Notwithstanding, some members thought that safety had been much reduced given the PA25 pilot's description of the separation (Category B). Others commented that, on the assumption that the CTSW pilot would not have flown into an aircraft he could see then there had not been a risk of a collision. In the end, without more definitive information as to the actual separation achieved, the latter view prevailed and it was agreed that although safety had been degraded, the risk was Category C.

During the discussion regarding the PA25's lack of radar conspicuity, members were reminded of another previous Airprox (2017265) concerning a tug aircraft which had not been equipped with a transponder. In that instance the Board had made a recommendation to the BGA that: '*The BGA consider recommending the fitment of transponders to tug aircraft*'. This had been considered to be an additional safety barrier towards reducing the risk of a collision because of the potential benefits of

electronic conspicuity for compatible collision warning systems (CWS). The BGA had chosen not to recommend that all tug operators install a transponder but had agreed to remind them that a transponder might be appropriate for their particular towing operation. For this incident, it had not been possible to determine whether either of the 2 light-aircraft had been equipped with CWS equipment but, given that they were under a listening watch with Stansted, there might also have been a possibility that the Stansted controller could then have been aware of the PA25 and might have been able to warn the light-aircraft pilots.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The CTSW and an unknown aircraft flew close enough to cause the PA25 pilot concern.

Degree of Risk: C.

Safety Barrier Assessment⁶

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

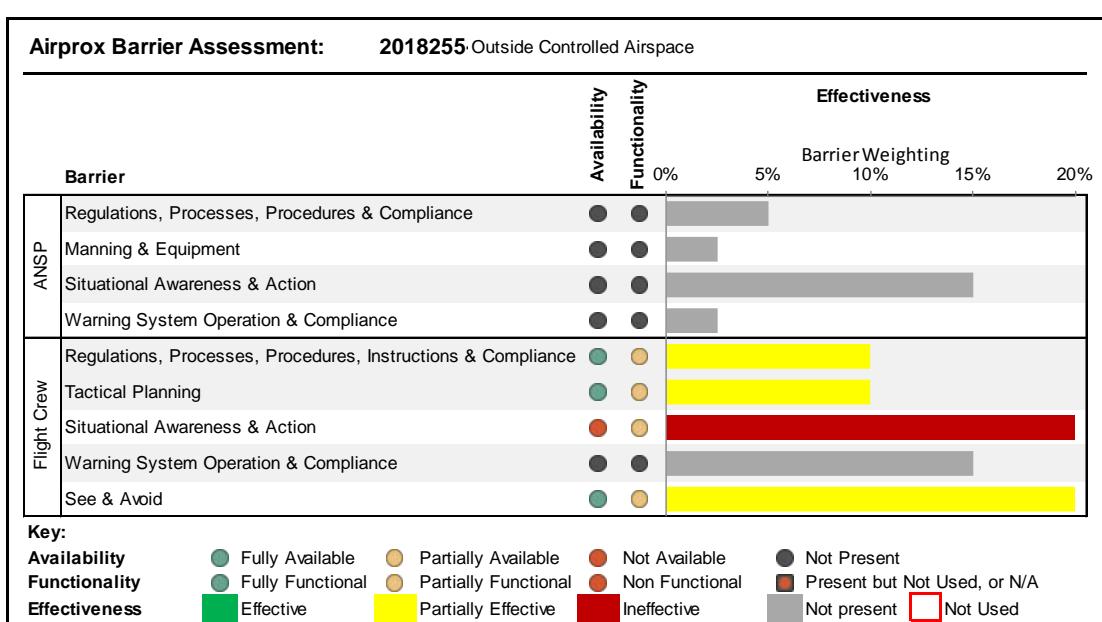
Flight Crew:

Regulations, Processes, Procedures, Instructions and Compliance were assessed as partially effective because the CTSW and an unknown aircraft did not sufficiently give way to the PA25 towing a glider.

Tactical Planning was assessed as **partially effective** because the 2 light-aircrafts' planned route took them close to an active and promulgated glider site.

Situational Awareness and Action were assessed as **ineffective** because neither aircraft had any awareness of the other before visually sighting each other.

See and Avoid were assessed as **partially effective** because the 2 light-aircraft approached from behind the PA25 and did not sufficiently give way despite seeing it 'in the distance' as they passed.



⁶ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).