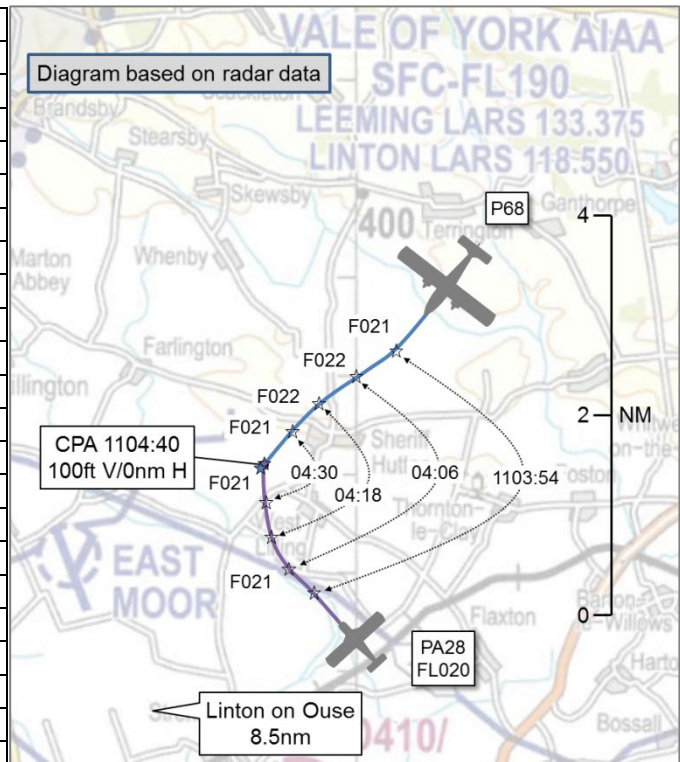


AIRPROX REPORT No 2015042

Date: 16 Apr 2015 Time: 1104Z Position: 5405N 00101W Location: 8.5nm ENE Linton on Ouse

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	P68	PA28
Operator	Civ Comm	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Traffic	None
Provider	Linton LARS	N/A
Altitude/FL	FL021	FL020
Transponder	A, C, S	A, C, S
Reported		
Colours	White/blue	White/black
Lighting	Strobe, nav	Strobe, nav
Conditions	VMC	VMC
Visibility	10km	>3nm
Altitude/FL	2000ft	~1800ft
Altimeter	RPS (1012hPa)	QFE (1017hPa)
Heading	240°	360°
Speed	140kt	108kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	<100ft V/0m H	300ft V/<100m H
Recorded	100ft V/0m H	



THE P68 PILOT reports being in straight-and-level cruise at 2000ft to maintain VMC and transit through the Linton MATZ. Linton advised of traffic in the 12 o'clock at 5nm, indicating 300ft below. The pilot reported that he was not visual, and was then informed that traffic was now at 2nm and 300ft below. Still not visual, he initiated a small clearing turn, at which point he saw the traffic, a white PA28, in level flight, in the 11 o'clock, slightly below and on an almost reciprocal heading. Avoiding action was instantly taken, a pitch up and right turn, and the traffic was seen to pass directly underneath, less than 100ft below.

He assessed the risk of collision as 'High'.

THE PA28 PILOT reports departing a local airfield for general handling and maintaining a listening watch on the airfield frequency whilst keeping well outside the 'Linton zone'. Somewhere roughly east of East Moor, he saw a plane pass more or less overhead, closer than he would normally expect, but still at what appeared to be a comfortable height above him. He commented that the aircraft was almost overhead when first sighted and appeared to have come out of cloud, or been obscured by cloud, until it was overhead. At some point later in the sortie he changed from the local airfield frequency to Linton Zone and obtained a Basic Service and squawk code. The radio controller was friendly and nothing was said to him about an Airprox, nor was anything asked or referred to regarding a possible close contact.

He assessed the risk of collision as 'None'.

THE LINTON ZONE CONTROLLER reports he was providing the P68 pilot with a Traffic Service whilst he was transiting the Vale of York at approximately 2000ft on the RPS. As the controller finished taking a handover from Doncaster, the P68 pilot advised him he was now routing direct to his destination and would require a MATZ crossing. As he initiated his turn, the controller called traffic, one southwest approximately 3 miles indicating 200ft below, the other southwest approximately 4

miles with no height information. As he was arranging the MATZ crossing, the P68 pilot advised him that he was filing an Airprox on the traffic that was called first (200ft below) and shortly after informed him he was also filing an Airprox on the other traffic with no height information [see Airprox 2015043].

He perceived the severity of the incident as 'Low'.

THE LINTON SUPERVISOR reports traffic levels for the controller were low to medium. The supervisor did not witness the incident directly; however, the controller highlighted the incident to him seconds after the Airprox was declared on frequency. General traffic levels in the vicinity of Linton were high as would be expected in good conditions; the congestion was exacerbated by a few clouds at 3500ft.

Factual Background

The weather at RAF Linton on Ouse was recorded as follows:

```
METAR EGXU 161050Z 26002KT 9999 FEW035 BKN150 BKN220 11/03 Q1017 BLU NOSIG
METAR EGXU 161150Z 23003KT 9999 FEW035 BKN150 12/04 Q1017 BLU NOSIG
```

A transcript of the Linton Zone RTF was provided, as follows:

From	To	Speech Transcription	Time
P68	Zone	[P68 C/S], request a MATZ transit direct [destination], [P68 C/S]	1103:00
Zone	P68	Station calling Linton Zone, say again you're stepped on	1103:27
P68	Zone	Its [P68 C/S] for a MATZ transit errr, to route direct [destination]	1103:30
Zone	P68	Roger and you've got traffic south 3 miles manouvering, similar altitude.	1103:39
P68	Zone	Looking for the traffic and we are also good visual with the one to the north of us [P68 C/S]	1103:42
Zone	P68	Roger, and you've got further traffic south west 3 miles, manouvering, no height information	1103:45
P68	Zone	Looking for the traffic [P68 C/S]	1103:51
Zone	P68	Are you happy to maintain altitude 2200ft for your MATZ transit and no closer than 3 miles from the overhead?	1103:55
P68	Zone	Errrr, yeah we will route to the south, and request 2000ft to remain VMC	1104:00
Zone	P68	Roger, descend and maintain 2000ft	1104:07
P68	Zone	2000ft [P68 C/S]	1104:12
Zone	P68	Previously called traffic South 1 mile, tracking north 200ft below.	1104:30
P68	Zone	[P68 C/S] we would like to file an Airprox time 1104 Z	1104:42
Zone	P68	[P68 C/S] say again?	1104:48
P68	Zone	We would like to file an Airprox, present position at time 1104 Z	1104:50
Zone	P68	Roger	1105:00
Zone	P68	[P68 C/S] roger is that the one err northbound now, 3 miles, tracking north?	1105:15
P68	Zone	Err, no visual now but yeah I think it's the one you told us about in our other one errr, sorry there's just a microflight flown right underneath us as well, [P68 C/S] that's two now, in present position. The first one was a P A 28 and the second one was a microlight.	1105:20
Zone	P68	Roger, currently painting that traffic is now north 1 mile tracking north no height information	1105:33
P68	Zone	Do you have a registration or callsign for the aircraft? [P68 C/S]	1105:40
Zone	P68	Not working me	1105:42
P68	Zone	Yeah no problem, thanks very much [P68 C/S]	1105:45
P68	Zone	Just for your records we did take avoiding action, and errr they didn't appear to change track at all [P68 C/S]	1105:50

Analysis and Investigation

Military ATM

The incident occurred on 16 April 15, at 1104, 8.5nm east-northeast of RAF Linton-On-Ouse. The incident occurred between a P68 under a Traffic Service with RAF Linton-On-Ouse and a PA28, not in receipt of an Air Traffic Service. The radar replay is based on London QNH of 1016hPa.

At 1103:30, the P68 pilot requested a MATZ transit direct to his destination. The Zone controller passed Traffic Information at 1103:39 (Figure 1) as, "traffic south 3 miles, maneuvering, similar altitude." The P68 pilot reported, "Looking for the traffic and good visual with one to the north of us."

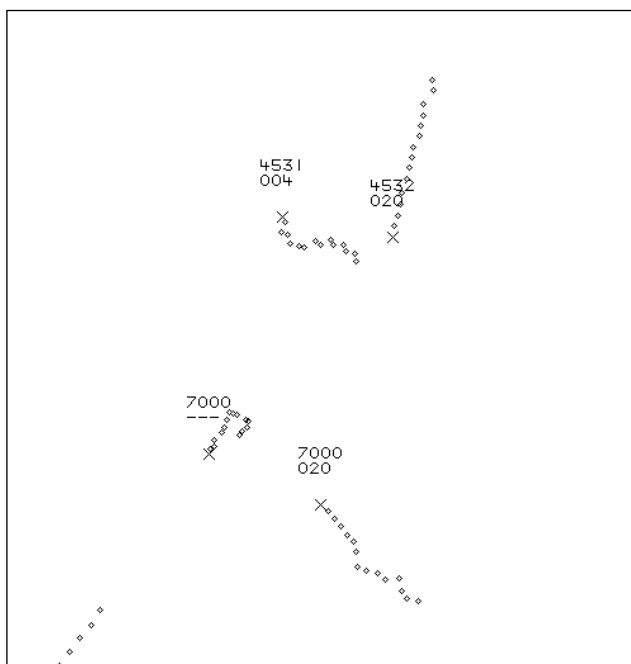


Figure 1: 1103:39 (P68 4532; PA28 7000 with Mode C).

At 1103:45 (Figure 2), Zone transmitted, "Roger, and you've got further traffic south west 3 miles, maneuvering, no height information." The P68 pilot confirmed that he was 'looking'.

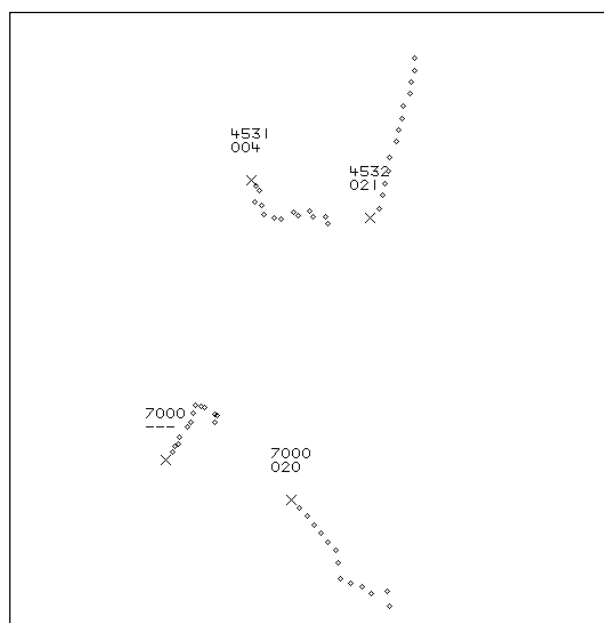


Figure 2: Traffic Information at 1103:45

At 1103:55, the Zone controller requested the P68 pilot fly at 2200ft feet, no closer than 3nm from the Linton overhead for a MATZ transit, but the pilot requested 2000ft to remain VMC. The Zone controller approved the MATZ crossing at 2000ft. At 1104:30 (Figure 3), the Zone controller updated Traffic Information with, "Previously called traffic, south 1 mile, tracking north, and 200 feet below."

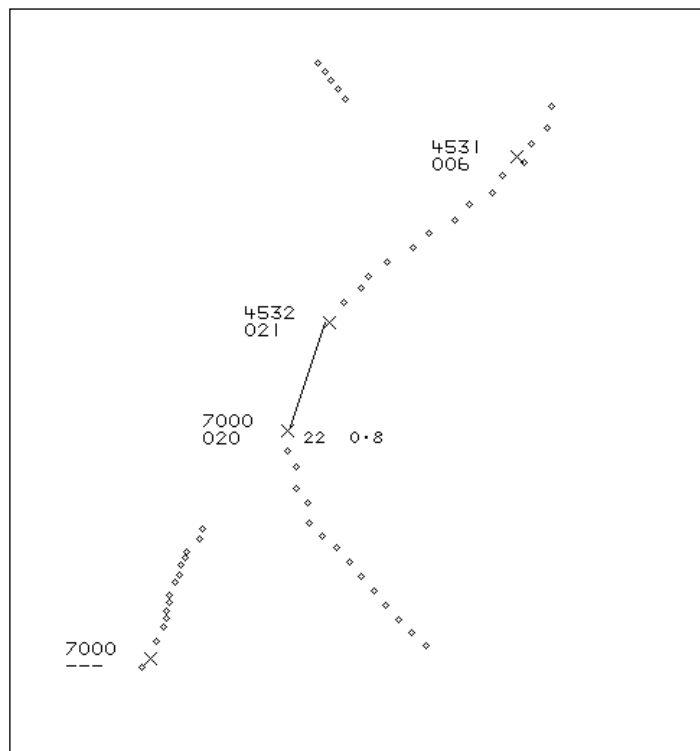


Figure 3: Traffic update at 1104:30

The CPA was estimated at 1104:40 with 0nm horizontal and 100ft vertical separation. At 1104:42, the P68 pilot declared an Airprox.

At 1105:15, the Zone controller requested if the Airprox was with traffic northbound by 3nm, tracking north, and the pilot responded, "Err, no visual now but yeah I think it was the one you told us about in our other one. Er sorry, there's a microlight flown right underneath us as well. [P68 C/S] that's two now, in present position. The first one was a PA28 and the second one was a microlight." [see Airprox 2015043 for the second Airprox].

The normal barriers to an incident in Class G airspace would be radar-derived Traffic Information, ACAS/TAS and 'see-and-avoid'. Neither aircraft was fitted with TCAS or a TAS. Traffic Information was passed at 3nm and 1nm. As the pilot was not visual, he reported conducting a small clearing turn to assist with lookout. The turn assisted the P68 pilot in seeing the PA28 and an avoiding action turn was initiated. The controller had five aircraft on frequency and recalled conducting a handover at the time of this Airprox and Airprox 2015043.

UKAB Secretariat

The P68 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, which the P68 pilot did.

¹ SERA.3205 Proximity.

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

Summary

An Airprox was reported when a P68 and a PA28 flew into proximity at 1105 on Thursday 16th April 2015, 8.5nm east-northeast of RAF Linton on Ouse. Both pilots were operating under VFR in VMC in the Class G airspace of the Vale of York AIAA, the P68 pilot in receipt of a Traffic Service from Linton Zone and the PA28 pilot not in receipt of an Air Traffic Service.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, a transcript of the relevant RT frequency, radar photographs/video recordings, reports from the air traffic controllers involved and a report from the appropriate ATC authority.

Considering the pilots' actions first, the PA28 pilot had recently got airborne and was not in receipt of an ATS. He saw the P68 pass overhead 'closer than he would normally expect but still at what appeared to be a comfortable height above him'. He also commented that the P68 appeared to have been obscured by cloud. Given the weather conditions at the time, some members commented that the PA28 pilot might have been better served in contacting Linton at an earlier stage to request an ATS. For his part, the PA68 pilot was transiting through Class G airspace, in receipt of a Traffic Service from Linton Zone, and had been given a clearance to 'descend and maintain 2000ft' in order to cross the Linton MATZ, having been unable to maintain VMC at the original cleared altitude of 2200ft. He was twice passed Traffic Information on the PA28, firstly at 5nm and secondly at 1nm, which prompted a 'small clearing turn', at which point he saw the PA28 at close range.

Members discussed whether the controller's first Traffic Information call of 'manoeuvring' was appropriate given that it might have given the impression to the P68 pilot that the aircraft was static in location. After some discussion the Board agreed that it was, although a better description may have been 'tracking northwest'. In the event, the PA28 was initially tracking to pass ahead of the P68 but the PA28 pilot had made a gradual right turn, which then resulted in the two aircraft being flown into proximity. Notwithstanding, members agreed that the Airprox was caused by both the P68 pilot's late sighting of the PA28 and the effective non-sighting of the P68 by the PA28 pilot (in that he saw it too late to take avoiding action as it passed overhead). It was noted that both aircraft were predominantly white and were being flown close to the cloudbase, which would no doubt have reduced the effectiveness of visual acquisition.

Members questioned whether the P68 pilot could have taken more action, given that he had twice been passed Traffic Information on the PA28. It was pointed out that although the geometry was considered as converging and the PA28 pilot was required to give way, the assumption that the other aircraft would do so was an ill-conceived notion even if the PA28 had seen the P68. Acknowledging that the P68 pilot was required to 'maintain course and speed' in such circumstances, there was a fine line between inaction and self-preservation. If the geometry of the event was considered to be more 'head-on' (as reported) then both pilots were therefore required to turn to the right, or in a direction that avoided collision if it was a late sighting. In either case, it was clear that the P68 pilot was aware of the closing geometry of the PA28 at a similar level, and had made a 'small clearing turn'; some members felt that the P68 pilot could reasonably have taken more action, in the form of a descent or climb to increase vertical separation (with a descent offering the added benefit of remaining VMC), or a significant earlier heading change to avert the Airprox geometry. After further discussion, it was agreed, by a small majority, that a contributory factor was that the P68 pilot did not act sufficiently on the Traffic Information, with some members dissenting from that view.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by the P68 pilot and effectively a non-sighting by the PA28 pilot.

Contributory Factor: The P68 pilot did not act sufficiently on the Traffic Information.

Degree of Risk: B.