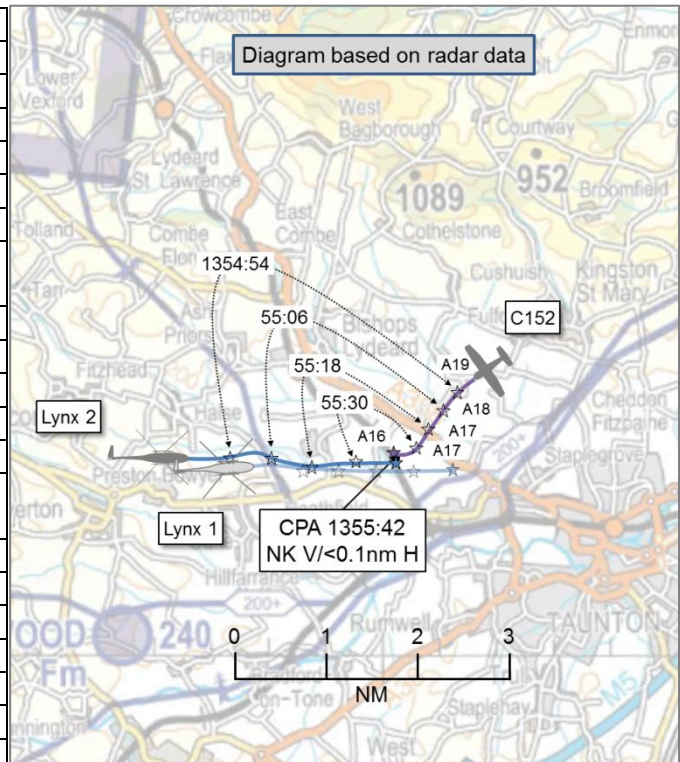


AIRPROX REPORT No 2015006

Date: 23 Jan 2015 Time: 1356Z Position: 5102N 00310W Location: Taunton

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Lynx	C152
Operator	RN	Civ Trg
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Basic
Provider	London Information	Exeter Radar
Altitude	NR	1500ft
ACAS/TAS	Not fitted	Not fitted
Transponder	A, C (S off)	A, C
Reported		
Colours	Grey	White
Lighting	Navigation, red anti-col	NK
Conditions	VMC	VMC
Visibility	6km, haze	8km
Altitude	1400ft	3000ft
Altimeter	RPS 1018hPa	NK
Heading	095°	270°
Speed	120kt	90kt
Separation		
Reported	0ft V/400m H	0ft V/0.25nm H
Recorded	NK V/<0.1nm H	



THE LYNX PILOT reports transiting back to RNAS Yeovilton as number 2 of a 2-aircraft tactical formation, on completion of a training sortie over Exmoor. He was positioned 400yd astern and 100ft below the formation lead aircraft, to the left side. A white, fixed-undercarriage, single piston-engine light-aircraft was seen heading directly towards the number 2 aircraft, in the 11 o'clock position at a range of 500m, at the same height and closing on a steady bearing. The handling pilot saw the light aircraft and immediately broke right and up, turning through 80° before rolling out. The light-aircraft was observed to have maintained its height and heading with a lateral separation of 800m and passed away to the south west. Minimum separation was assessed to be 400m. The formation leader did not see the light aircraft before the incident.

He assessed the risk of collision as 'High'.

THE C152 PILOT reports conducting training sortie in the 'Dunkeswell training area'. They were conducting usual lookout procedures before exercises when the Exeter Radar Controller informed them of approaching aircraft at the same level. They immediately executed a lookout and saw 2 Lynx helicopters heading towards them, at the same level, at a range of about ¼nm. The instructor estimated that they had less than 10sec to take avoiding action. Although the Lynx were in formation, the instructor noted that they were only in conflict with the leading helicopter, which required him to take avoiding action by turning to the right. The Lynx pilot was observed to do the same. The instructor noted that the Exeter Radar Controller had passed valuable and effective Traffic Information, even though he was under a Basic Service, and that the Lynx formation were not on the Exeter Radar frequency. The instructor stated that the area to the north of Dunkeswell, between Wellington and Taunton, was a routine training area up to 4000ft. The Yeovilton AIAA to the east was avoided for obvious reasons, but it was observed that a large number of military aircraft, such as Lynx, Merlin, Chinook and Hercules, flew close to Dunkeswell (outside its ATZ but within 5 miles of

the airfield, to the north and south) so a good look out was required by all. The instructor stated that, for improving flight safety, it might be worth Yeovilton ATSU considering that Dunkeswell has its training area to the north of the field, which can get very busy, and either to avoid the area if possible or advise pilots to keep a good lookout if transiting in the Wellington/Taunton area.

He assessed the risk of collision as 'Medium'.

THE EXETER RADAR CONTROLLER reports the C152 pilot was operating on his frequency under a Basic Service at 2000ft. Traffic Information was passed to the pilot with regard to unknown traffic in his vicinity at a similar level. As the aircrafts' paths continued to converge, updated Traffic Information was given and the C152 pilot reported the aircraft in sight. The controller noted that his submission of a report was delayed, partly because Exeter ATSU were unaware that an Airprox had been filed.

Factual Background

The weather at Yeovilton was recorded as follows:

METAR EGDY 231350Z 18010KT 7000 HZ FEW025 08/04 Q1023 WHT NOSIG

Analysis and Investigation

CAA ATSI

The C152 pilot was receiving a Basic Service from Exeter Radar, displaying SSR code 0410. At 1354:12 (Figure 1) the Exeter controller first passed Traffic Information about the conflicting traffic (code 1177, which later changes to FIS). As the C152 pilot didn't acknowledge the Traffic Information, the controller passed Traffic Information again, at 1354:21, stating that the traffic in the vicinity was relatively fast moving and eastbound.

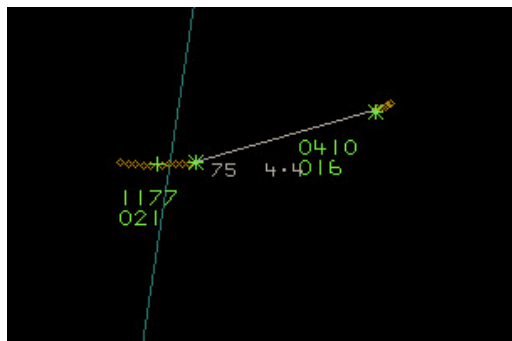


Figure 1

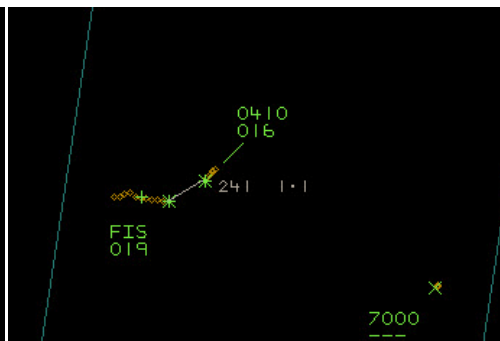


Figure 2

The controller updated this Traffic Information at 1355:13 (Figure 2) stating that there appeared to be two aircraft together and that they were just south of the C152 position at the same height. At 1355:22 the C152 pilot reported sighting the traffic (Figure 3).

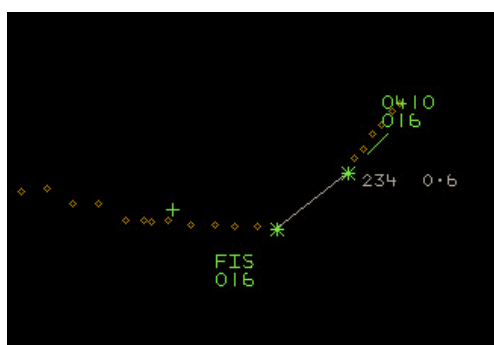


Figure 3

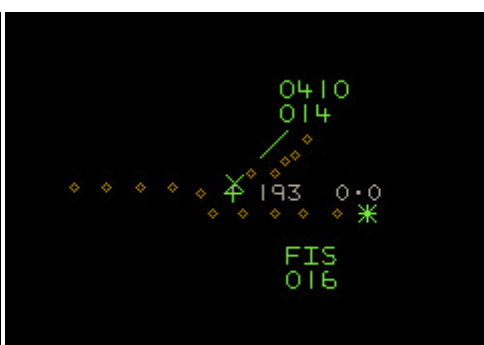


Figure 4

The C152 pilot altered course to the right and CPA occurred at 1355:43 (Figure 4). Although the Radar indicated that the lateral distance was 0.0nm it should be noted that, prior to this, there had been some 'track jitter' of the second aircraft, possibly due to the nature of the contact being derived from a Primary radar source only.

At the time of the Airprox, the Lynx helicopter pilots were in receipt of a Basic Service from London Information. There was no Traffic Information or mention of the C152 on the London FIS frequency. The provision of the Basic Service by FISO is without the use of surveillance equipment. Exeter Radar did pass Traffic Information, although pilots operating in Class G airspace are ultimately responsible for their own collision avoidance.

It should also be noted that the radar screen shots used above are from the London Area Radar display and are not the picture the Exeter Radar Controller would have seen at the time.

UKAB Secretariat

The Lynx 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 hazard¹. If the incident geometry is considered as converging, then the C152 pilot was required to give way to the Lynx², which he did.

Comments

Navy HQ

When flying in Class G the final safety barrier is see-and-avoid, in this scenario both pilots' lookouts eventually proved effective and prevented a more serious outcome. Both pilots were under a Basic Service; therefore neither should expect Traffic Information pertaining to conflicting traffic. That said, in accordance with CAP 774, the Exeter controller did pass Traffic Information to the C152 pilot, who recognised in his statement that the Traffic Information was timely. The Lynx pilots would never have received Traffic Information from London Information as flights are not monitored by that 'Unit'. Due consideration should be given to the selected airborne frequency, the most appropriate frequency should be used in relation to the area of interest, in this instance perhaps Exeter would have been the better choice. Navy HQ believes that this incident was resolved by the 'see-and-avoid' principle aided by the Traffic Information offered by the Exeter controller.

Summary

An Airprox was reported when a Lynx and a C152 flew into proximity at 1356 on Friday 23rd January 2015. Both pilots were operating under VFR in VMC in receipt of a Basic Service, the Lynx pilot from London Information and the C152 pilot from Exeter Radar.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, radar photographs/video recordings, a report from an air traffic controller involved and reports from the appropriate ATC and operating authorities.

Considering the controllers' actions first, Board members quickly agreed that the Exeter controller's Traffic Information to the C152 pilot had been key in the resolution of the confliction. Members were heartened to hear that the Exeter controller had passed this Traffic Information, even though the C152 pilot had agreed a Basic Service, and commended the controller for his professionalism in persisting with Traffic Information calls until the C152 pilot reported visual. ATC members also noted

¹ SERA.3205 Proximity.

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

that London Information is operated by FISOs, not qualified or rated to use radar surveillance, and that Traffic Information could therefore never have been passed by them to the Lynx formation.

When considering the pilots' actions, members noted that the Lynx formation had elected to use London Information for their transit to Yeovilton. In harmony with Navy HQ's comments, members questioned whether the London Information frequency was the most appropriate one to use for routine operations when local ATC agencies were available and were more likely to be also talking to other relevant aircraft in the area; in this vein, they also agreed with Navy HQ that, in the circumstances presented, the Exeter frequency may have been more appropriate. The Board noted that the Exeter controller had first passed Traffic Information to the C152 pilot some 1½min before CPA, although it was not known whether the C152 pilot heard or assimilated this first call. In any case, the Exeter controller passed Traffic Information about 10sec later and again about 30sec before CPA. The C152 pilot saw both Lynx, in trail formation, and turned right to avoid the lead aircraft, (who's pilot did not see him). In doing so, the C152 passed <0.1nm from the trail Lynx, with both pilots reporting co-altitude. Members agreed that the C152 pilot was obliged to give way to the Lynx formation, and they pointed out that he had had the opportunity to do so well before CPA by using the Traffic Information he had first been passed by the Exeter controller; the Board opined that changing his course or altitude at that point could well have increased separation to the point where an Airprox was avoided altogether.

In the event, both the C152 and Lynx pilots took avoiding action indicative of a late sighting, which the Board found to be the cause. Members were not unanimous in their assessment of risk, but decided by a majority that, although effective action had been taken to prevent aircraft colliding, it had not been timely and safety margins had been much reduced below normal.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by both pilots.

Degree of Risk: B.