AIRPROX REPORT No 2011067

Date/Time: 1 Jul 2011 0909Z

Position: 5104N 00234W (5nm NE of Yeovilton A/D - elev 75ft)

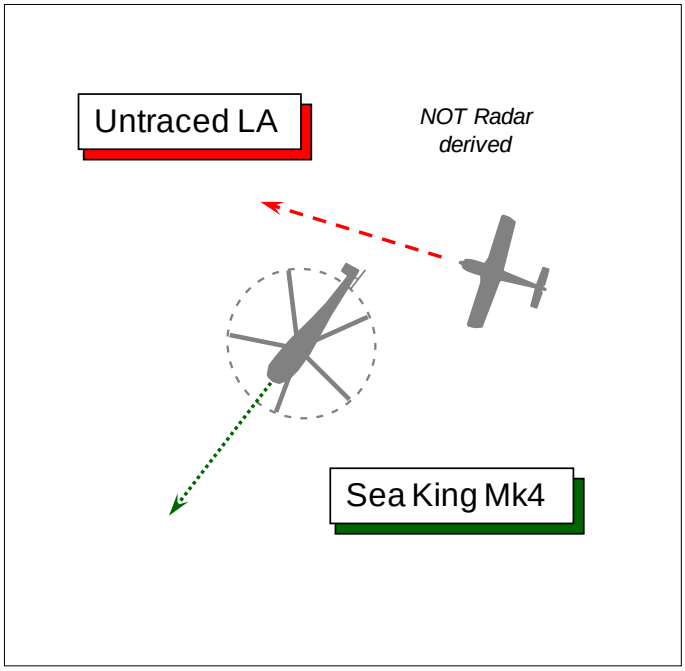
Airspace:	MATZ/AIAA	(*Class:* G)
	Reporting *Ac*	*Reported Ac*
Type:	Sea King HC Mk4	Untraced LA
Operator:	HQ JHC	NK
Alt/FL:	1200ft QFE (1026mb)	NR
Weather:	VMC NR	NK NR
Visibility:	25km	NR

Reported Separation:

Nil V/150-200m H NR

Recorded Separation:

Not recorded



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE WESTLAND SEA KING HC Mk4 HELICOPTER PILOT reports that he was executing a PAR to RW22 at Yeovilton and was in receipt of a Radar Control Service, he thought, from APPROACH (APP) on 295·075MHz. The helicopter colour-scheme is overall dark green, but the white HISLs and the nose lights were all on. Approaching 5nm Final, heading 220° at 70kt, level at 1200ft QFE (1026mb), a silver low-wing single-engine propeller-driven light ac (LA) passed about 150-200m astern of his helicopter at the same height from L - R. Although RADAR had primary radar contact on the unknown LA and was passing TI, he saw it late because the LA blended into the rising ground in the distance. The conflicting LA's flight path did not deviate throughout the encounter. He assessed the Risk as 'medium'.

An Airprox was later filed by telephone with ATC.

THE RADAR ANALYSIS CELL LATCC (MIL) (RAC) report that despite extensive tracing action, including contact with all aerodromes in the vicinity, the reported LA could not be traced.

UKAB Note (1): Subsequent to manoeuvring in the AIAA to the N of Yeovilton, the Sea King is shown intermittently on the Burrington Radar recording as an SSR contact only approaching 5nm Final for RW22 indicating 1000ft Mode C (1013mb), which equates to broadly 1390ft QFE (1026mb) before fading entirely. The unidentified LA is not evident at all on the radar recording.

UKAB Note (2): The Yeovilton AIAA is notified in the UK AIP at ENR 5-2-9, which promulgates intensive helicopter instrument flying training extending from the sfc to 6000ft ALT, with peak activity 0730-1500 UTC on Fridays in Summer. A LARS is available on 127·350MHz.

YEOVILTON ATC reports that the APP controller and RT voice recordings of the APP frequency support the sequence of events reported. The Sea King was vectored for a Short Pattern Circuit (SPC) PAR to RW22 at Yeovilton and was in receipt of a TS - not a RCS. The Sea King crew was instructed to descend to 1200ft QFE (1026mb), whereupon an intermittent radar contact was observed crossing the approach to RW27 at about 8-9nm E of the A/D before fading. The unknown contact then reappeared to the SE of the Sea King, about 4½ to 5nm away, tracking WNW'ly and

was called as being intermittent, possibly spurious, with no secondary radar information. The contact then faded from radar again, before reappearing 2nm SE of the Sea King still tracking WNW'ly; its position was passed again to the Sea King crew. As separation decreased to 1.5nm, TI was called again along with an assessment that it would pass behind the Sea King, whose crew finally became visual with the conflicting LA at a range of 0.5nm as it passed astern.

The Approach controller was also monitoring the Yeovilton VHF LARS frequency throughout, but did not receive any radio calls from any LA that could have matched the position of the conflicting ac. The Sea King crew continued with the PAR to RW22 without further incident.

The APP controller fulfilled his responsibilities regarding the provision of a TS, keeping the Sea King crew fully apprised of the relative position of the unknown conflicting LA until it had passed behind, therefore, no advisory avoiding action was offered.

SATCO YEOVILTON commented that the Unit investigation, supported by the RT recordings, indicate that this was a late sighting of an unidentified ac. The APP controller more than fulfilled the conditions of a TS, updating the Sea King crew several times that there was a possible ac tracking towards them, although there was no supporting information to confirm the validity of the primary contact. There are several small aerodromes and LA landing strips in the vicinity of Yeovilton and, whilst most GA operators do call on the LARS frequency, there are still some that do not.

HQ JHC comments that the poor airmanship displayed by the LA pilot who chose to operate on the extended centreline of a busy airfield at around the same altitude as the glide path, undoubtedly made an Airprox much more likely to happen. This Command considers that a mid-air collision with a light coloured small ac is a very significant risk. This Airprox indicates that the light aircraft community is probably not fully cognisant of the flying operations at Yeovilton.

HQ NAVY COMMAND comments that Yeovilton has for many years had close liaison with the GA community in its vicinity and it is surprising that the LA flew within the DUA and AIAA without calling Yeovilton LARS and is certainly not the norm. The actions of the APP controller were correct, with the LA called to the Sea King crew several times. Once again though it is noted that the correct procedure for initial reporting of an Airprox was not followed; UK AIP (Mil and Civil) ENR 1.14 (3.2.1) states that 'an initial report of an Airprox by a pilot should be made immediately by radio to the ATS unit with which the pilot is in communication'. Aircrew should be reminded of the need to follow this procedure so that the correct actions can be taken by ATC as soon as possible. This issue has been added to the agenda at the next Senior Pilots Meetings of both RNAS Culdrose and RNAS Yeovilton.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included a report from the Sea King pilot, radar video recordings, together with a report from the ATSU involved and the appropriate operating authority.

This Airprox occurred outwith recorded radar coverage, which hindered tracing action somewhat and despite the best endeavours of the RAC the LA pilot could not be identified. Furthermore, in the absence of any recorded radar data, the Board's assessment could only be made on the basis of the Sea King pilot's account coupled with the ATSU's report.

It was clear that the untraced LA had been spotted by the controller and TI passed on three occasions under the TS, which finally enabled the Sea King crew to sight the LA as it passed clear astern. Members understood that a LA of small cross-sectional area approaching on a constant relative bearing would be difficult to spot, despite the reported good visibility. Moreover, the Sea King pilot reports that the LA blended into the rising background terrain hindering earlier visual detection by the crew. It may be that the untraced LA pilot, who was required by the 'Rules of the Air' to 'give way' in this situation, had seen the larger helicopter in sufficient time to alter his course and pass clear astern. However, it would have been better airmanship if the LA pilot had contacted Yeovilton

on their LARS frequency whilst transiting through the AIAA adjacent to the MATZ. If he had, the LA pilot might well have benefited from a warning about the helicopter from ATC thereby giving earlier notice of the Sea King's presence that could also have mutually enhanced both pilots' SA. In the absence of his account, it was unclear if the LA pilot had definitely seen the Sea King. Therefore, based on the limited information available, the Board could only conclude that this Airprox resulted because the untraced LA pilot flew close enough to cause the Sea King crew concern.

The Board can only base its assessment on what had actually occurred and not what might have happened if circumstances had been slightly different. Nevertheless, this close quarters situation could have been prevented if the LA pilot had given the helicopter a wider berth. Despite the reported minimum separation, it seems that APP maintained a good flow of TI to the Sea King pilot and no avoiding action was taken, nor did the helicopter pilot break off his approach. In the absence of recorded radar data it was not feasible to confirm the minimum separation as the LA passed astern of the helicopter and the Board debated whether there was sufficient evidence available to enable the Members to reach a meaningful conclusion on the Risk. The majority view prevailed here and it was concluded that there was no Risk of a collision in these circumstances.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The untraced LA pilot flew close enough to cause the Sea King crew concern.

Degree of Risk: C.