

## AIRPROX REPORT No 2011050

Date/Time: 2 Jun 2011 0919Z

Position: 5107N 00032W  
(Dunsfold A/D - elev  
172ft)

Airspace: London FIR (Class: G)

Reporter: Dunsfold A/G

Type: 1st Ac Agusta 109 2nd Ac Sea King Mk4

Operator: NK MFTR/Civ Test

Alt/FL: NK 700ft  
QNH (NKmb)

Weather: NK NK VMC CLBC

Visibility: NK >10km

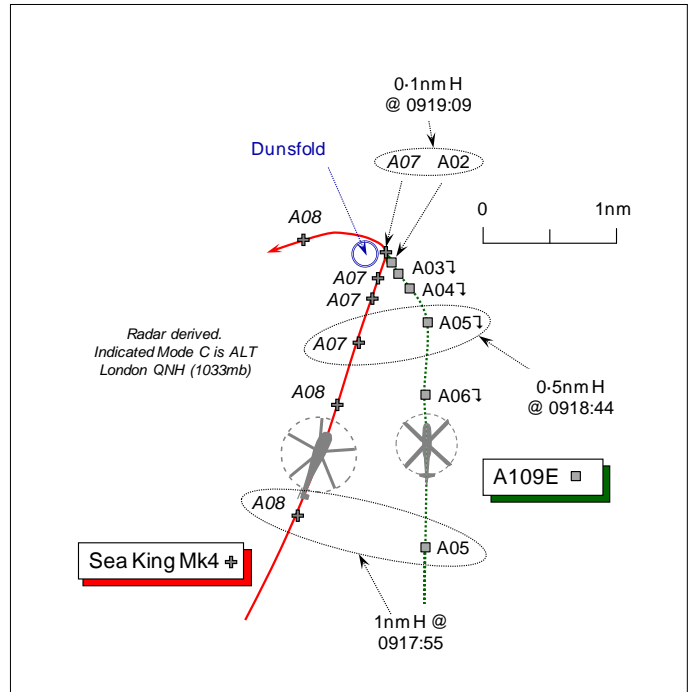
Reported Separation:

Dunsfold A/G: slightly higher  
NK 700ft V/1nm H

Recorded Separation:

200ft Min V @ 0.5nm H

0.1nm Min H @ 500ft V



## **A/G OPERATOR [CONTROLLER] REPORTED**

### **PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

**THE DUNSFOLD AIR/GROUND RADIO OPERATOR (A/G)**, who is also a licensed ATCO, reports that he was operating from the Control Tower at Dunsfold [situated S of the midpoint of RW07/25] on 119.100MHz when he became aware of a helicopter engine noise behind him. He looked around and saw a white coloured Agusta 109 (A109) helicopter approaching the southern aerodrome boundary at low level at about 400-500ft agl, which flew overhead the Tower descending steadily until it was obscured by the roof and he lost sight of it. As the A109 flew back into view again, he saw a large green Sea King helicopter that veered across ahead of the A109 from R to L, he perceived, at almost the same height, but slightly higher. The incident appeared to take place he thought at a height of about 100ft above the mid-point of the RW. Neither pilot called Dunsfold RADIO on 119.100MHz. The engine noise from the A109 flying above the VCR masked the sound from the Sea King helicopter, so he had seen it late, without any audible warning of its approach. The Sea King then made a slow turn in the Dunsfold overhead and departed to the NW at low-level.

The A109 landed next to a fuel bowser to the N of the RW and was met by an individual who began to refuel the ac once it had shut down. The bowser operator was expecting the A109 as he had received a text message from the pilot saying he was inbound, but the arrival of the A109 had not been notified to him as the A/G Operator. He called Farnborough RADAR immediately who advised that they were not talking to any traffic in the Dunsfold area. Another person who had been monitoring the A/G frequency on the ground also observed this occurrence, and at the time of the incident a high performance vehicle was using the RW for pre-arranged test runs. Subsequently, he went across the A/D to speak to the helicopter pilot and ask him if he was visual with the Sea King and to ask why he did not call on the A/G frequency – 119.100MHz. The A109 pilot's response was 'what helicopter' and stated that he had not called on the A/G frequency because he had 'forgotten it'.

Although the incident took place in Class G airspace at an unlicensed aerodrome without an ATZ, the A/G Operator perceived that both helicopters came within an unsafe distance of one another. This, combined with a non-sighting by the A109 pilot during a late stage of the approach and the omission of both pilots to call Dunsfold RADIO, especially when a high performance car was using the RW, led him to make this report.

UKAB Note (1): From a subsequent telephone conversation with the A/G Operator it seems that PPR approval had been given to the A109 pilot to operate at the A/D, but the A/G Staffs had not been informed.

**THE AGUSTA 109 PILOT's** company was contacted many times by the UKAB Secretariat, but to date no report has been provided.

**THE SEA KING PILOT** reports he had departed from Fleetlands, VFR and was conducting a post maintenance test flight in VMC whilst in receipt of a BS from Goodwood INFORMATION on 122.45MHz. The helicopter is coloured Dark Green with RN markings. The upper and lower white HISLs were on.

Flight safety critical systems (main rotor and tail rotor vibration levels plus both engine power performance indexes and max contingency levels etc) had been proven and were all within limits. At this stage of the flight they were testing the accuracy of the Doppler plot compared to the GPS plot prior to testing the ILS at Odiham and subsequently returning to Fleetlands. During the navigation plot check they routed to on-top Petworth, thence to on-top Dunsfold and to on-top the MID beacon.

Heading 260°, overflying Dunsfold at an altitude of 700ft at 90kt, his observer who was sat in the LHS, saw an A109 take off from the aerodrome below, he thought, that transitioned into their 7o'clock as they were heading W, the A109 appeared also to be heading W. There was no conflict hence they maintained a steady heading, altitude and speed whilst his observer continued to call out the A109's position by clock code, which remained in their 7o'clock. Since the A109 had just transitioned, his Sea King's speed was greater so they waited until there was sufficient lateral separation before turning SW to route towards the MID beacon. He estimated the minimum horizontal separation from the small helicopter as 1nm and the Risk 'none'.

**ATSI** reports that the Airprox occurred in the vicinity of Dunsfold A/D, in Class G airspace between the A109 and a Sea King Mk4 helicopter.

Dunsfold provide an A/G Service without an ATZ. Neither helicopter crew was in communication with Dunsfold RADIO. The written report from the pilot of the Sea King indicated that he was in communication with Goodwood INFORMATION. Goodwood provide a FIS, but the incident was not reported to them and no RT recording was available.

The Gatwick METAR for 0920 UTC: VRB08KT 9999 SCT034 20/11 Q1034=

Goodwood provide a FISO service and provide TI to ac flying in the vicinity of Goodwood aerodrome. It is not clear why the Sea King remained on the Goodwood frequency.

UKAB Note (1): At 0918:44, the radar recording shows two contacts separated by 0.5nm, approaching the southern boundary of Dunsfold A/D. The Sea King is the westerly of the two contacts squawking A7000 and indicating an altitude of 700ft unverified Mode C London QNH (1033mb); the easterly contact - the A109 - is at an altitude of 500ft unverified Mode C London QNH. The two helicopters converge and at 0919:09, the distance between the two ac is 0.1nm, with Sea King indicating an altitude of 700ft and crossing ahead of the A109 from the latter's L to R; meanwhile the A109 has slowed and indicates an altitude of 200ft. The Sea King then turns and departs to the W at an altitude of 800ft. The A109 is last shown at an altitude of 100ft and shortly afterwards this contact fades from radar overhead Dunsfold A/D.

## **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available included a report from the A/G Station operator, a report from the Sea King pilot, radar video recordings, together with a report from the ATC authority.

Whereas the Board normally receives reports from pilots or controllers, this was an unusual Airprox insofar as it had been originated by an A/G operator. There were, however, precedents for this and the Board recognised that the A/G Station operator involved here is also a licensed ATCO. Furthermore, the initial review of the occurrence had revealed some significant issues worthy of investigation. The Board was briefed that, despite repeated requests through the company, the A109 pilot had not provided a report. Consequently, Members were denied the A109 pilot's perspective on this Airprox and could, therefore, only base their assessment on the limited information available. Board Members expressed their disappointment at the lack of timely action by the company and the absence of a report from the A109 pilot, which prevented the Board from making a full assessment of the incident.

It was plain that neither of the pilots involved had established two-way RT communication with Dunsfold RADIO on their published frequency, thus the A/G operator was not aware of either flight before they flew into view. Whilst recognising that Dunsfold was now an unlicensed aerodrome with no ATZ and offering only limited ATS facilities, Members familiar with this area are aware that it is still used extensively by a broad range of ac operators. Moreover, other activities not compatible with aviation evidently occur on the A/D. Pilots need to be aware of what is happening, what other ac might be operating in the vicinity and where they can operate safely, which is best accomplished by operating on the frequency established for that purpose. To that end any pilot operating into the A/D, or in the immediate cct area, should be in contact with Dunsfold RADIO, to ascertain information useful for the safe and efficient conduct of the flight. Although the A109 pilot should have been able to see, cross cockpit, the larger dark green Sea King to port, the A/G operator's report suggested that the A109 pilot was unaware of the close proximity of the Sea King as he made his approach; whilst there was no reason to doubt the veracity of the A/G Operator's report, this could not be substantiated without the pilot's account. Therefore the Board agreed that the first part of the Cause was, probably a non-sighting by the A109 pilot.

From the Sea King pilot's comprehensive account, it was evident that he had not detected the presence of the smaller A109 to starboard as they approached Dunsfold from the S and it was not until their Sea King turned westbound over the A/D that the A109 was seen. Moreover, his observer had not realised that the A109 was landing; when spotted, it was most probably positioning across the main RW to the N side for refuelling before it was obscured from view as it drew aft. Since it had not been seen beforehand, it was presumed to be departing from the A/D. The Board was briefed that subsequent discussions with the Sea King pilot had revealed that on previous flights he had attempted to establish communications with Dunsfold RADIO, but two-way RT had proved somewhat erratic, the pilot suggesting that the operator might be using a hand-held VHF radio. Even though communication might be difficult, and it was accepted that the test flight was an intensive task, helicopter pilot Members opined that better airmanship was always to call on the RT when operating in the immediate vicinity of an A/D, otherwise remain clear of the cct area, as is required by the 'Rules of the Air'. The HQ JHC Member said that it was normal practice for test flights from Boscombe Down to obtain an ATS and other pilot Members agreed that the acquisition of a service, perhaps even a radar service from Farnborough, would be a useful adjunct to the crews' visual scan on high workload test flights. Controller Members recognised that Farnborough LARS would not be able to offer much of a radar service at the altitudes reported here, but in this locale they could probably provide a more useful ATS than Goodwood INFORMATION; Gatwick was suggested as another helpful ATSU who might afford a service. Regarding the actual encounter, the recorded radar data clearly shows the A109 passing to starboard and no less than 200ft below the Sea King whilst approaching Dunsfold A/D. The A109 was there to be seen forward of the beam from a range of 1nm the radar recording reveals and broadly in the Sea King pilot's field of view from that point. Therefore, the Board concluded that the other part of the Cause was, effectively, a non-sighting by the Sea King crew.

Some perceived that this was a Risk bearing Airprox because both ac were flying towards the same point on converging tracks at close quarters, both pilots being unaware of the other helicopter it would seem. Any separation that did exist was thus fortuitous. However, it was evident from the radar data that the A109 was always below the Sea King before it commenced final descent to land on the A/D, and at the point of minimum horizontal separation as the Sea King turned overhead the recorded Mode C, albeit unverified, indicated it was 500ft above the A109, not the 100ft perceived by the A/G operator. This convinced other Members that any Risk had been effectively removed. Although the Board was content to assess the Cause of this Airprox, further discussion then ensued as to whether there was sufficient evidence available to enable the Members to assess the Risk of collision. Moreover, it is not within the Board's remit to consider the safety implications of any conflict with a vehicle that might have been using the RW when the A109 landed. Following a wide ranging debate, Members concluded that without an account from the A109 pilot there was insufficient information available to reach a meaningful conclusion on the inherent Risk.

**PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: Effectively a non-sighting by the Sea King crew and probably a non-sighting by the A109 pilot.

Degree of Risk: D.