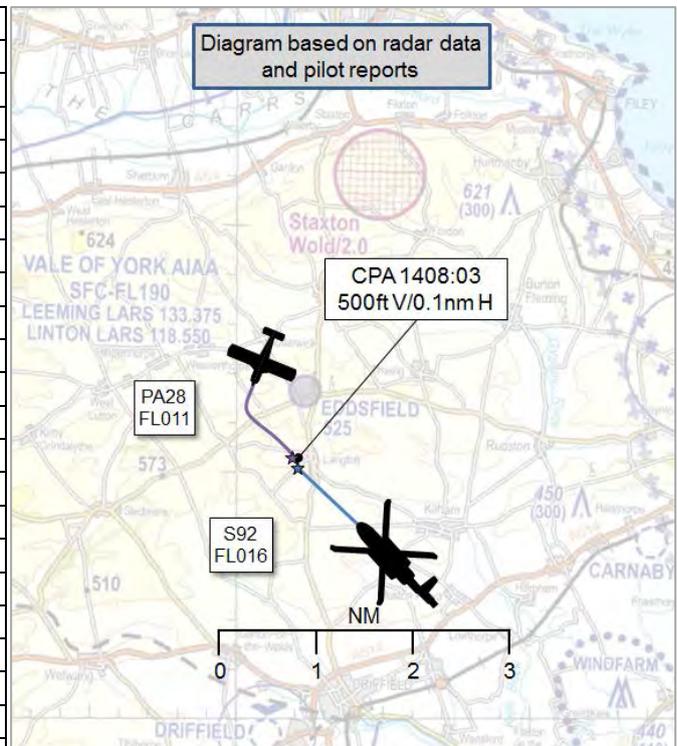


AIRPROX REPORT No 2018132

Date: 06 Jun 2018 Time: 1408Z Position: 5405N 00027W Location: 1nm south Eddsfield Airfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	S92	PA28
Operator	SAR	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	None
Provider	Humberside	Eddsfield
Altitude/FL	FL016	FL011
Transponder	A, C, S	A, S
Reported		
Colours	White, Red	White, Blue
Lighting	Not reported	Strobe
Conditions	VMC	VMC
Visibility	5nm	7km
Altitude/FL	700-1500ft	1200ft
Altimeter	Rad Alt	NK
Heading	320°	175°
Speed	110kt	125kt
ACAS/TAS	TCAS II	Not fitted
Alert	RA	N/A
Separation		
Reported	350ft V/100m H	500ft V/NK H
Recorded	500ft V/0.1nm H	



THE S92 PILOT reports that he was crossing the Yorkshire Wolds under broken cloud near Langtoft, routing direct from Catfoss (disused airfield) to the northern edge of Pickering. His Traffic Service had been downgraded to a Basic Service due to the distance from Humberside radar. He received a pop-up TCAS contact at 1-1 ½nm, 100ft, 12 o'clock. Almost immediately, the symbol turned amber and he started a climb towards the cloud base. He could not see the other aircraft. Shortly after the TA, an RA "climb, climb" was heard. He continued the climb into cloud, in accordance with the RA instruction, and a "clear of conflict" was received. Simultaneously, when he cleared the cloud he saw the ground and the opposing aircraft below. With the conflict passed, he remained VMC below the cloud for a short while before abandoning the overland part of the training sortie and climbing to minimum safe altitude (MSA) with Humberside radar, he continued with his coastal training elements.

He assessed the risk of collision as 'Medium'.

THE PA28 PILOT reports that he had just taken off from Eddsfield on the westerly runway, having made a blind call giving his intentions to Eddsfield traffic; he made a climbing left turn to join his southerly track to Wickenby. He levelled off at approximately 1200ft and heading south. He saw the helicopter coming towards him and estimated it to be at least 500ft above so did not need any avoiding action. He was a bit surprised to see the helicopter at that height so near to an airfield but didn't consider it a danger to his aircraft. On calling Humberside Radar they asked him if he had seen the passing aircraft and he confirmed he had. No mention was made of an Airprox report from the other aircraft. He did not consider it worthy of a report as no avoiding action had been required and he had full sight of the approaching aircraft.

He assessed the risk of collision as 'None'.

THE HUMBERSIDE CONTROLLER reports that the S92 was on a training sortie transiting northbound towards the Filey area at around 1200ft amsl under a Basic Service. He reported to the S92 pilot that there was traffic climbing out of Eddesfield southbound at a similar level, the S92 pilot replied that they were recovering from a TCAS alert. The other aircraft was subsequently identified after the pilot contacted Humberside for a Basic Service. On questioning, the pilot confirmed that he was visual with the S92 as he climbed out of Eddesfield.

Factual Background

The weather at Humberside was recorded as follows:

METAR EGNJ 061350Z 36008KT 9999 SCT015 BKN024 16/12 Q1016

Analysis and Investigation

CAA ATSI

At 1337:08, the S92 pilot established communication with the Humberside Radar controller reporting at 1800ft and requesting a Traffic Service. The controller identified the aircraft and a reduced Traffic Service was agreed due to the limits of surveillance coverage.

The S92 tracked north and the controller passed Traffic Information as appropriate. At 1349:42, the controller informed the S92 pilot that they were outside of primary radar coverage and a Basic Service was agreed.

At 1351:34, the controller informed the S92 pilot that they were back within radar coverage and a reduced Traffic Service was agreed. The controller passed Traffic Information as appropriate as the S92 tracked north.

At 1401:13 (Figure 1), The controller informed the S92 that they were outside primary radar coverage again and a Basic Service was agreed. At 1401:30, the controller asked the S92 pilot to confirm his route. The pilot reported that they were routing north, then offshore and then towards Grimsby.

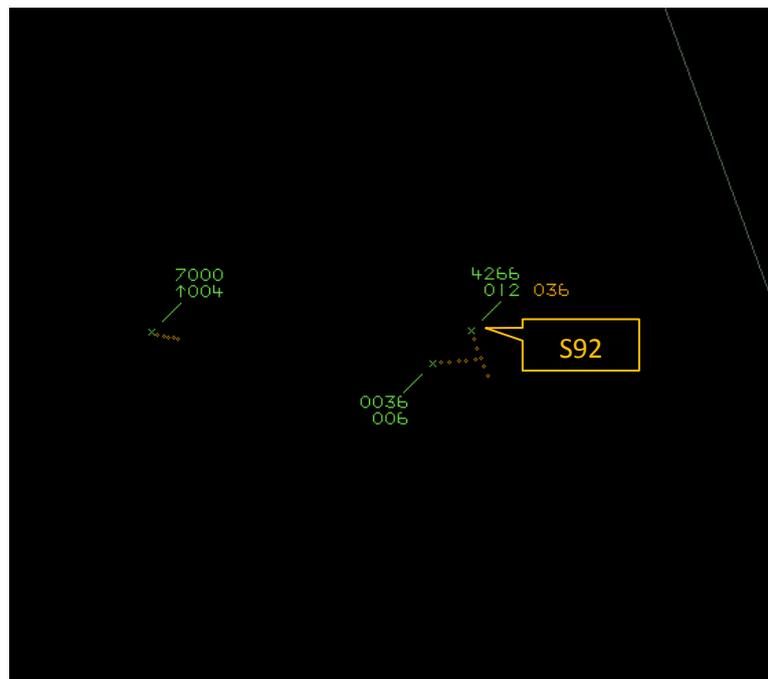


Figure 1 – 1401:13

At 1407:02 (Figure 2), the PA28 was first visible on the area radar.

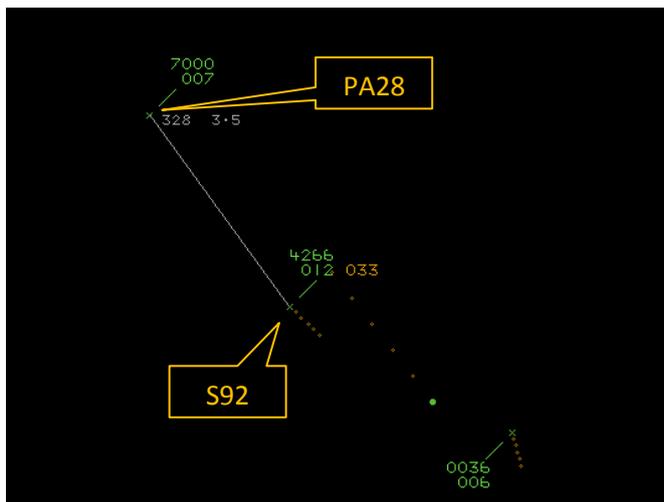


Figure 2 – 1407:02

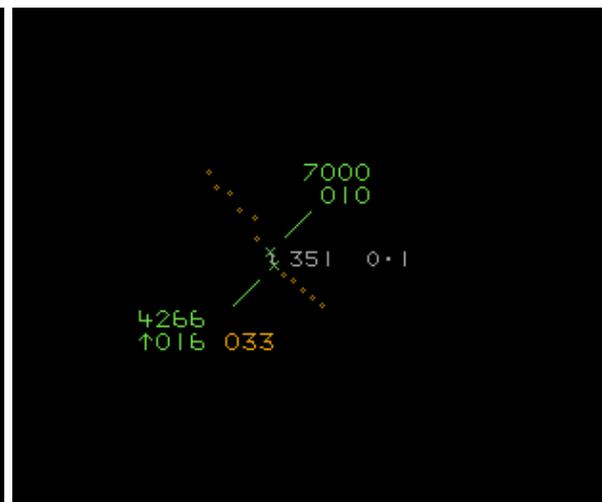


Figure 3 – 1407:58

At 1407:51 the controller passed Traffic Information on the PA28 to the S92 pilot, indicating 500ft below. The pilot reported that they had just complied with a TCAS RA at the same time as the Traffic Information was passed but that they were now clear of conflict.

CPA occurred at 1407:58 (Figure 3), when the aircraft were separated by 0.1nm and 600ft [UKAB note: Using a different radar picture UKAB measured separation at CPA as 0.1nm and 500ft].

The S92 was flying at the limits of the surveillance coverage and at the time was in receipt of a Basic Service.

CAP 774 states:

“Regardless of the ATS being provided, pilots are ultimately responsible for collision avoidance and terrain clearance.”

UKAB Secretariat

The S92 and PA28 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right².

Summary

An Airprox was reported when an S92 and a PA28 flew into proximity at 1408hrs on Wednesday 6th June 2018. Both pilots were operating under VFR in VMC, the S92 pilot in receipt of a Basic Service from Humberside and the PA28 pilot in communication with Eddsfield.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

The Board began by discussing the actions of the S92 pilot. He had been conducting a training flight which involved flying at the edge of Humberside's radar coverage. This had resulted in the Humberside controller downgrading the Traffic Service to a Basic Service although the Humberside controller had still been able to pass Traffic Information to the S92 pilot on the PA28 climbing out of Eddsfield. Some

¹ SERA.3205 Proximity.

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

members wondered whether the S92 pilot might have been better served by requesting a Traffic Service from Linton-on-Ouse LARS who may have been able to provide continuity of service; however, this was merely an observation because the Humberside controller had seen the conflicting traffic and had passed TI, albeit later than desirable. Other members commented that the S92 pilot was operating at about 700ft close to Eddsfield and that this did not provide a great degree of separation from any Eddsfield traffic; they opined that the S92 pilot may have been better advised to have given Eddsfield a wider berth to ensure he avoid its pattern of traffic. Notwithstanding, the Board noted that the S92 pilot carried out the correct actions upon the receipt of a TCAS RA.

The Board then turned to the actions of the PA28 pilot. When he departed from Eddsfield he first saw the S92 about 500ft above him and the Board agreed that this was after the S92 pilot had climbed 400ft in accordance with his TCAS RA instruction. As such, the Board concluded that the PA28 pilot had not seen the S92 until the conflict had effectively been resolved by the S92 pilot.

Turning to the cause and risk, the Board quickly agreed that the S92 pilot had complied with the TCAS instructions before he had seen the PA28, and before the PA28 pilot had seen him. They therefore quickly agreed that the incident was best described as a conflict in Class G resolved by the S92 pilot. The Board then discussed the risk. Although the aircraft were originally at a similar level, the S92 pilot's action when he received a TCAS RA had been timely and effective and had ensured there was no risk of collision; accordingly, the Board determined that the risk was Category C.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in Class G resolved by the S92 pilot.

Degree of Risk: C.

Safety Barrier Assessment³

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

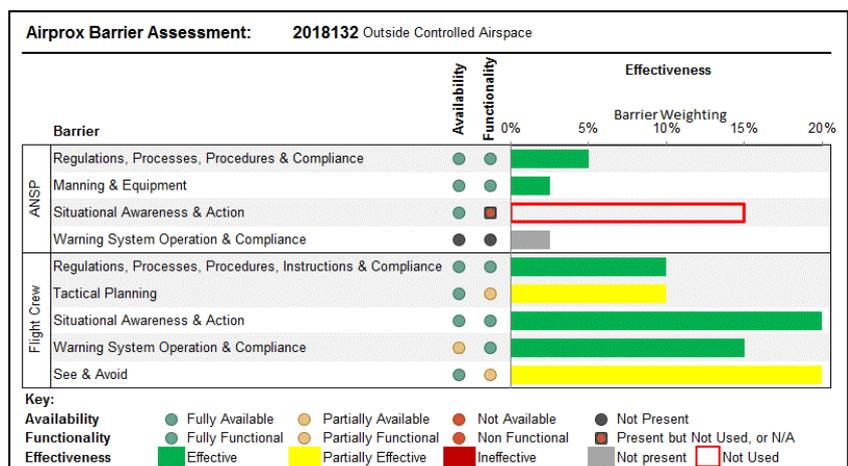
ANSP:

Situational Awareness and Action were assessed as **not used** because the S92 pilot was receiving only a Basic Service from Humberside and the Humberside controller was not required to maintain situational awareness or conduct any action. Although the Humberside controller did provide Traffic Information this was after the S92 pilot had received a TCAS warning and had already resolved the conflict.

Flight Crew:

Tactical Planning was assessed as **partially effective** because the S92 pilot was conducting his flight in the vicinity of the circuit pattern at Eddsfield aerodrome.

See and Avoid were assessed as **partially effective** because both pilots saw each other late, after the S92 pilot had complied with his TCAS alert.



³ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).