

AIRPROX REPORT No 2011013

Date/Time: 9 Feb 2011 1113Z

Position: 5101N 00238W
(Yeovilton RW09 - elev 75ft)

Airspace: MATZ/ATZ (Class: G)

Reporting Ac Reported Ac

Type: Lynx Mk8 Hawk T Mk1

Operator: HQ Navy HQ Navy

Alt/FL: 10ft 100ft↓
QFE (1003mb) QFE (1003mb)

Weather: VMC NR VMC CLOC

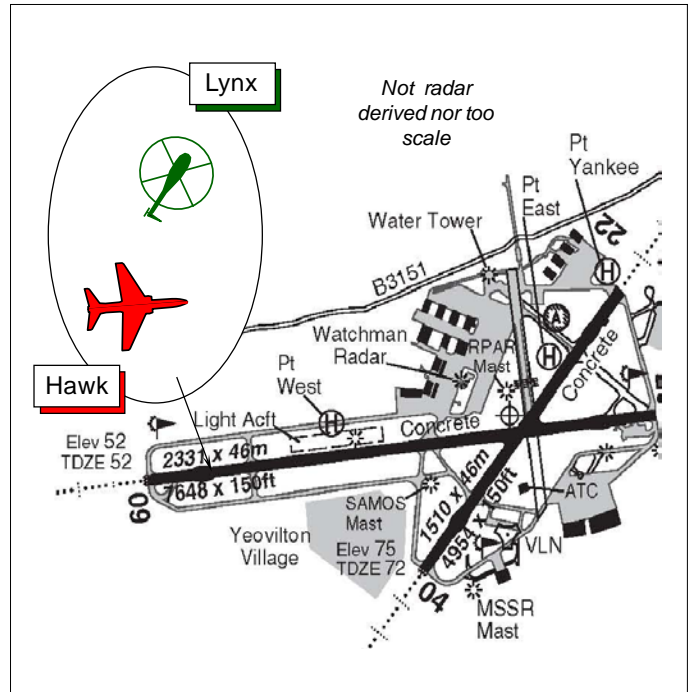
Visibility: 10km 15km

Reported Separation:

>50m Nil V/30m H

Recorded Separation:

Not recorded



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE AGUSTA WESTLAND LYNX Mk8 HELICOPTER PILOT reports he was returning to Yeovilton from Culdrose and had completed a PAR to RW09 at Yeovilton in VMC. At DH he was transferred from TALKDOWN to the TOWER frequency, the clearance to land was reiterated with the instruction to continue along RW09 to exit at RW04 for Yankee dispersal. After reading back these instructions, TOWER then requested him to vacate RW09, to the L across the grass, because of a Hawk turning Final to Land. He repeated back TOWER's instructions and turned L at 15kt hoverslipping towards the northern parallel taxiway at a height of 10ft QFE (1003mb), about 200m beyond the threshold of RW09. During the L turn his observer, occupying the LH Seat, informed him the Hawk was directly over the RW09 threshold. He expeditiously vacated the runway as the Hawk landed and passed >50m astern from L – R with a 'medium' Risk of a collision. He reported the Airprox to the Duty Air Traffic Control Officer (DATCO) by telephone after landing.

His helicopter has a grey colour-scheme; the landing lamp (directed forward) and the red anti-collision light situated on the tail were switched on.

THE BAe HAWK T Mk1 PILOT reports he was the Captain and PF at the completion of a local training sortie from Yeovilton.

Whilst flying in the visual cct to RW09 he became aware of a Lynx helicopter flying a PAR to the runway in use. As he flew downwind he saw the Lynx from a range of 3nm approaching the runway threshold. His 'Final gear down' call resulted in a 'continue' from TOWER. Whilst descending wings level at about 150ft QFE, the Lynx crew called 'vacated' on the RT and he was given clearance to land by TOWER whilst he was still above 100ft QFE. The Lynx helicopter was well clear of the runway to the Northside 'on the deck' and he landed normally heading 090° at 120kt. At no point was there a Risk of collision. He estimated the minimum horizontal separation as 30m as he passed astern of the helicopter.

His ac has a black colour-scheme; the 2 HISLs and the nose light were on. The assigned squawk was selected with Mode C; neither TCAS nor Mode S are fitted.

THE REAR SEAT HAWK PASSENGER (a Harrier QWI) reports he saw the Lynx on short finals to RW09 as the Hawk Captain flew downwind. The Hawk Captain configured the ac for landing and commenced the finals turn for RW09. As the Hawk Captain rolled out on the RW heading, the Lynx was vacating the runway. With a height of 100ft indicated on the Hawk's altimeter the Lynx had vacated the runway and Yeovil ATC issued the Hawk Captain clearance to Land. Their Hawk touched down and decelerated as the Lynx remained hovering clear of RW09, over the grass to the N of the RW. The Lynx was clearly visible throughout their final approach and landing; at no time was there a Risk of collision.

THE HAWK PILOT'S UNIT commented that having debriefed the Hawk Captain at length they were content that no risk of collision existed & there was no breach of local orders. However there was a perception from the Lynx crew that this could have been the case and they were, therefore, right to highlight their concerns.

THE YEOVILTON ATC LOCAL EXAMINING OFFICER (LEO) reports that the Weather State Colour Code (CC) was WHITE and the Forecast CC WHITE [Vis >5km; Cloud SCT > 1500ft QFE].

On this occasion there was a trainee in the ADC position (TOWER) and also a trainee on DIRECTOR, so 2 controllers were afforded higher levels of traffic and more challenging controlling. There were 2 Hawk ac in the visual cct to RW09 and the Lynx was conducting a PAR to the duty runway – RW09. The subject Hawk pilot called Downwind and was advised using standard ATC liaison and RT phraseology that the Lynx on PAR was ahead for the runway. At 1111:49, the Lynx crew called TOWER from TALKDOWN and were told to vacate L along RW04/22 for Y dispersal, which by 1112:04 had been read-back. At 1112:07 the Hawk pilot called Final, whereupon the Lynx crew was asked at 1112:09 by TOWER if they could vacate the runway onto the grass for the Hawk behind. The Lynx crew agreed, read-back the instruction by 1112:16; the Hawk pilot was told to Continue. At 1112:36, Hawk pilot was given a clearance for the runway and immediately after the read-back by the Hawk pilot, the Lynx crew was instructed to continue with GROUND.

The trainee TOWER controller and his instructor report that they both visually confirmed that the Lynx was clear of the landing area, prior to issuing the clearance to the Hawk pilot. The Lynx crew did not report runway vacated on the RT; however, immediately after the Hawk pilot was given his clearance to land, the Lynx was transferred to GROUND for his air taxi to dispersal.

Clearances to use landing areas are not given by controllers until after a visual check of the landing area has been conducted, regardless of whether an ac has called runway vacated or not, as this call is only ever used as a back up to a visual observation by the controller from the VCR. The DATCO also had full SA and was also content that the Lynx had vacated the landing area.

JSP550 at R307.125.6 states that:

‘..aircraft shall move clear of the landing area as soon as it is safe to do so.’

Yeovilton Aviation Orders (YAvOs) at 0213.6 states that a FW pilot will initiate his own ‘go around’ by 100ft if he is not in receipt of a clearance from ATC. Thus we can deduce that when the clearance was issued by TOWER at 1103:53, the Hawk should have been higher than 100ft. Additionally, JSP 552 at 310.160 requires that the Runway Caravan Controller fire a red very cartridge (refusing an ac permission to land) if he believes that there is a definite risk of collision or if the path of the oncoming ac is obstructed. No red very cartridge was fired, therefore the caravan controller also deemed there to be no risk of collision or obstruction on the runway.

Although given a positive clearance by ATC, one must assume that the Hawk pilot would not have chosen to continue his approach if the Lynx was still on the runway and a Risk of collision existed.

The Lynx pilot's ASIMS report states that his helicopter was taxiing. An aircraft taxiing from the runway is defined by ICAO as:

'upon exiting the landing runway and terminates upon arrival at the gate, ramp, apron, or parking area, when the aircraft ceases to move under its own power.'

By this definition, if the Lynx was indeed taxiing as stated, then he had exited the landing runway and consequently the landing area was fit for use by the Hawk.

There was no breach of YAvOs and no breach of ATC procedures. The Hawk had been given a positive clearance to use the landing RW surface, which it seems the Lynx captain had not heard. The Hawk pilot was visual with the Lynx at all times, as he was No2 to the Lynx landing ahead. Additionally the Lynx crew was told on their landing clearance that there were 2 Hawks in the cct, so would have been aware that they were entering a busy traffic environment.

THE DEPUTY SENIOR AIR TRAFFIC CONTROL OFFICER YEOVILTON comments that he was a witness to the event in the VCR and therefore tasked another Local Examining Officer to investigate the Airprox. He fully supported the actions of the ATC personnel on watch at the time, who acted in accordance with YAvOs and the relevant regulations.

HQ NAVY COMMAND comments that the thorough investigation indicates that in this instance there was no Risk of collision and that no breach of regulations occurred. The Lynx captain reported that the Hawk was directly over the threshold whilst the Lynx was still occupying the runway; however, it would appear that the Hawk was in line with the runway, on a 'continue' from ATC and still above 100ft awaiting the runway to be vacated by the Lynx. ATC issued the Hawk with a clearance to land after they had visually assessed the runway to be clear. All parties were fully aware of the other aircraft's position and intentions in the minutes preceding the reported incident, with the Hawk pilot positioning his ac to take account of the Lynx ahead. The perception of the Lynx Captain was that they had been the subject of a Flight Safety occurrence, and are therefore fully supported in their decision to submit a report.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, a recording of the relevant RT frequency and reports from the appropriate ATC Unit and operating authority.

The Board agreed that if the Lynx Captain was at all concerned at the proximity of another ac in flight then he was not only duty bound to initiate an Airprox report, but was wise to do so. From the Lynx crew's perspective, they had complied promptly with TOWER's request to vacate RW09RHC onto the grass in order to expedite matters, but were concerned that they were still in close proximity to the runway when the Hawk, which they thought too close, was given a clearance to land. The Board noted that the estimate of the minimum horizontal separation given by the Lynx crew at 50m was more than the Hawk pilot's reported 30m. However, the Lynx crew would have lost sight of the Hawk as it passed from the observer's field of view to port, behind the tail and into the pilot's view to starboard as it landed. Conversely, the Hawk pilot had the helicopter in full view throughout. Moreover, the ATC Unit report from the LEO assured the Board that TOWER, who had full view of the runway surface, had checked that the Lynx was clear of RW09RHC before the Hawk pilot was given his clearance to Land. It was evident that the Hawk pilot was also content that the Lynx was clear of the runway when he received this landing clearance for the HQ Air pilot Member was in no doubt that the Hawk pilot would have executed a 'go-around' and not attempted to land if the helicopter had not been a safe distance from the runway surface he was about to land on. The Board also noted that the runway caravan controller appeared to have been content that the runway was clear because he did not intervene to send the Hawk around. However, the Board's discussion then centred on the parameters for a helicopter to be sufficiently clear of the runway to allow the jet to land with complete safety. The Board was briefed that civilian practice requires that an ac must have passed the holding/marshalling point for the RW in use for an ac to be considered to have vacated the RW. However, a helicopter's ability to hover taxi across an aerodrome unconstrained by fixed taxiways made this point somewhat open to interpretation. There was no equivalent military

regulation that applied in this instance, a point noted by the MAA Advisor, which required aerodrome controllers to use their judgement to exercise safe control over traffic within the manoeuvring area. This aerodrome is a well established mixed traffic environment with ATC well versed in accommodating fixed and rotary wing traffic. It was plain to the Members that both the Lynx crew and the Hawk pilot were complying with the instructions issued by TOWER, who were endeavouring to exercise expeditious but safe and orderly control over aerodrome traffic. Whilst it was not feasible to determine independently the geometry or the minimum separation that applied here, it seemed that the Lynx crew's report was based on their reasonably held belief that the Hawk was closer on final than it might have actually been. But it seemed to the Members that the Lynx crew's perspective, looking virtually straight-up the approach, had probably given a misleading perception of the Hawk's distance from touchdown when the clearance was issued. The Board was content that ATC had established that the Lynx was clear of RW09RHC when the Hawk pilot's landing clearance was issued. Therefore, the Members were unanimous in their agreement that this Airprox had resulted because of a perceived conflict by the Lynx crew. Moreover, the Board also concluded that established procedures had been followed, normal safety standards had been applied and had not been compromised in any way.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A perceived conflict by the Lynx crew.

Degree of Risk: E.