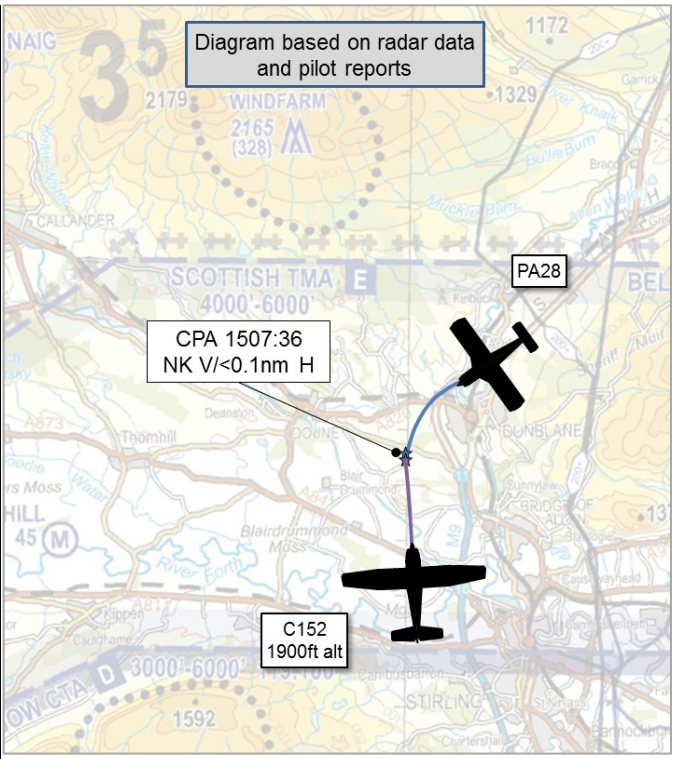
AIRPROX REPORT No 2017196

Date: 20 Aug 2017 Time: 1507Z Position: 5610N 00400W Location: SW Dunblane

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA28	C152
Operator	Civ Trg	Civ Trg
Airspace	Scottish FIR	Scottish FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	None[1]
Provider	Scottish Info	[Scottish Info]
Altitude/FL	NK	1900ft
Transponder	A	A, C, S
Reported		
Colours	White, Red	Red, White, Blue
Lighting	Nav, Landing, Beacon	NK
Conditions	VMC	VMC
Visibility	>10km	NK
Altitude/FL	2000ft	2000ft
Altimeter	RPS (1020hPa)	QNH
Heading	170°	358°
Speed	99kt	90kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	0ft V/20-30m H	0ft V/500m H
Recorded	NK V/<0.1nm H	



THE PA28 PILOT reports that he heard the C152 pilot report overhead Stirling at 2000ft heading north. This immediately caught his attention and he started to look in that direction, which was between his 10 and 11 o'clock; he looked for a few seconds and failed to spot the C152. He restarted his normal scan, starting from his right, when he saw the C152 in his 1 o'clock at the same level and on a constant relative bearing. Before his student had spotted the C152 he took control and made a steep turn to the left [UKAB note: from the radar replay it appears that the PA28 pilot had already started a left turn prior to seeing the C152 and commencing his avoiding-action steep turn]. The C152 appeared to turn away from him at the same time.

He assessed the risk of collision as 'High'.

THE C152 PILOT reports that he was flying to the north of the Stirling area when he encountered another aircraft in his 12 o'clock position at approximately the same altitude. The other aircraft turned left and he then turned left.

He assessed the risk of collision as 'Medium'.

THE SCOTTISH INFORMATION FISO reports that the incident was not reported on the frequency and therefore he had no recollection of the event.

Factual Background

The weather at Glasgow was recorded as follows:

```
METAR EGPF 201450Z AUTO 23008KT 9999 NCD 17/11 Q1020
```

[1] The PA28 pilot was in the process of establishing contact with Scottish Information.

Analysis and Investigation

CAA ATSI

The PA28 was in receipt of a Basic Service from Scottish Information at the time of the Airprox. The C152 had established two-way communications with Scottish Information, but was still in the process of passing details of their flight to the Flight Information Service Officer (FISO), and was not yet in receipt of a service, when the Airprox occurred.

At 1506:00 the C152 was observed on the radar replay to be south west of the PA28 by 4.5nm (Figure 1).

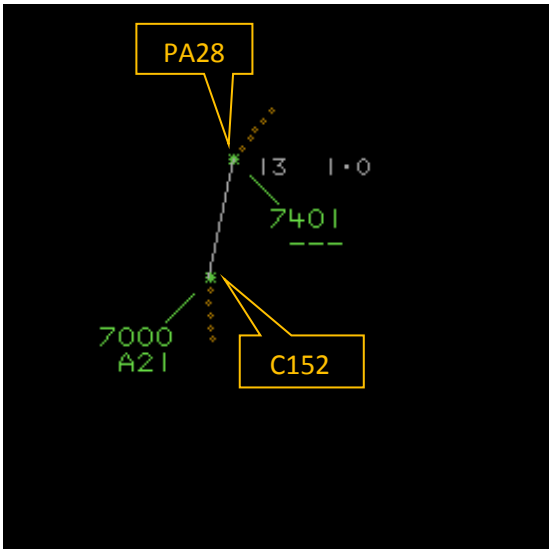


Figure 1 - 1506:00

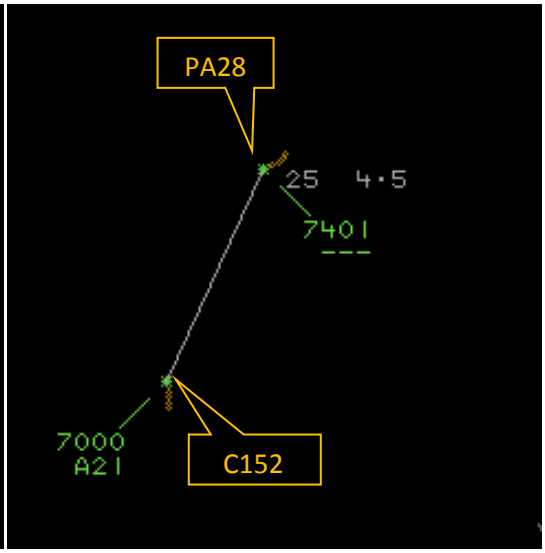


Figure 2 - 1507:15

At 1507:15 the C152 starts to pass details of their flight to the FISO (Figure 2).

CPA occurred at 1507:35 when the radar returns merged (Figure 3).

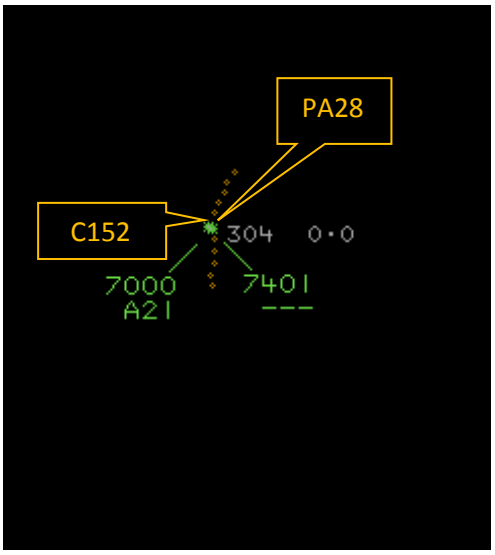


Figure 3 - 1507:35

At 1507:46 the C152 pilot concluded passing details of their flight to the FISO and a Basic Service was agreed.

CAP774 (UK Flight Information Services) extract:

A Basic Service is an ATS provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at aerodromes, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot's responsibility.

Basic Service relies on the pilot avoiding other traffic, unaided by controllers/ FISOs. It is essential that a pilot receiving this ATS remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight.

Due to the timing of the C152 pilot's call to Scottish Information, there was no opportunity for the FISO to pass any generic traffic information to either crew. Prior to the C152 establishing two-way communication with the FISO and providing a position report, the FISO was unaware of the location of the aircraft.

UKAB Secretariat

The PA28 and C152 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[2]. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right[3], notwithstanding the pilot's overriding responsibility for avoiding collision. If the incident geometry is considered as converging then the C152 pilot was required to give way to the PA28[4].

Summary

An Airprox was reported when a PA28 and a C152 flew into proximity at 1507 on Sunday 20th August 2017. Both pilots were operating under VFR in VMC, the PA28 pilot in receipt of a Basic Service from Scottish Information and the C152 pilot requesting a Basic Service from Scottish Information.

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 flight information officer involved and reports from the appropriate operating authorities.

The Board began by looking at the actions of the PA28 pilot. One member noted that the PA28 pilot was aware from the C152's radio transmission that the two aircraft would be transiting through the same area at the same height and wondered why the PA28 pilot had not climbed or descended to increase separation as a precaution. Other members opined that the C152 pilots report as 'overhead Stirling' meant he could be anywhere within a 5-10nm radius of the reporting point and so changing level would not be a reasonable expectation unless the PA28 pilot was visual with the C152 because the two aircraft could easily not be close enough to each other to warrant it. They also commented that the PA28 pilot would not know what pressure setting the C152 pilot would be using and so, if the PA28 pilot did change level, he may just as easily have climbed or descended into conflict unless he changed height by a significant amount. The Board noted that the radar replay showed the PA28 pilot had already commenced a left turn prior to the Airprox, and the rate of turn had been increased when he saw the C152, which was commensurate with his report and a sensible solution to the proximity of the C152 once sighted.

The Board then looked at the actions of the Scottish Information FISO. The C152 pilot was still establishing a service with Scottish Information and therefore the FISO did not have sufficient information, within the available time prior to the Airprox, to pass Traffic Information to either pilot on the other aircraft. The GA member voiced his concern that some pilots might be under the

[2] SERA.3205 Proximity.
[3] SERA.3210 Right-of-way (c)(1) Approaching head-on.
[4] SERA.3210 Right-of-way (c) (2) Converging.

impression that the FISOs at Scottish Information and London Information had access to a radar screen and were able to offer navigation and/or collision avoidance information. This is not the case, they have access to maps and charts of their operational area, but not to any surveillance equipment displays. Other than providing generic information based on RT calls when appropriate, Scottish and London Information should not be relied upon for anything other than provision of aviation-related background information. That being said, another member opined that, now that SERA has mandated the use of transponders in suitably equipped aircraft, a radar screen could be beneficial. The Board agreed but noted that the remit of a FISO license does not permit them to use surveillance equipment, and so the use of a radar screen would not serve to enhance the type of service provided unless a controller was rostered. Ultimately, members agreed that all pilots should be aware of the limitations of the Basic Service available from these agencies, and that guidance on Flight Information Services in general had recently been provided under *AIC Y 001/2018*.[5]

Finally the Board looked at the actions of the C152 pilot. Due to the circumstances and timing of his call to Scottish Information, the C152 pilot had no information on the PA28. Members noted that when he saw the PA28 it was already turning left to avoid him and so the C152 pilot also sensibly turned left to avoid the PA28.

The Board then looked at the cause and risk of the Airprox. They agreed that the PA28 pilot was aware of the C152 through the C152 pilot's radio transmission to the Scottish Information FISO, and that the PA28 pilot had accordingly increased his lookout to try to sight the C152. Members noted that neither aircraft was fitted with an electronic warning system, which meant that lookout was the only barrier in this instance. It was apparent to the Board that neither pilot had seen the other aircraft early enough to alter their course or height without taking avoiding action, and so members agreed that the cause was that both pilots saw the other aircraft late. Turning to the risk, the Board agreed that both pilots had taken emergency action to increase the separation and that safety had been much reduced below the norm; they therefore assessed the risk as Category B.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by both pilots.

Degree of Risk: B.

Safety Barrier Assessment[6]

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 C152 pilot was still establishing a service with the Scottish Information FISO who was therefore not able to pass information to either pilot on the position and height of the conflicting aircraft early enough to affect the situation.

Flight Crew:

Warning System Operation and Compliance were assessed as **not present** because neither aircraft had an electronic warning system fitted.

[5] http://www.ead.eurocontrol.int/eadbasic/pamslight-EF17B854D676E48FFDFE481A2E7DA6EB/7FE5QZZF3FXUS/EN/AIC/Y/001-2018/EG_Circ_2018_Y_001_en_2018-01-18.pdf.

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

See and Avoid were assessed as **partially effective** because neither pilot saw the other until avoiding action was required.