## AIRPROX REPORT No 2011094

*Date/Time:* 23 Jul 2011 1548Z (Saturday)

*Position:* 4918N 00214W (6nm N of Jersey Airport - elev 277ft)

*Airspace:* C. Islands/Jersey CTR (*Class:* A/D)

*Reporter:* Jersey ATC

| | *1st Ac* | *2nd Ac* |
|---|---|---|
| *Type:* | ATR72-500 | TB10 |
| *Operator:* | CAT | Civ Pte |
| *Alt/FL:* | ↓2000ft QNH (1016hPa) | 1000ft QNH (1016hPa) |
| *Weather:* | VMC | VMC |
| *Visibility:* | NR | NR |

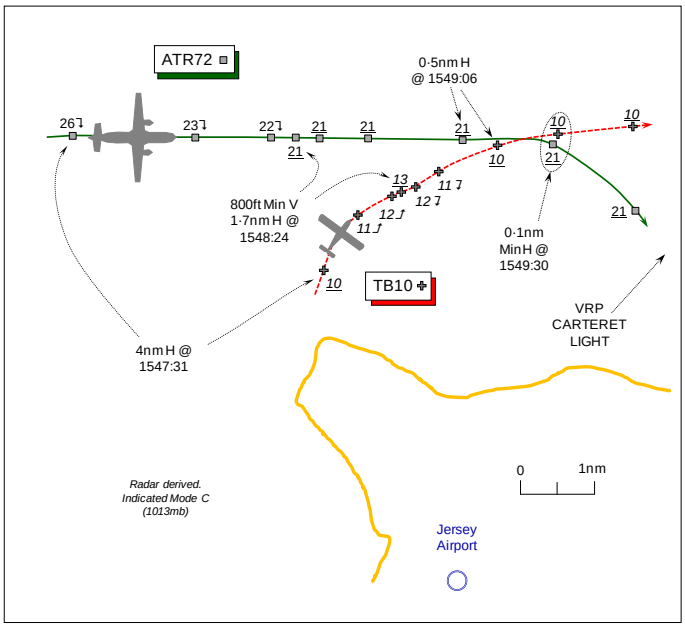
*Reported Separation:*

1000ft V/1nm H NK

*Recorded Separation:*

800ft Min V @ 1·7nm H

0·1nm Min H @ 1100ft V




## CONTROLLER REPORTED

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE JERSEY APPROACH RADAR CONTROLLER (APR)** reports that the TB10 was departing from Jersey Airport bound for Oxford/Kidlington and was issued a Special VFR (SVFR) clearance outbound not above 1000ft Jersey QNH (1016hPa) to Carteret Lighthouse VRP [on the French coast 18nm NE of Jersey Airport] as per standard clearances. The ATR72 was inbound to Jersey, IFR under a RCS and being vectored for an ILS approach to RW27 descending to an altitude of 2000ft QNH (1016hPa). When released, the TB10 pilot was given a climb-out restriction of straight ahead off RW27 due to traffic inbound to Jersey from Guernsey. After contacting Jersey APP the TB10 pilot was instructed to turn R onto a radar heading of 020°, to keep him clear of the centre line. Immediately before the TB10 pilot initiated his climb, he was released off the heading on his own navigation to Carteret. There was some confusion in the TB10 pilot's read-back and so the controller restated that the flight was cleared own navigation to Carteret. The TB10's Mode C then indicated the ac was climbing and he asked the TB10 pilot to check his altitude followed by an instruction to descend back to 1000ft and a reiteration of his clearance limit, as well as TI about the ATR72 descending to 2000ft QNH from above. He instructed the ATR72 crew to stop their descent 'now' and passed TI on the TB10 below them. The ATR72 crew acknowledged the stop descent and advised they had the TB10 in sight and also displayed on their TCAS. The pilot of the TB10 apologised and continued as per his SVFR clearance until approaching the French coast. Prescribed separation was eroded to 700ft vertically at a range of 1nm; prescribed separation was subsequently re-established and the ATR72 completed a visual approach without further incident.

**THE ATR72-500 PILOT** reports he was inbound to Jersey from Cork under IFR and in receipt of a RCS from Jersey APPROACH on 120·300MHz. The assigned squawk was selected with Modes C and S on.

At a position about 300° JSY 10DME, heading 090° at 180kt descending to 2000ft QNH (1016hPa) in VMC, traffic appeared on TCAS in their 2 o'clock at a range of about 3nm, so he reduced the ROD to 500ft/min. Shortly afterwards, with the other ac – the TB10 – about 1nm away, APP instructed them to 'stop descent immediately'. The TB10 was already in sight before the call from APP, but he levelled off immediately at about 2300ft QNH. APP instructed the pilot of the TB10 to maintain an altitude not above 1000ft QNH and then asked if they had the TB10 in sight or displayed on TCAS. They did have the TB10 in sight and on TCAS throughout and no TA or RA was enunciated. There was no danger of collision; the controller did not indicate that he would make an Airprox report at the time of the occurrence.

**THE TB10 PILOT** reports he departed from RW27 at Jersey Airport with a R turnout cleared to 1000ft Jersey QNH. APP gave various heading instructions for Carteret Lighthouse VRP but about 10min after departure he was told by APP to 'assume your own navigation'. He corrected his course toward the VRP at 110kt and started to ascend; passing 1300ft APP asked him to confirm his altitude and he replied 'approaching 1400ft', he thought. APP then instructed him to descend to 1000ft QNH as he had not been given permission to climb; he thought he replied to the controller that as he had been given an instruction to assume his own navigation that this meant he could also ascend. He apologised for this mistake and descended to below 1000ft QNH. A few minutes later he received details to continue and to free-call his en-route frequency. At no time did he or his two passengers (both pilots) see any other ac in close proximity to themselves. They were aware that there was a PA28 about 5nm ahead of them but they could not see that ac. He realises that it was an error to ascend to 1400ft QNH, for which he gave his unreserved apologies. His error was not intentional but a misunderstanding of the 'assume' instruction. The Risk was not assessed.

On landing at Oxford he discussed the occurrence with the Owner of his Club and he will not be making the same mistake again; he will get confirmation from ATC when under their control that he is cleared to either ascend or descend. He did try to telephone Jersey ATC to explain and apologise for the confusion but the phone was not answered. He apologises for this mistake but he did not see any other ac close by, neither did his passengers. He was not aware of any possible Risk to others or himself by being close to another ac, specifically the ATR72, which was not seen.

UKAB Note (1): Analysis of the Jersey APP transcript reveals that after TOWER instructed the TB10 pilot to line up on RW27, the controller passed an amendment to the flight's departure clearance. At 1540:34, TOWER transmitted, "[TB10 C/S] *an amendment to your clearance after departure climb straight ahead till advised Special V-F-R not above altitude 1 thousand feet";* this was immediately read-back by the TB10 pilot, *"climb straight ahead Special V-F-R not above a thousand feet* [TB10 C/S]". After take-off TOWER requested the TB10 pilot recheck the allocated squawk of A1235 before instructing the pilot to, *"..report your heading to Jersey APPROACH 1-2-0 decimal 3",* which was acknowledged by the pilot correctly at 1542:29.

At 1542:56, the ATR72 crew made their initial call to APP descending on a radar heading of 100°. APP responded by instructing the ATR72 crew to descend to 3000ft QNH (1016hPa). A little later at 1543:35, the TB10 pilot made his initial call to APP stating, *"Good afternoon Jersey Approach* [TB10 C/S] *awaiting further instructions."* The controller's initial response was to turn the TB10 R onto 330°, followed by further R turn onto 350° that was read-back by the TB10 pilot at 1544:22. Moments later at 1544:25, the ATR72 crew was instructed to, *"..descend altitude 2 thousand feet"* that was read-back correctly. APP then issued a vector to the TB10 pilot to fly a heading of 020° that was duly acknowledged, before the ATR72 crew was placed on a radar vector of 090° that was read-back correctly at 1545:53.

At 1547:18, APP instructed the TB10 pilot to, *"..resume..own navigation now to Carteret"*, this was acknowledged by the pilot merely as, *"Resuming own navigation* [TB10 C/S]". APP therefore challenged this read-back by stating, *"confirm to Carteret";* the TB10 pilot reaffirmed at 1547:46, *"resume own navigation to Carteret* [TB10 C/S]". The LAC Jersey Radar recording at 1547:31, shows the ATR72 tracking E descending through 2600ft (1013hPa), some 4nm NW of the TB10 that is shown turning R on course to Carteret indicating 1000ft (1013hPa). Some 30sec later at 1548:01,

as both ac close to a range of 2·5nm the TB10 is first shown climbing through 1100ft, as the ATR72 descends through 2300ft. At 1548:22, APP instructed the TB10 pilot to, *"..check your level*"; no reply is apparent from the TB10 pilot before the controller transmitted 4sec later, "[TB10 C/S] *continue not above 1 thousand feet".* This transmission was immediately read-back by the TB10 pilot, *"continue not above 1 thousand feet* [TB10 C/S]". APP then instructed the ATR72 crew at 1548:29 to, *"..stop decent immediately",* which was acknowledged immediately by the crew. The radar recording shows the TB10 ascended to a maximum of 1300ft (1013hPa) – about 1390ft Jersey QNH (1016hPa) and within the Class D Jersey CTR – at a range of 1·7nm, 800ft below the indicated level of the ATR72 that was now indicating level at 2100ft (1013hPa) – about 2190ft QNH (1016hPa) and marginally within the Class A Jersey CTA. At 1548:37, APP advised the ATR72 crew about the TB10 for the first time, *"Traffic in your 12 o'clock should be not above 1 thousand feet has climbed through 14 hundred feet descending back down".* Although the TI was incomplete, the ATR72 crew responded *"Copy have him in sight and have him on TCAS* [ATR72 C/S] *thank you"*. The TB10 descended thereafter, re-establishing a level cruise at 1000ft at 1548:50, with the ATR72 astern, off the TB10's port quarter, at a range of 0·9nm. As the faster ATR72 closed on the TB10, APP advised the latter's pilot that, *".. you were cleared not above 1 thousand feet there was traffic a thousand feet above you continue not above 1 thousand feet".* APP subsequently cleared the ATR72 crew for a visual approach. The respective tracks crossed with minimum horizontal separation of 0·1nm, the TB10 1100ft below the ATR72; as the ATR72 cleared to the S of the TB10, horizontal separation was established and the ATR72 crew was cleared to descend. The TB10 pilot apologised to the APP controller, who released the flight to continue VFR when passing the CTR boundary and call Deauville en-route at 1554:21.

## 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 video recordings and a report from the air traffic controller involved.

It was explained that commonly within Class D CAS, VFR flights are passed TI about IFR and other VFR flights and it is then the responsibility of the pilot flying under VFR to maintain his own separation on the traffic he has been told about. However, here the IFR ATR72 was descending in the Class A Channel islands CTR and the TB10 was departing within the Class D Jersey CTR on a Special VFR clearance. No TI had been passed to the TB10 pilot about the ATR72 beforehand and it was evident that the Jersey APR had restricted the TB10 pilot to a maximum of 1000ft Jersey QNH beneath the inbound ATR72 descending to 2000ft, in order to ensure vertical separation of 1000ft. After providing radar vectors around other traffic, the TB10 pilot was then 'released' by the APR to, *"..resume..own navigation now to Carteret"*. It was evident that the TB10 pilot had misunderstood this message such that he believed he could now turn on track to the VRP and also climb to his desired transit altitude. Members who fly regularly to the Channel Islands commented that being held down at 1000ft for a long over sea transit in a single-engine ac was particularly uncomfortable; an engine problem at that altitude could result in a ditching with very little time to prepare or make appropriate RT calls. It was understandable, therefore, that the TB10 pilot would wish to climb as soon as possible. That said, it was the TB10 pilot's misunderstanding regarding the words "own navigation" that was the crux of this Airprox. Experienced pilot Members commented that this had been a hotly debated topic for many years and the GA Member observed that it was unfortunate that TI on the ATR72 had not been passed by the APR and the altitude restriction reinforced, which could have been a helpful safeguard. The SRG Policy Advisor pointed out the changes that had been made to SIDs & STARS by ICAO and Members were aware there was no recognised definition of "..*own navigation..".* The SRG Advisor considered that an AIC might be beneficial to reinforce the meaning and usage of this widespread term so as to reduce the potential for similar events. Nevertheless, within the context of an ATC 'clearance', the term was used in the lateral plane only and did not cancel the altitude restriction, thus the TB10 pilot should not have climbed above 1000ft QNH without further reference to the APR. The Board concluded, therefore, that this Airprox had resulted because the TB10 pilot climbed into conflict with the ATR72 after assuming his altitude restriction had been removed.

It was clear that the ATR72 crew had the TB10 in plain sight ahead of them even before the APR passed TI and also had the ac displayed to them on TCAS. Thus the ATR72 crew were prepared to act even before the APR detected the TB10's climb and instructed the pilot to descend back to his assigned altitude. This coupled, with horizontal separation of 1·7nm as the vertical separation decreased to a minimum of 800ft convinced the Board that no Risk of a collision existed in these circumstances.

## PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The TB10 pilot climbed into conflict with the ATR72 after assuming his altitude restriction had been removed.

Degree of Risk: C.