

AIRPROX REPORT No 2011019

Date/Time: 15 Mar 2011 1151Z

Position: 5146N 00156W
(2nm N Cirencester)

Airspace: Lon FIR (Class: G)

Reporting Ac Reported Ac

Type: Merlin DA42

Operator: HQ JHC Civ Comm

Alt/FL: 3000ft 4000ft
(QFE 1003mb) (1013mb)

Weather: VMC CLAC VMC

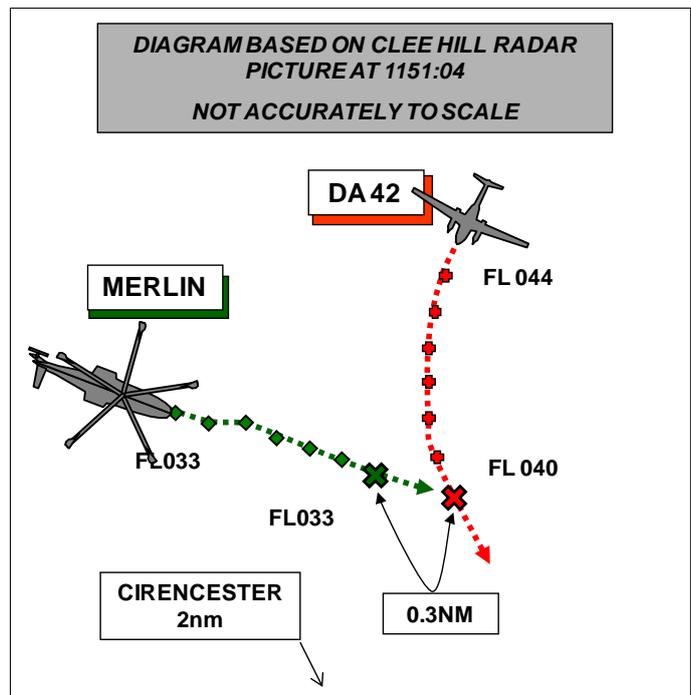
Visibility: 10km NR

Reported Separation:

300ft V/500m H NR

Recorded Separation:

700ft V/0.3nm (540m) H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE MERLIN PILOT reports flying a green helicopter with all lights switched on, squawking with Mode C, but TCAS was not fitted. They were heading 110° at 120kt above cloud, in receipt of a TS from Brize Norton APP and were being given radar vectors for an ILS approach, when an ac was seen manoeuvring to the S in the vicinity of Kemble aerodrome. Shortly after, while in a high workload situation preparing for the approach, a white twin-engine, high-tail ac, believed to be a DA42, was then seen high in their 11 o'clock passing from left to right in front of them; the DA42 was assessed to be about 300ft above and separated 500m laterally and they considered it to be a late spot by the LHS pilot. They received no information from Brize APP about the ac until they pointed it out to the controller.

He assessed the risk to be high and reported the incident to Brize APP on the frequency in use.

THE DA42 PILOT reports that he was made aware of the Airprox by Brize Radar after he had returned to Lyneham. He was told that a Merlin at 3000ft reported having an Airprox with him but he informed Brize that in that area he was never lower than 4000ft [FL40] so it must have been another ac.

At the time he was cruising at 120kt in good weather, heading 145° squawking with Modes C & S, changing between ATC units. At no point did he receive a traffic warning from the ac Traffic Warning System [TCAS 1] nor did see any traffic. He was asked to call NATS, which he did and he was told that the highest the Merlin reached was 3300ft and the lowest he went was 3900ft.

HQ 1GP SM BM reports that this Airprox occurred between a Merlin HC3 inbound to Brize Norton for an ILS and in receipt of a TS from Brize APP and a DA42 operating VFR to the W of the Brize CTR.

The Merlin was identified and placed under a TS, reduced as Brize were operating SSR only. The Brize Norton SSR update rate is 8RPM, which equates to one sweep every 7.5sec.

At 1149:23, the DA42 was approximately 5.6nm E of the Merlin, descending through 6000ft in a LH turn, with the Merlin maintaining 3300ft (SSR Mode C), which it does throughout the period. At some point after 1149:26, APP commenced a handover of the control position to another controller. The

handover was not recorded on the desktide recording, nor has it been possible to determine what information the incoming controller received. The first APP controller was a trainee being screened by an experienced controller, whilst the second controller was fully validated in the position.

JSP 552 110.115.1 states, *'when handing-over a control position to another controller the off-going controller is to brief his relief on the state of all surveillance and instrument aids; serviceability state of communication equipment; the traffic situation and any other relevant information'*.

At 1149:55 the DA42 rolled out of the left turn tracking W and then re-commenced the left turn at 1150:04, bringing it into conflict with the Merlin.

At 1150:55 it is clear that the handover of control position was complete since the voice recording showed a different voice as APP was liaising with TWR. It has not been possible to determine for how long this controller had assumed responsibility for the control position. At that point, the DA42 was 0.5nm E of the Merlin [at 3300ft] indicating 4100ft. The CPA occurred 1151:04 as the DA42 passed through the Merlin's 12 o'clock at 0.3nm and indicating 700ft above.

At no stage did APP pass TI to the Merlin on the DA42. The Supervisor stated that APP's workload was Med to Low and the Unit's workload High to Med; that said, in the lead-up to the incident, the trainee APP controller was involved in liaison with several agencies and would have been monitoring DIR's busy radar training cct in order to sequence their own traffic.

Notwithstanding the 'see and avoid' responsibilities of both pilots when operating in Class G airspace, while in receipt of a TS the Merlin should have been passed TI on the DA42. Even with the slower update rate of the SSR compared with the primary radar, the DA42 was in conflict for 51sec prior to the CPA descending to 4000ft and was 'there to be seen' by APP. From the subsequent actions of the second APP controller it is clear that he accepted the control position with the Merlin in conflict and the lack of action by both APP controllers suggests that the situation was not questioned.

Although this was primarily a sighting issue, the lack of TI from APP to the Merlin crew, caused by poor handover procedures between the APP controllers, was probably a contributory factor.

SATCO Brize Norton has reviewed the console position handover procedures at the Unit; he is content that this was an isolated incident and that controllers routinely operate in accordance with JSP 552 110.115.1.

HQ JHC comments that it is recognised that TI should have been passed to the Merlin pilot, but it remains the pilot's responsibility to 'see and avoid' whilst in receipt of a TS. In this case, the pilot considered it a 'late spot' and did not take avoiding action but assessed the risk of collision to be high.

While probably not a contributory factor in this case, it is noted that the reporting pilot stated that he was receiving a TS, whilst HQ 1GP BM SM stated that he was being provided a reduced TS due to Brize operating SSR only. It is assumed that both parties understood what service was being provided. However, when a pilot accepts a 'reduced TS, SSR only', it is assumed that he understands the implication that he will only receive TI on aircraft fitted with a serviceable transponder that is switched on. To reiterate this important difference, JHC HQ will publish a reminder to aircrew, highlighting what the term 'SSR only' actually means.

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 recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

As noted above, the HQ JHC Member informed the Board that there was a perception in the HQ that some pilots do not fully understand the significance of 'SSR Only' when applied to a TS and accordingly they had commenced an education programme; she suggested that this lack of understanding might not be confined to helicopter pilots.

Members noted that the Merlin had right of way, but it was suggested that since it was well below the DA42, its pilot (as inferred in his report) may not have considered there to be any conflict; in any case he was not aware of the incident and received no TCAS warnings. This incident was another case where the 'see and avoid' principle had not worked as the pilot with the onus to avoid did not see the opposing ac.

Members were unanimous in their opinion that, had TI been passed to the Merlin crew about the DA42, the crew would not have considered the incident to be an Airprox, even allowing for the DA42 being between frequencies and not receiving any warning about the former. That being the case, due to the significant separation extant, Members agreed that there had been no risk of collision. Members also agreed that, since the Merlin crew were operating under a TS, they should have been warned about the DA42.

The Board noted the HQ 1 GP BM SM report and the explanation for the TI not being passed by Brize ATC during the handover of the APP position and accepted that this had been a 'one off' occurrence caused by a misunderstanding, albeit one that should have been evident had the handover procedures stipulated in JSP552 been fully complied with.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: In the absence of TI, the Merlin crew was concerned by the proximity of the DA42.

Degree of Risk: C.