

GA1348

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Category: [General Aviation](#)

Report Title Change of Circuit Direction to Suit Straight-in Landing Business Jet

Initial Report

Having got my newly minted PPL in Autumn 2019, I (and everyone else) had my plans and experience-building disrupted by COVID. I was only able to get back in the cockpit in late summer 2020, at a new and more local aerodrome to that where I did my PPL.

I was aware of skills fade, the new airfield procedures & local area (and psychological doubting Gremlins that had crept in as a newbie) combining, so I undertook revision training. I found the new Aerodrome a good fit and felt I would settle well, with better procedures, clearer guidance and online aircraft/aerodrome specific documentation on a dedicated portal. 5 flights and 4 hours later, I was signed off to fly solo and hire aircraft. The same day as sign off, I went up for two more circuits to cement thinking of myself as a competent pilot (for my experience) to fly safely.

Two weeks later, I returned, wanting to consolidate confidence and minimise future skills fade. I could only go after work so I planned only a few more circuits before sunset. The A/G radio was due to cease operating at 5pm so I had planned and confirmed the procedures to make blind calls on frequency, as I knew I would not be up before 5pm. Wind was low. Just a few quiet circuits, I thought. My take off time was 17:45. It turned out the A/G radio was still operating and so I flew as normal with A/G. I completed 2 circuits, building my confidence. In part of my circuit, the radio was readable but not good, but I was able to understand the calls.

On the third circuit, I was downwind to land when a call from a small commercial aircraft requested a straight in landing on the same runway but from the opposite direction. The situation quickly became stressful for me. Imperfect radio and stress combined to hinder me but it became clear that the other aircraft was planning to land in the opposite direction to me on the same runway. My immediate thought was not to land but what exactly to do next?

I don't think this was covered in my training. I knew I had taken off with full fuel so didn't 'need' to land right now. I called to say I was already established in the circuit (N.B. I had been for 20-25min) to land in the opposite direction to the other aircraft. Poor radio again, but I think I was being told to change the circuit pattern. Reasserting in my mind that I am responsible for myself and approaching base turn, I knew at the very least I couldn't continue on. I wasn't sure how far out the other aircraft was but two more turns and we could be nose to nose before I knew it.

Calling before to assist all, I did a 180 degree turn away from the runway to begin another downwind in the other direction, offset from my previous track. Maybe I should have just left the circuit and orbited until I heard the other aircraft was clear. But my unfamiliarity with the area and stress level made me sure I wanted to stay "safe" in the circuit. I think I heard the other aircraft call a 4-mile final. This is a situation I had at least experienced before and the radio was better. I called to extend downwind until I had visual. I did and saw the other aircraft. I regained my confidence a little and called that I had visual and would position behind.

Waiting for the aircraft to pass a good way, I turned base and went through the normal landing checks. The other aircraft seemed to have some confusion on which taxiway to take and was stationary on the runway, to a little exasperation of A/G to get them to clear. Having got myself back to a manageable situation, while on final I watched the aircraft with A/G stress rising and still trying to instruct them. Just above decision altitude, I decided and called to go around. There was some doubt, and I had had enough excitement for one day. A/G apologised. I landed safely on the next circuit.

To an experienced pilot, this might have been an annoyance and some heated exchanges later. Even writing it, it doesn't seem like that big of a deal. But the realisation of being out of your comfort zone without an immediately obvious path to safety was shocking. What are the ideal reactions for next time!

Dirty Dozen factors involved: **Stress and pressure** – it was a highly novel situation to me; **Communication** – difficult so could not coordinate a response as effectively; **Awareness** – I seemed to have been forgotten about. The other a/c didn't seem to be aware of me.

Comment

CHIRP Comments: To an inexperienced pilot, this is one of those out-of-the-ordinary situations that can suddenly throw everything into confusion. The first thing to say is that within the [SERA.3225\(b\)](#) regulation, aircraft in the vicinity of an aerodrome shall "...conform with or avoid the pattern of traffic formed by other aircraft in operation" so it was for the business jet pilot to conform with the reporter's circuit pattern or make sure that they avoided the reporter's aircraft, not the other way around.

That being said, it seems that the A/G operator had intervened and probably requested that the reporter change circuit direction to fit in with the business jet, which they did – at that point, it might have been worth asking the A/G operator to repeat their transmission just to confirm what they said if there's any doubt in your mind. Remember that an A/G operator cannot instruct you to change circuit direction and, under an AGCS, pilots should not 'request' courses of action because an A/G operator is not empowered to grant such requests. Instead, pilots should simply state their intentions so that others are aware and can integrate as appropriate.

Having re-orientated themselves to the opposite circuit direction, the question then becomes 'who has priority?' Straight-in approaches are notoriously difficult to sequence with due to differing aircraft speeds and the sometimes unreliable range calls from straight-in pilots. But the over-riding requirement is covered in [SERA.3210\(c\)\(4\)\(i\)](#) which states that the higher aircraft shall give way as below:

(4) Landing. An aircraft in flight, or operating on the ground or water, shall give way to aircraft landing or in the final stages of an approach to land.

(i) When two or more heavier-than-air aircraft are approaching an aerodrome or an operating site for the purpose of landing, aircraft at the higher level shall give way to aircraft at the lower level, but the latter shall not take advantage of this rule to cut in front of another which is in the final stages of an approach to land, or to overtake that aircraft. Nevertheless, power-driven heavier-than-air aircraft shall give way to sailplanes.

So the bottom-line is that once they had changed circuit direction to match the straight-in business jet, the reporter did the right thing in going around when they found that the runway was still occupied as they approached – you can go around at any point in the circuit, even when downwind if you're not sure what is going on or where the other aircraft is – just maintain your height and follow the circuit ground track (but fly deadside if possible rather than down the runway in case the other aircraft goes around and climbs away) to position yourself at the start of another downwind leg if necessary.

Although, as we said earlier, it was for the business jet to conform to the pattern of traffic formed by the reporter and arrange their approach accordingly, for expediency it may be simpler to make way for such higher-speed straight-in traffic in order to avoid greater confusion if the business jet then had to go around itself and try to enter a visual circuit because it could not integrate from the straight-in approach. In making way, perhaps a better initial course of action when hearing the business jet call for the opposite runway might have simply been to either depart the circuit or go into the overhead at 2000ft and wait for the business jet to land before then re-joining the circuit.

Finally, we commend the reporter for making their intentions clear on the radio for others to hear; even if they were the only other aircraft in the circuit it would have reassured the business jet pilot and A/G operator that the reporter was aware of and (eventually) visual with the other aircraft.

Key Issues

Dirty Dozen Human Factors

The following 'Dirty Dozen' Human Factors elements were a key part of the CHIRP discussions about this report and are intended to provide food for thought when considering aspects that might be pertinent in similar circumstances.

- **Stress** – a situation not encountered before
- **Pressure** – inexperience and uncertainty about what to do
- **Communication** – if uncertain, ask others to repeat their transmission or clarify their intentions
- **Complacency** – the business jet pilot seemed to assume that they had priority

stressStress

pressurePressure

poor_communicationCommunication

complacencyComplacency



