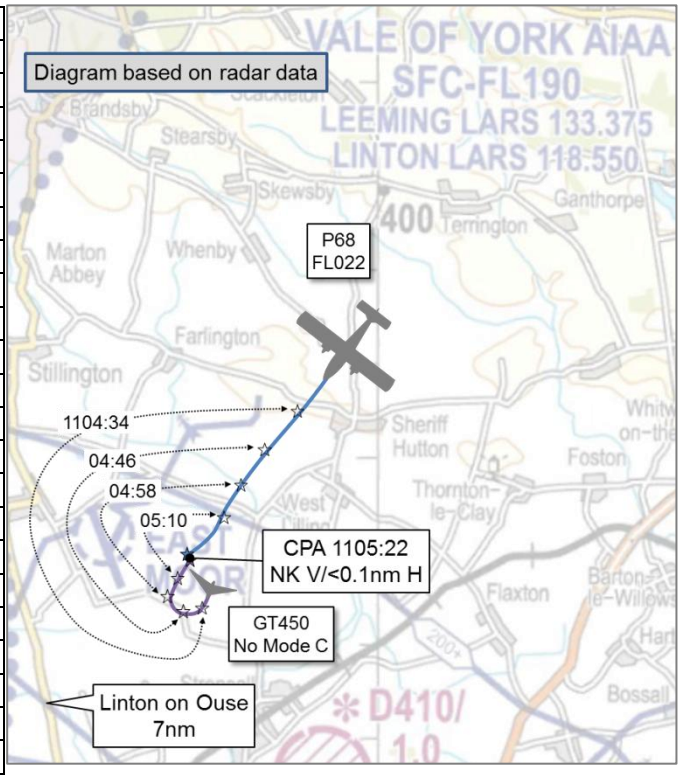
AIRPROX REPORT No 2015043

Date: 16 Apr 2015 Time: 1105Z Position: 5405N 00101W Location: 7nm ENE Linton on Ouse

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	P68	GT450 microlight
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, S, no Mode C
Reported		
Colours	White/blue	White/yellow
Lighting	Strobe, nav	Landing
Conditions	VMC	VMC
Visibility	10km	NK
Altitude/FL	2000ft	NK
Altimeter	RPS (1012hPa)	NK
Heading	240°	MK
Speed	140kt	NK
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	50ft V/0m H	Not Seen
Recorded	NK V/<0.1nm H	



THE P68 PILOT reports being in straight-and-level cruise at 2000ft to maintain VMC and transit through the Linton MATZ. Linton had advised him of traffic in the 12 o'clock at 5nm, indicating 300ft below[1]. The pilot reported that he was not visual and was then informed that traffic was now at 2nm and 300ft below[1]. Still not visual, he initiated a small clearing turn, at which point he saw the traffic, which passed close by. Whilst reporting this event as an Airprox [2015042], another aircraft, a microlight, was then seen to pass 50ft below them, which he also reported as an Airprox.

He assessed the risk of collision as 'High'.

THE MICROLIGHT PILOT reports not being aware of an Airprox, which was reported by the other aircraft's pilot but was not seen by either of the 2 pilots aboard the open-cockpit flex wing microlight. At the time of the incident, they were carrying out either simulated precautionary landings or recovery from unusual attitudes as part of the NPPL Assistant Flying Instructor syllabus, operating at between 100ft and 2000ft agl, approximately 5-8 miles east of Linton on Ouse. They were listening out on the SAFETYCOM frequency. The pilot thought it unlikely that either of the 2 pilots on the microlight, one a BMAA panel examiner with 25 years instructor experience, the other a student AFI, would miss such a large aircraft, yet alone any aircraft, especially at such close proximity.

THE LINTON ZONE CONTROLLER reports that 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 advised him that

[1] The PA28 traffic involved in Airprox 2015042.

he was filing an Airprox on the traffic that was called first (200ft below) [see Airprox 2015042] and shortly after informed him he was also filing an Airprox on the other traffic with no height information.

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:

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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
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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 1104z	1104:42
Zone	P68	[P68 C/S] say again?	1104:48
P68	Zone	We would like to file an Airprox, present position at time 1104z	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 twenty eight and the second one was a microlight.	1105:20
Zone	P68	Roger, currently painting that traffic is now north one 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 1105, 7nm east-northeast of RAF Linton-On-Ouse. The incident occurred between a P68 under a Traffic Service with RAF Linton-On-Ouse and a GT450 microlight, not in receipt of an Air Traffic Service. The radar replay was based on the London QNH of 1016 hPa.

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."

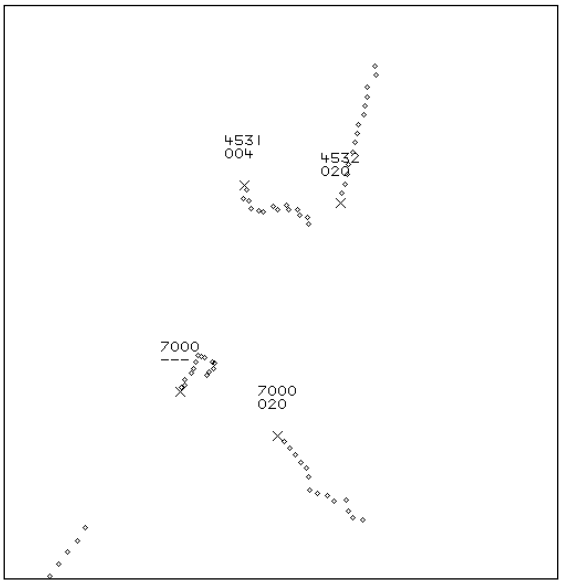

Figure 1: 1103:39 (P68 4532; GT450 7000 without Mode C)

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

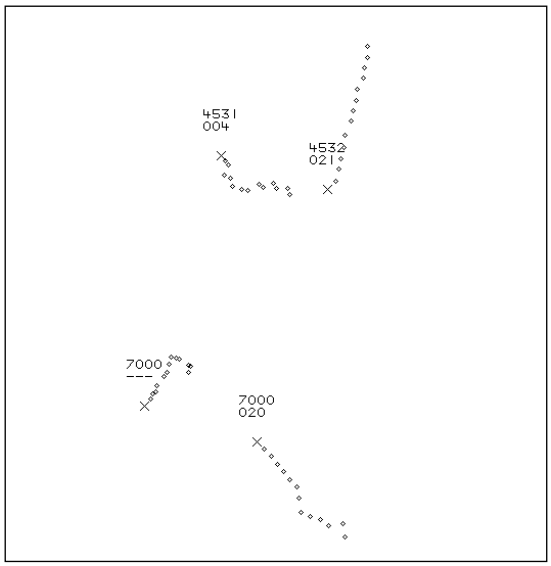

Figure 2: Traffic Information at 1103:45

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."

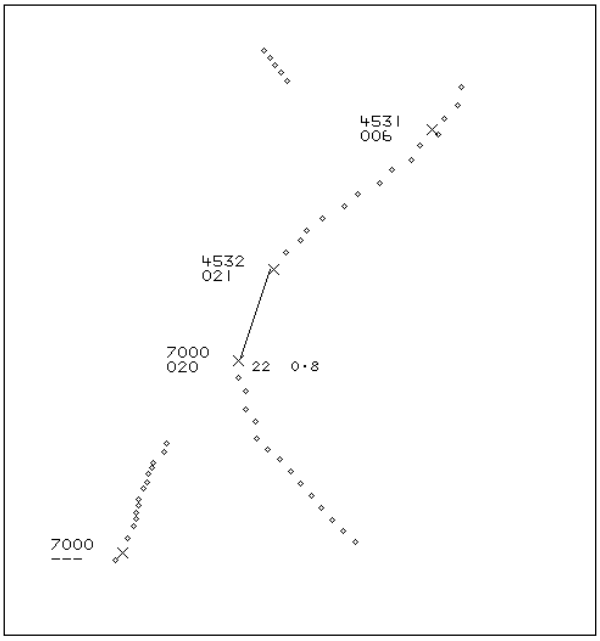

Figure 3: Traffic update at 1104:30

At 1104:42, the P68 pilot declared an Airprox with a PA28 [Airprox 2015042]. 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."

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 on the microlight. The microlight completed a 180° turn and converged with the P68 as the pilot was discussing the first Airprox with the controller; no Traffic Information update was offered as the microlight converged with the P68. The controller had five aircraft on frequency and recalled conducting a handover at the time of this Airprox.

UKAB Secretariat

The P68 and microlight 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].

Summary

An Airprox was reported when a P68 and a GT450 flew into proximity at 1105 on Thursday 16th April 2015, 7nm 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 microlight pilot not in receipt of an Air Traffic Service.

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

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.

Members observed that this Airprox occurred 42sec after Airprox 2015042 and that it shared many of the same characteristics. The GT450 pilot was not in receipt of an Air Traffic Service and did not see the P68. Unusually, his flex-wing microlight was equipped with a transponder, albeit in this case without the Mode C altitude being apparent on the area radar. Members felt that the microlight pilot could usefully have contacted Linton LARS whilst operating in the vicinity of this busy training airfield with the benefit that this may have increased the situational awareness of all. The Board noted that the highly experienced microlight pilot felt that it was unlikely that both he and his experienced student could not have seen an aircraft the size of a P68 in close proximity. However, members noted that the microlight's Mode S output confirmed that it was the aircraft involved in this Airprox and therefore this in itself was a valuable lesson in human factors: whether the canopy had obscured the P68 and the microlight's engine noise drowned out the P68's engine was unknown; the lesson for all was that good lookout was something that had to be continuously worked at in order to overcome deficiencies in human performance and potential obscuration.

The Linton Zone controller had passed Traffic Information on the GT450 at 1103:45, about 1½min before CPA, and with the microlight heading in the same direction as the P68. Unfortunately, in the intervening time the GT450 pilot had reversed course, resulting in the two aircraft tracking towards one another. Members observed that the Linton controller had become involved in discussing the previous Airprox (Airprox 2015042) with the P68 pilot, and that there had been no update in Traffic Information on the now approaching microlight. This aspect of this Airprox was discussed at some length with members observing that usual ATC practice after an Airprox was to immediately assess whether the controller involved was able to remain on duty and to start to deal with the administrative functions. It was felt that this course of action was appropriate, but that an initial assessment of factors affecting local traffic under control could usefully be carried out first, with Traffic Information or avoiding action being passed if necessary. In short, the Board wondered whether the controller had become preoccupied with the first Airprox at the expense of dealing with the potential second.

In the event, the P68 pilot had seen the GT450 too late to take avoiding action, effectively a non-sighting, and the GT450 pilot did not see the P68. Without altitude data on the GT450, members were in some disagreement as to the separation, but were persuaded by the P68 pilot's report that the vertical separation had been very small. Consequently, members agreed that the situation had stopped just short of a collision, where chance had played a major part in events.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A non-sighting by the GT450 pilot and effectively a non-sighting by the P68 pilot.

Degree of Risk: A.