

AIRPROX REPORT No 2012172

Date/Time: 28 Nov 2012 1025Z

Position: 5108N 00249W
(RNAS Yeovilton 320°/10nm)

Airspace: Yeovilton AIAA (Class: G)
Reporting Ac Reported Ac

Type: Lynx Mk 8 Beech 76

Operator: RN Civ Trg

Alt/FL: 2100ft 2000ft
RPS (1008hPa) RPS (1008hPa)

Weather: VMC CLBC VMC CLBC

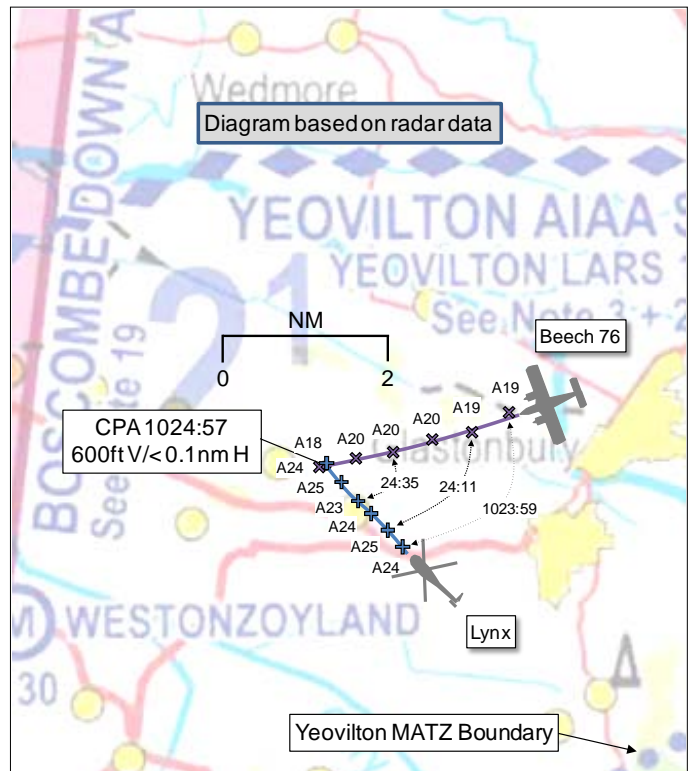
Visibility: 25km 10km

Reported Separation:

100ft V/0ft H 100m V
500-1000m H

Recorded Separation:

600ft V/<0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE LYNX MK 8 PILOT reports conducting a partial Air Test following ac maintenance. He was operating under VFR in VMC, 400ft below cloud, in receipt of a BS from Yeovilton APP [234.300MHz]. The grey camouflaged ac had navigation and anti-collision lights selected on. The SSR transponder was selected on with Modes A and C. The ac was not fitted with a Mode S capable transponder or an ACAS. He stated that, immediately after 'setting up' to test one of the engines, heading 335° at 100kt and altitude 2100ft, he saw a white and red/orange coloured, low-wing, twin-engine 'civilian' ac in his R 3 o'clock position on a closing course. He immediately assessed there was no risk of actual collision so elected to remain 'straight and level'. Approximately 1-2sec later the conflicting ac, which also remained straight and level, passed directly below him with 100ft V separation.

He assessed the risk as 'High'.

He stated that cockpit workload was moderate but did require both crew to look inside to verify switch selections. He also stated that he had elected not to take a TS, based on the level of RT traffic on Yeovilton APP frequency.

THE BEECH 76 PILOT reports instructing a CPL VFR navigation exercise. He was PNF in the R seat, with PF, the student, occupying the L seat. He was operating under VFR in VMC, 500ft below cloud, the PF being in the process of establishing a BS with Yeovilton LARS. The white and red ac had navigation and strobe lights selected on, as was the SSR transponder with Modes A and S. The ac was not fitted with an ACAS. The PF had descended from altitude 2500ft to altitude 2000ft due to weather ahead when the Instructor saw a Lynx helicopter in his L 10 o'clock position at a range estimated at 10km. He considered that the student was 'late in asking for a BS from Yeovilton' but that, as an instructor, he sometimes had to 'sit and watch to see how long it takes'. He stated that 'they were always N of Yeovilton' but that they were also in the Yeovilton AIAA. He assessed the student lookout as 'poor', that it was safe to maintain track of approximately 270° at 135kt and that, being on the R, he had right of way, albeit that both parties had to be visual to 'implement this'. When he deemed it unsafe to continue he took control and descended to avoid the Lynx, which he lost sight of but judged had passed behind.

He assessed that there was no risk of collision.

[UKAB Note(1): The RNAS Yeovilton weather was reported as follows:

METAR EGDY 280950Z 34011KT 9999 FEW010 SCT025 OVC030 06/01 Q1016 BLU NOSIG

METAR EGDY 281050Z 35011KT 9999 FEW010 SCT025 OVC030 06/01 Q1016 BLU NOSIG]

THE LYNX SQUADRON OCCURRENCE MANAGER reports that the Airprox occurred because of a lack of SA. He stated that crews are being strongly encouraged to request an ATS commensurate with the weather conditions and task in hand.

THE YEOVILTON APPROACH CONTROLLER reports that the Lynx pilot, positioned approximately 15nm N of the A/D, was in receipt of a BS. He was in the process of handing over two separate ac, positioned approximately 15nm S of the A/D and under TSs, to a fighter control agency when the Lynx pilot transmitted that he would like to report an Airprox. He then observed a contact in the vicinity of the Lynx, at a similar level. This contact then descended and was seen to change squawk to a Yeovilton LARS squawk. Shortly after the incident the Lynx pilot upgraded his ATS to a TS.

[UKAB Note(1): The Yeovilton APP RT Transcript is reproduced below:

To	From	Speech Transcription	Time	Remarks
VL App	[Lynx C/S]	Approach, [Lynx C/S]	10:26:10	
[Lynx C/S]	VL App	[Lynx C/S], Yeovil Approach, standby	10:26:12	
Freddie	VL App	Own navigation, squawking one seven six one	10:26:14	Landline Call resumed
VL App	Freddie	Contact	10:26:17	
Freddie	VL App	Climbing flight level one six zero, traffic service	10:26:18	
VL App	Freddie	Climbing flight level one six zero, traffic service, Amber one identified, contact Freddie channel eight, back up channel nine	10:26:20	
Freddie	VL App	Channel eight, back up channel nine, roger, Approach	10:26:27	
Amber 1	VL App	Amber one, contact Freddie channel eight, two four zero decimal four	10:26:31	
VL App	Amber 1	Amber one, channel eight	10:26:40	
Amber 1	VL App	Amber one, back up channel nine	10:26:42	
VL App	Amber 1	Copied	10:26:44	
[Lynx C/S]	VL App	[Lynx C/S], Yeovil Approach, pass your message	10:27:26	
VL App	[Lynx C/S]	[Lynx C/S], I'd like to report an Airprox, I've got a position, height and details for you	10:27:27	
[Lynx C/S]	VL App	[Lynx C/S], roger, standby	10:27:38	
[Lynx C/S]	VL App	[Lynx C/S], Yeovil Approach, go ahead	10:27:48	
VL App	[Lynx C/S]	Yeah, err, we were at two thousand one hundred feet, one double oh eight set, in position north five one zero eight decimal six, west zero zero two four nine decimal two at ten twenty five exactly local, a, err, twin engine, white aircraft, flew directly underneath us, about a hundred foot separation. Our track three three zero, he was tracking south westerly	10:27:51	
[Lynx C/S]	VL App	[Lynx C/S], roger, many thanks, I have the details.	10:28:25	
VL App	[Lynx C/S]	Roger, we'll give you a ring when we get back	10:28:28	
[Lynx C/S]	VL App	[Lynx C/S], roger.	10:28:30	

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THE YEOVILTON LARS CONTROLLER reports that [the subject Beech 76] free-called Yeovilton LARS [127.350MHz] and requested a service. He agreed a BS and issued a squawk. He was then asked by someone else in [the subject Beech 76] to 'standby' because they were avoiding a conflicting ac. He looked at the radar display and noticed a 7000 conspicuity code in the vicinity of a recognised Yeovilton APP squawk. Once [the subject Beech 76] was established in a 'safe area', he was then asked to repeat his last message.

[UKAB Note(2): The Yeovilton LARS RT transcript is reproduced below:

To	From	Speech Transcription	Time	Remarks
VL Lars	[Be76 C/S]	Yeovilton Radar, [Be76 C/S fragment], err, [Be76 C/S fragment], err, request MATZ penetration.	10:23:52	
[Be76 C/S]	VL Lars	[Be76 C/S], Yeovil Radar, pass your message.	10:24:00	
VL Lars	[Be76 C/S]	[Be76 C/S], err, Beach Seventy Six, from Bournemouth to Bournemouth we are, err, north of Bridgewater to err west of Bridport, err, currently, err, south of err Wells, err, one, err, two thousand err feet, QNH one zero zero eight, request MATZ penetration.	10:24:04	
[Be76 C/S]	VL Lars	[Be76 C/S], roger, squawk zero two four four, basic service, Portland regional is one zero zero eight.	10:24:37	
VL Lars	[Be76 C/S]	Say again, sorry, [Be76 C/S], just descending for the Lynx.	10:24:46	
[Be76 C/S]	VL Lars	Roger	10:24:50	
VL Lars	[Be76 C/S]	Clear of the Lynx, say again please, [Be76 C/S].	10:24:53	
[Be76 C/S]	VL Lars	[Be76 C/S], roger, squawk zero two four four, Portland regional one zero zero eight.	10:25:56	
VL Lars	[Be76 C/S]	Zero two four four, [Be76 C/S]	10:25:02	

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HQ NAVY COMMAND comments that this Airprox occurred between two ac operating VFR in receipt of a BS from Yeovilton ATC, albeit two different controllers. The Beech 76 had not yet been identified as they had only just called the LARS controller and the Approach controller had prioritized his attention to the TS ac under his control. This meant that no warning of proximity was passed to either ac, however both saw each other in time and avoided a collision. Both crews report 'mission focus' by being either 'eyes in' the cockpit or allowing the student pilot to have rein, and the Lynx Squadron Occurrence Manager states that crews are encouraged to request the most appropriate ATS. Collision was averted by the sighting of both ac, albeit somewhat late by the Lynx crew.

[UKAB Note(3): RoA, Rule 8 (Avoiding Collisions) states:

(1) Notwithstanding that a flight is being made with air traffic control clearance it shall remain the duty of the commander of an aircraft to take all possible measures to ensure that his aircraft does not collide with any other aircraft.

(2) An aircraft shall not be flown in such proximity to other aircraft as to create a danger of collision.

...

(4) An aircraft which is obliged by this Section to give way to another aircraft shall avoid passing over or under the other aircraft, or crossing ahead of it, unless passing well clear of it.

(5) ..., an aircraft which has the right-of-way under this rule shall maintain its course and speed.

...

RoA Rule 9 (Converging) states:

...

(3) ..., when two aircraft are converging in the air at approximately the same altitude, the aircraft which has the other on its right shall give way.

RoA Rule 11 (Overtaking) states:

(1) ..., an aircraft which is being overtaken in the air shall have the right-of-way and the overtaking aircraft, whether climbing, descending or in horizontal flight, shall keep out of the way of the other aircraft by altering course to the right.

(2) An aircraft which is overtaking another aircraft shall keep out of the way of the other aircraft until that other aircraft has been passed and is clear, notwithstanding any change in the relative positions of the two aircraft.

...]

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequencies, radar photographs/video recordings and a report from the helicopter operating authority.

The Board first considered the actions of the two pilots. The JHC Member opined that the Lynx pilot knew the air-test would involve more than normal in-cockpit activity and consequently that his lookout would be degraded, exacerbated by the Lynx Mk 8 only having flying controls for the single pilot. He would therefore have been better served by using a TS or DS. Planning for this level of service would have been a useful part of his pre-flight preparation, especially with regard to risk mitigation, and may even have led him to make the decision that provision of such a service was an essential requirement to undertake the air-test. Turning to the Beech 76, a civilian Pilot Member commented that an instructor did have to give his student time to complete procedures that were necessarily limited in tempo by the student's inexperience, but the dividing line between achieving a valuable learning exercise and continuing to the detriment of safety could be a fine one. Some pilot Members opined that the Beech 76 instructor had taken control too late to avoid the Lynx by a margin sufficient to avoid causing the Lynx pilot concern. Both pilots were operating in class G airspace and had equal responsibility to 'see and avoid'. The Beech 76 instructor correctly assessed that he had right of way, but the Board emphasised that both pilots were responsible for collision avoidance. In this case the Beech 76 pilot had achieved collision avoidance but it was felt that he would have been better served by not passing almost directly beneath the Lynx.

It was apparent from the radar recording that the 2 ac were separated by some 600ft at the CPA. Nevertheless, the Lynx pilot was sufficiently concerned to file an Airprox. The Board opined that the Lynx pilot's concern was due to his late sighting and consequent surprise at the proximity of the Beech 76 and that the Beech 76 instructor had taken effective and timely action to avoid a collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Late sighting by the Lynx pilot.

Degree of Risk: C.