

GA1349

Posted on 27.11.2023 by Steve Forward

Category: [General Aviation](#)

Report Title Radio Issue

Initial Report

Flying fairly late in the day with a first-time GA passenger as a favour to a relative, sunny with some haze, airport fairly quiet. Called for start and airfield information, no reply from the A/G service in the tower. Looked up at the windows, couldn't see anyone in there, which wasn't that unusual, nor was the lack of reply, so I didn't think any more about it.

Started, taxied out, completed pre-flight checks, called 'ready for departure', still no reply. Again, not unheard of to have nobody in the air that late in the day and nobody replying from the tower, so I made a blind call that I was entering and backtracking [active runway]. Checked both directions of the active runway before crossing the double yellow line and entering the live side of the airport, entered the runway...and about halfway down the backtrack an aircraft on final appeared out of the haze.

It immediately dawned on me that I had a radio failure, so I got as far over to one side of the runway as I could just in case the approaching aircraft hadn't seen me, waited for it to go around, then performed a 180 and got back off the runway.

Taxiing back in, there was someone halfway down the tower steps waving a handheld at me – my suspicions seemed correct. I made my apologies to all concerned, then taxied back to the hangar to see if I could discover the problem. I was very surprised, as the radio had been working perfectly a few days before when I had been talking to the local international airport and also someone on a handheld at a grass strip. I checked aerial connection, swapped headsets, swapped which pair of headset plugs I was connected to – all seemed fine.

Then I noticed that where the frequency on the radio should have been showing a zero, it was showing an eight. I had returned to [Airport] out of hours when I had flown a few days before, and I must have inadvertently selected this incorrect frequency when switching back from the other services, but as it was out of hours there was nobody manning the tower A/G radio, so the lack of reply on return to [Airport] did not alert me to the problem. The difference between the 8 character on my radio and the Ø was a minor difference in the direction of the line in the middle of the character (horizontal on the **8**, slightly sloping on the continental **Ø** it uses). That small difference was pretty much invisible to me in bright sunlight, especially with the aircraft jiggling around during

taxi. I selected the correct frequency, and everything worked perfectly.

What more could I have done: check small displays such as radio frequencies in the shade of the hangar, with the aircraft stationary. I could see the error clearly enough when I did that, and would have avoided the problem completely had I done so before starting and taxiing. The other thing which occurs to me is confirmation bias. I believed the radio to be working and on the correct frequency because I thought that was the case on my previous flight...hence I interpreted all the subsequent information in the light of what I already 'knew'. A more sceptical attitude would also have helped to avoid the error. But, ultimately, a quick glance at a small digital display in unfavourable lighting was the root cause.

Dirty Dozen factors involved: **fatigue**, time **pressure**, **distraction**, but mostly **complacency** – the radio was working perfectly very recently, so radio failure wasn't something I even considered when receiving no reply to several calls. Question assumptions!

Comment

It's really difficult to recognise a radio 'failure' on an aerodrome when it's not unusual for there to be no other transmissions and it appears that no other aircraft are operating that might otherwise be heard on the radio. It's easy to be wise after the event and offer advice about double-checking frequencies etc but what we need to think of is practical advice on how we might detect such situations. Before you walk to the aircraft, a confirmatory check with the A/G operator that they were operating would at least ring some alarm bells if you then can't get hold of them before taxiing. Also, with radio displays like these where an '8' and 'Ø' might not be obviously different, it's a good habit to select a digit one click before or after to confirm that this digit is what you expect (i.e. one click back from 'Ø' to get '9' rather than '7') before then returning one click to the desired digit.

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.

- **Resources** – poor radio display user interface
- **Pressure** – desire to get the passenger airborne for their first flight
- **Communication** – wrong frequency selected
- **Complacency** – assumption that the radio was set to the correct frequency from the previous flight

pressurePressure

lack_of_resourcesResources

poor_communicationCommunication

complacencyComplacency



