AIRPROX REPORT No 2013056

Date/Time: 27 Jun 2013 0800Z

Position: 5027N 00502W (2nm NW Newquay Airport)

Airspace: Newquay Airport ATZ(*Class*: G)

	Reporting Ac	*Reported Ac*
Type:	A319	DHC6
Operator:	CAT	CAT
Alt/FL:	1500 QNH (1031 hPa)	1000 QNH (1031 hPa)
Weather:	VMC CLBC	VMC CLAC
Visibility:	7km	10km
Reported Separation:	0ft V/1nm H	1000ft V/0.5nm
Recorded Separation:	600ft V/0.7nm H	

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE A319 PILOT reports lining up on RW30 for an IFR departure to the East with the aircraft's beacon, HISLs and landing lights switched on and transponder modes A, C and S on. Noting that the cloud-base was BKN at 400ft, the crew requested a Deconfliction Service on departure; they also noticed an aircraft on TCAS 3nm ahead and the Captain asked the First Officer to monitor it and attempt to gain visual contact with it. After take-off, at around 500ft, the crew received a TCAS TA [UKAB Note 1: the Tower controller also passed traffic information at the same time] and, as the other aircraft was around 2nm away and they could not see it, the Captain elected to make a VMC right turn. As the turn was commenced, the crew saw a twin turbo-prop aircraft in their left, 10 o'clock, 'less than 0.5nm away'. They continued their climbing right turn through the other aircraft's level and continued to climb away from it.

He assessed severity of the event as 'High' and the risk of collision as 'Medium'.

THE DHC6 PILOT reports planning a VFR, left hand down-wind join for RW30, under a Traffic Service from Newquay Approach. The white aircraft had strobes, navigation lights, landing lights and transponder modes A, C and S turned on. The crew noted that the cloud was clear of the coastline but had formed ½ to 1nm inland and, as the cloud was lower than they had expected on the down-wind leg, they positioned over the village of Watergate Bay, which would still allow a VFR down-wind join. As they positioned over Watergate Bay, the crew could see the threshold of RW12 and they asked the Approach Controller if they could join right-base for RW12; the controller informed them that the A319 about to depart RW30. Due to the departing aircraft and the cloud in the down-wind area, the crew requested an ILS approach for RW30; they were instructed to turn on to 140°, they thought, and commenced a climb. By this time the runway was visible and the crew were able to keep the A319 in sight as it took off and departed in a climbing right turn.

He assessed the risk of collision as 'None'.

THE TOWER CONTROLLER reports being informed by the Approach Controller that the DHC6 was inbound from the south-west for a visual down-wind join for RW30. Approach also issued a release for the A319 to depart with a right turn on track for DAWLY, climbing to FL190. The Tower Controller could not see any other traffic to affect the A319 on the Air Traffic Monitor (ATM) and so allowed the

aircraft to take-off. After departure, he saw the A319 make an early right turn and the crew transmitted that they were making the turn against a TCAS Traffic Alert. The controller informed the crew that they were expecting an aircraft to join down-wind left-hand for RW30; at this point the controller could not see the DHC6 but observed its squawk on the ATM, tracking south-east, climbing and in an appropriate position for a right-base join for RW12.

THE APPROACH CONTROLLER reports providing a Traffic Service to the DHC6 routing VFR inbound for a left-hand down-wind join for RW30; he had released the A319 for departure from RW30 with a right turn towards DAWLY. He noticed a fast moving contact 20nm south-east of Newquay, which he believed to be a fast-jet, which was climbing and could conflict with the departing A319. He turned his attention to a data system so that he could contact the fast-jet's controlling agency for co-ordination. On turning his attention back to the radar screen he was surprised to see the DHC6 on a northerly track, 3nm south-west of the airport, as if joining for right-base on RW12. The Approach Controller was about to call the DHC6 crew when they called him to request the surface-wind and a right-base join for RW12. The Controller passed the surface-wind but refused the right-base join and passed Traffic Information that the A319 was about to depart RW30. The DHC6 crew requested vectors for an ILS approach to RW30 and Approach instructed them to turn right on to 130° and climb to 2500ft.

Factual Background

The Newquay ATZ consists of a circle 2.5nm radius centred on the mid-point of RW 12/30 and extending to a height of 2000ft above aerodrome level (elevation 390ft).

The Newquay METAR at 0750Z was:

310 07KTS 7000 BKN006 13/13 Q1031

Analysis and Investigation

CAA ATSI Analysis

Background

CAA ATSI had access to Newquay RTF recording, Newquay and area radar recordings together with written reports from the Tower and Approach controllers and the pilots of both aircraft. Traffic levels were reported as light. CAA ATSI interviewed the Tower and Approach controllers. The two controllers were experienced controlling at Newquay and there were no reported distractions or unusual circumstances apart from the weather conditions. The sky was reported clear over the sea and coast with low cloud having formed half a mile inland.

Factual History

At 0749:40 the DHC6 contacted Newquay Approach reporting at 3000ft on QNH 1031hPa. The Newquay Approach controller acknowledged the call, *"(DHC6)c/s roger information golf er QNH one zero three one looking for you"*. The radar displayed the DHC6, 28.1nm southwest of Newquay squawking 1731, which had been code callsign converted on the Newquay radar display. The DHC6 pilot asked for the cloud base and visibility, which was passed as, *"Visibility seven thousand metres broken six hundred feet."* The DHC6 pilot responded, *"Okay I'll have a quick listen to golf and er but with that in mind we'd like a er Traffic Service and a visual downwind join to runway three zero please (DHC6)c/s"*. This was acknowledged by the Approach controller and then the DHC6 was identified, *"(DHC6)c/s identified Traffic Service own navigation for a downwind",* acknowledged correctly by the DHC6 pilot.

At 0750:20, the Approach controller notified the Tower controller,*"(DHC6)c/s looking for a Traffic Service for a downwind join"*. This was acknowledged by the Tower controller.

At 0751:51 the DHC6 requested a VFR descent and the Approach controller replied, *"(DHC6)c/s thank-you descend er visually and report the aerodrome in sight"* and the DHC6 pilot acknowledged, *"Descending wilco (DHC6)c/s"*.

At 0756:52 the Tower controller requested a release on the A319 and the Approach controller responded *"(A319)c/s released runway 30".* The DHC6 was 10nm west-south-west of the airfield indicating an altitude of 1200ft.

At 0758:25 the Approach controller contacted Western Radar and requested a joining clearance for the A319 joining CAS at DAWLY. There followed a short discussion regarding an aircraft squawking 6163 at FL150, 17nm east of Newquay and it was agreed that this contact was routeing towards Culdrose and was not a problem. Co-ordination was agreed for the A319 to climb FL190 routeing DAWLY with a squawk of 3770 and frequency 132.3MHz.

At interview the Approach controller indicated that he had then focused on 2 other aircraft climbing out from Culdrose which may have presented a potential conflict for the departing A319.

At 0758:58 the DHC6 was 5nm west of the airfield and the Tower controller cleared the A319 for take-off.

The DHC6 pilot's written report indicated that he planned to join downwind for RW30 and reported the cloud was clear off the coastline, but had formed approximately half a mile inland, and was lower than expected. The DHC6 pilot decided to route over Watergate Bay village at which point the threshold of RW12 became visible. [Watergate Bay is situated 1.3nm west of the end of RW30 and 0.7nm from the extended centreline of RW30].

At 0759:28 the DHC6 was 4nm west-north-west of the airfield at 1100ft and the following RTF exchange occurred:

DHC6	"*Newquay (DHC6)c/s what's your wind on the ground at the moment"*
Approach	*"Three three zero at five knots"*
DHC6	*"Any chance of er right base for one two"*
Approach	"*I've got the [A319 company prefix] just about to depart off runway three zero"*
DHC6	*"Okay in that case er we're going to turn right and request vectors ILS runway three zero please"*
Approach	*"(DHC6)c/s thank you turn right then please heading one three zero degrees"*
DNC6	*"Right one three zero (DHC6)c/s"*

At interview the Approach controller indicated that he had been monitoring the traffic to the south-west and had not realised that the DHC6 was within 5nm and approaching the ATZ without having called field in sight.

At 0800:09 the DHC6 had commenced a right turn, 3nm west-north-west of the airfield and was in a climb, passing 1400ft. The DHC6 was 0.9nm from the extended centreline of RW30 and the Approach controller instructed the DHC6 pilot to climb to an altitude of 2500ft, which was read back correctly as the DHC6 then entered the ATZ.

At 0800:26 the Tower controller notified Approach that the A319 was airborne on the hour. The A319 then appeared on radar passing 500ft with the DHC6 in the A319's 11 o'clock at a range of 1.8nm, indicating 1700ft as shown in Figure 1.

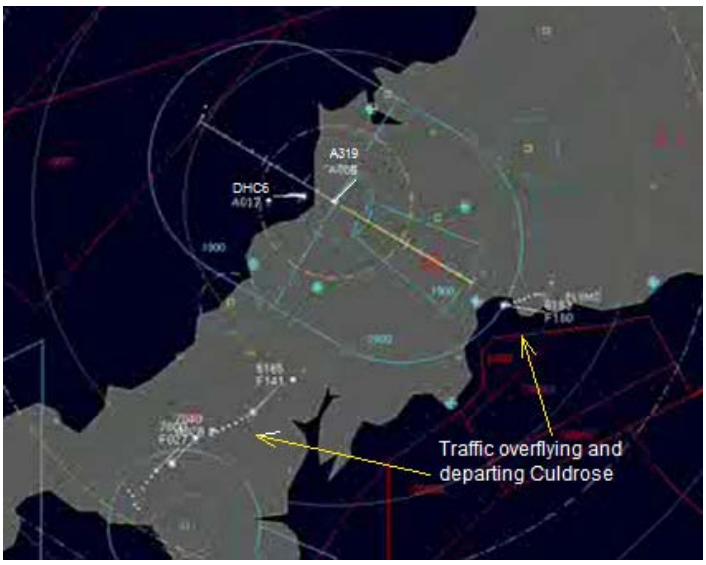

Figure 1 - Newquay Radar at 0800:26

The DHC6 had not completed the right turn and was still converging with the extended centreline. The Approach controller notified the Tower that the DHC6 was now positioning for an ILS approach. At this point the Mode C of the A319 faded from radar.

At 0800:29 the A319 pilot advised the Tower controller, *"(A319)c/s we've got TCAS traffic traffic er two miles ahead on our left"* and the Tower controller replied *"(A319)c/s there's traffic joining downwind routeing now for the ILS".* The A319 pilot replied, *"Roger he's on TCAS (A319)c/s."* The Tower controller responded *"Understood own navigation"*.

At 0800:42 the two aircraft passed abeam at a range of 0.5nm, with the DHC6 passing 1900ft. There was no radar Mode C readout for the A319 (Figure 2).

Figure 2 - Newquay Radar at 0800:42

The DHC6 pilot's written report indicated that he had the runway in sight and watched the A319 depart and then make a climbing right turn.

At 0800:53 the A319 faded from the Newquay radar display and then re-appeared at 0801:11, passing 2200ft. The Tower controller instructed the A319 pilot to contact Approach on frequency 133.4MHz. The A319 pilot replied, *"One three three four (A319)c/s" – "er for the (A319)c/s just*

departing I don't know if you need to file a report erm we turned just before the noise so I couldn't see the traffic and he was coming up on TCAS with an advisory so we needed to do something about it".

The UK AIP page AD 2.EGHQ-8 (30 May 2013) para 2.21, noise abatement procedures for RW30, states:

> 'Aircraft 5700 kg or more: Climb straight ahead until above 2000ft agl or across the coast before turning on track'.

The A319 was then transferred to the Approach frequency and continued without further incident.

At interview the Approach controller indicated that normally, if VFR inbound traffic had not reported the field in sight by 5nm from the airfield, appropriate instructions would be given together with co-ordination and transfer to the Tower. The Approach controller had been monitoring the two aircraft climbing out of Culdrose and had not realised the DHC6 was approaching Watergate Bay and the ATZ. When the DHC6 then asked for RW12, late traffic information had been given regarding the departing A319.

Both controllers indicated that DHC6 pilots would often position towards Watergate Bay and it was common practise for them to request right base for RW12 if traffic permitted. However, the A319 operation had only recently commenced and the changed operational aspects had probably not been fully assimilated or integrated into local practises. When asked, the Approach controller agreed that had the DHC6 crew been made aware of the A319 departure earlier, it was likely that the DHC6 would have integrated into a wider circuit or requested an ILS approach earlier.

Both controllers recognised that the DHC6 pilot was not aware of the departing A319 as it routed towards Watergate Bay. This together with the added complexity of low cloud, probably prompted the DHC6 pilot to consider the option of RW12. Due to the low traffic levels the controllers had an expectation that there was not likely to be a conflict as the DHC6 was positioning downwind left-hand for RW30 and the A319 was departing with a right turn to the east. Had the circuit been busier there would have been a greater degree of coordination and planning.

The Tower controller indicated that he was busy watching the A319's taxi and departure, observing the runway and looking for birds. The Tower controller had not noticed the DHC6 on the ATM until the A319 was airborne and had reported a TCAS contact. The Tower controller reported watching the A319 climbing and turning right, in an area of blue sky, on climb out over the coast, but at no point was the DHC6 sighted visually. The Tower controller indicated that when the A319 reported the TCAS contact he passed late traffic information regarding the DHC6 joining downwind. With the benefit of hindsight, had he known the DHC6 was going to position close to the climb out area, he would have given earlier traffic information and coordinated with Approach.
Since this incident the ATSU has reminded all controllers of the MATS Part 1 and 2 requirements to ensure that inbound VFR aircraft are properly coordinated before the aircraft reaches 5nm from the aerodrome, to ensure that the aircraft is able to integrate properly into the visual circuit. The Newquay Manual of Air Traffic Services (MATS) Part 2, Page 55 paragraph 2.4.2 (VFR Inbound), states:

> 'APP/APS will provide details of inbound VFR aircraft to the VCR assistant as soon as practicable after first contact. APP/APS will then co-ordinate join with ADI before the aircraft reaches 5 nm from the aerodrome.
>
> APP/APS may decide to level restrict inbound VFR aircraft depending on other traffic and ADI will be informed if this is the case.'

The MATS Part 1, Section 2, Chapter1, Page 13, paragraph 15.1.1, states:

> ‘Clearance to enter a traffic circuit is issued when an aircraft is still some distance from the aerodrome to enable the pilot to conform with the traffic circuit, pending clearance to land. Information concerning landing direction or runway in use and any other necessary instructions are given at the same time so that the pilot may intelligently position himself in the traffic pattern.’

The ATSU and two controllers were aware of CAA Safety Notice SN-2013/001, (Integrating Traffic in the Vicinity of an Aerodrome) which highlights that, ‘…in order to achieve a safe, orderly and expeditious flow of air traffic and to assist pilots in preventing collisions, specific traffic information is needed as the pilot gets closer to the aerodrome and is required to integrate with other traffic…’

Newquay ATS Investigation

The A319 was departing RW30 on an IFR flight plan from Newquay to the east. This aircraft was receiving an Aerodrome Control Service from Newquay Tower and was due to receive a Deconfliction Service once safely airborne. The DHC6 was operating VFR, receiving a Traffic Service from the Approach controller and making a downwind left visual join for RW30.

At 0756 ADI requested a release from Approach for the A319. This was granted by Approach without any restriction. At this point the DHC6 was 10nm from Newquay some 2nm clear of the coastline and approximately 3nm north-west of Perranporth airfield.

At 0758 Approach arranged departure handover details for the A319 with Western Radar. A short discussion over a potential conflict with an aircraft at FL150 15nm east of Newquay took place, but it was agreed that this track’s heading posed no threat to the A319 and the pre-note was agreed.

0759 the DHC6 pilot asked for the wind at Newquay and then whether an approach to RW12 was possible. He was told “*No, A319 for departure off 30*”. The DHC6 then said “*in that case, we're going to turn right and we'll take vectors for ILS Runway 30 please*”. He was instructed to turn right heading 130 degrees. The DHC6 was 2.5nm west of Newquay at 1200ft QNH and 1.5nm to the left of the extended centreline for the climb out of RW30. SSR Mode C indicates that it started to climb at this point.

At 0800:19 Approach instructed the DHC6 to “*climb to 2500 feet*”. The aircraft was now 1nm south of the climb-out lane, 2.5nm west of the airfield and passing 1500ft.

At 0800:23 The Tower Controller reported “*[A319 c/s] airborne on the hour"*. Approach replied “*cheers mate, [DHC6 c/s] breaking out, he wants ILS now*”. Approach acknowledged. The A319 appears on radar for the first time over the airfield and indicating 500ft on Mode C.

Shortly after the A319 pilot called “*we have TCAS traffic two miles ahead on our left*”, the Tower Controller replies “*traffic joining downwind routing now for the ILS*”. The A319 pilot replies “*Roger, he’s on TCAS*”, the Tower Controller replies “*Roger, own navigation*”. The A319 passed approximately 0.5nm port-to-port with the DHC6 indicating 1900ft. The A319's Mode C is garbled, 4 sweeps later it appears 2.5nm north of the DHC6 indicating 2200ft while the DHC6 indicates 2500ft with both diverging from each other. Approach asked Tower “*how close was that?*” Tower replied “*that was the* [DHC6], *wasn't it?*”

At 0801:12 the A319 was transferred to 133.4MHz, as the pilot acknowledged he said *“I don't know if you need to file a noise report but we turned early due a TCAS with an advisory so we had to do something about it*”. The Tower Controller replied “*Yes, no problem at all, I have my Manager with me now*”.

Conclusions

There were several opportunities for the Approach Controller to tell the DHC6 that its track for the visual downwind join was too close to the climb out track and to suggest a rerouting. Visual downwind joins for RW30 generally follow the coastline until Newquay town then run parallel to the runway and are automatically well clear of the climb out. The Tower Controller would therefore not normally call visual downwind joining traffic to a departing IFR aircraft as their paths are not in conflict. This was not the case here, and the situation warranted an additional call to ADI to co-ordinate and draw the Tower Controller's attention to the unusual routing and positioning of the DHC6, so that he could call the traffic to the departing A319 crew.

Notwithstanding the Traffic Service being provided to the VFR DHC6, once it asked for an ILS to RW30 and started to climb into conflict with the A319, the term 'avoiding action' should have been used and a bold turn to 210 degrees instructed; this would have given a little additional distance from the climb-out, while ensuring terrain clearance, until the aircraft was at safety altitude and may have reduced the TCAS severity. Traffic Information on the departing A319 should have been passed urgently to the DHC6, although it is recognised that the notification of the departure was the trigger for his turn and climb. An urgent warning should also have been called to Tower to pass on to the A319. Finally, the instruction to fly a heading of 130 degrees and an altitude of 2500 feet were quite inadequate to ensure safe separation from the departing traffic.

The Approach reply demonstrates that the two aircraft were unlikely to have collided even if the A319 had not started its turn, and the DHC6 pilot had not been visual with the departing A319 throughout. He also said that he had received a TA on the departing A319, but not an RA. However, positive, authoritative control of the situation to ensure safety was not exercised by the Approach Controller throughout this series of events.

Summary

The A319 was an IFR flight departing from Newquay, in receipt of an Aerodrome Control Service from Newquay Tower.

The DHC6 was inbound VFR to Newquay and was in receipt of a Traffic Service from Newquay Approach.

The Airprox occurred when the inbound DHC6, operating VFR and, initially, unaware of the departing A319, positioned close to the climb-out area of RW30 due to the presence of low cloud in the vicinity of the airfield, which resulted in the A319 responding to a TCAS TA by making an early avoiding right turn.

The DHC6 was in receipt of a Traffic Service. CAP774 UK Flight Information Services, Chapter 3, Page 1, paragraph 5, states:

> 'The controller shall pass traffic information on relevant traffic, and shall update the traffic information if it continues to constitute a definite hazard, or if requested by the pilot. However, high controller workload and RTF loading may reduce the ability of the controller to pass traffic information, and the timeliness of such information.'

Once the DHC6 was within 5nm of the airfield, the departing A319 was likely to be relevant traffic. However, the DHC6 pilot was not made aware of any other traffic and the Approach controller had asked the DHC6 pilot to report aerodrome in sight. This would normally have prompted the Approach controller to update joining instructions and give traffic information on circuit activity prior to transferring to the Tower. Due to the low cloud in the vicinity of the airfield, the DHC6 continued along the coast towards Watergate Bay un-challenged and reached a position adjacent to the climb out area for RW30, which in the absence of traffic information resulted in the Airprox report by the A319.

A number of factors were considered by ATSI to have been contributory:

The low traffic levels resulted in lower levels of co-ordination and the controllers believed that with the DHC6 positioning downwind to the west of the airfield and the A319 departing to the east, that there was not likely to be any conflict between the two aircraft.

The DHC6 pilot had requested a downwind join but the lower than expected cloud inland, resulted in the DHC6 routeing along the coast until sighting Watergate Bay and the threshold of RW 12.

The Approach controller did not provide early traffic information to the DHC6 pilot, which would have aided awareness and influenced the pilot's tactical planning relative to the departing A319.

The Approach controller was distracted whilst monitoring traffic climbing out of Culdrose and did not immediately notice that the DHC6 was closer than expected, having passed the 5nm buffer from the airfield without any further co-ordination or updated traffic information.

The Tower controller was visually monitoring the airfield for birds as the A319 departed and did not notice the position of the DHC6 on the ATM.

The A319 pilot had not been passed any traffic information prior to departure and was not aware of the type, flight rules or intentions of the DHC6. The A319 responded to a TCAS TA immediately after departure which resulted in the A319 commencing an early right turn and the Airprox report.

The Tower and the Approach controllers passed late traffic information to their respective aircraft once the potential conflict was recognised.

ATSI considered that the following factors are likely to have been contributory:

The weather around the airfield was likely to make VFR flight and the field in sight call difficult. The implications had not been fully anticipated by either the DHC6 pilot or the two controllers.

It was reported to be common practise for arriving DHC6 aircraft to route via Watergate Bay, often requesting the use of RW12. The controllers were probably conditioned to the practice, without appreciating the requirements for the recently introduced A319 operation and added complexity of the low cloud.

The Tower controller was busy monitoring the A319 as it taxied, looking for bird activity as it departed and didn't notice the DHC6 on ATM.

The DHC6 pilot was VFR and sighted the A319 as it departed from RW30, making a climbing right turn.

The A319 was not passed any traffic information prior to departure. The A319 pilot would not have known the type, flight rules or intentions of the DHC6 aircraft. The A319 pilot received and responded to a TCAS TA immediately after departure and reported a concern that he had not complied with noise abatement requirements.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available to the Board consisted of the reports from both crews, the air traffic controllers, the RT transcripts and the radar recordings.

The Airline Pilot Members were asked to comment on the actions of the A319 crew, who had elected to take-off with the DHC6 showing on their TCAS display. They informed the Board that it is completely normal to have contacts on TCAS during take-off and that crews understand that azimuth and range displays are not as accurate as the vertical information; it was agreed that the A319 crew could have asked the Tower controller for information on the DHC6 before deciding to take-off, but that they subsequently took action to resolve the confliction. Crews are normally advised to exercise caution against taking avoiding action based on TCAS azimuth information alone, but in this case traffic information on the DHC6 was passed by Tower at around the time that the A319 crew elected to turn right, and so the Board agreed this was an appropriate course of action in the circumstances.

Discussion turned to the actions of the DHC6 crew, and whether they should have informed Approach of their change of intentions before they positioned for a right-base join to RW12. It was agreed that it was quite normal for crews flying in and out of coastal airports to adapt their approach, as the weather conditions over the land often differ considerably from those over the sea, and that in the absence of traffic information on the departing A319, the crew may not have perceived a problem with a change of approach; nonetheless, the Board felt that, if the DHC6 crew had informed the Approach controller of their change of intentions, he may have taken earlier action to provide greater separation. Some members felt that, as the DHC6 crews fly this route regularly, they may have become habituated to a late change of approach and that may have been why they omitted to inform the Approach controller.

The Board agreed that the Approach controller had a responsibility to monitor the climb-out lane because he had released the A319 for an IFR departure. The DHC6 was 10nm from the airport when Approach released the A319, and the Board agreed that the release was appropriate. Several members observed that this is the point at which they would have expected Approach to take more positive control of the DHC6 and offer traffic information to the crew. ATC members felt that Approach should have offered vectors at this point, and it would have been reasonable to prompt the DHC6 crew by a range of 5nm, if they had not positioned appropriately and reported visual with the airport. The Board agreed with the Newquay ATS Investigation that, once the A319 was airborne and the conflict was apparent, Approach could have taken more positive avoiding action to achieve greater separation. Noting that both controllers were reported to be experienced, it was felt likely that the Approach controller may have become distracted at the point when he should have taken positive control of the DHC6. The A319 was operating on a relatively new schedule and it was also possible that the low levels of traffic experienced at this airport, along with the recency of the operation, may also have influenced the actions of the pilots and air traffic controllers involved.

There was considerable discussion around the cause of this Airprox; some members felt that the initial cause was the DHC6 crew's decision to reposition without informing Approach, whilst others felt that the lack of traffic information from both controllers and lack of positive control by the Approach controller were the initial cause. Others pointed out that, as the DHC6 was flying VFR, the A319 crew's decision to take-off, IFR, with the confliction displayed on TCAS, could have been causal or contributory. The Board agreed that the cause had been that ATC had allowed the A319 pilot to get airborne and fly in to conflict with the DHC6, and that a lack of co-ordination between the two controllers and a lack of traffic information had been contributory. The Board also recommended that Newquay ATC should review their co-ordination procedures and responsibilities for integrating VFR traffic.

When assessing the Risk, the Board noted that the A319 crew had taken effective action, and that the DHC6 crew maintained visual contact with the A319 on the runway and throughout its take-off; they agreed on a Risk of C.

The safety barriers[1] pertinent to this Airprox were: 'ATC rules and procedures', 'controller action', 'aircrew rules and procedures', 'visual sighting', 'aircrew action', 'situational awareness from RT', and SA from TCAS'. The Board concluded that, as the A319 crew had used traffic information and their TCAS TA to take effective action, and the DHC6 crew could see the A319 throughout its take-off, the barriers had been 'effective'; the total number of POB was greater than 19, so an Event Risk Classification score of 50 was allocated.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: ATC allowed the A319 pilot to get airborne and fly into conflict with the DHC6.

Contributory Factors:

1. Lack of co-ordination between controllers.
2. Lack of traffic information to both pilots.

Recommendation: Newquay ATC review their coordination procedures and responsibilities for integrating VFR traffic.

Degree of Risk: C.

ERC Score: 50

[1] Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.