

GA1354

Posted on 27.02.2024 by Steve Forward

Category: [General Aviation](#)

Report Title Mixture mix-up

Initial Report

I was flying into [Airfield] with a family member for dinner, and had been told when I called for PPR that the wheels needed to be 'on the ground' for no later than 16:45 (when the airfield closed). We were tight on time for departing, and I was keen to make sure we arrived in time – and in fact we arrived over the airfield at 16:30 – plenty of time for an overhead join. I was explaining to my passenger what constituted this type of approach, then called "overhead – descending dead side", selected carb heat and reduced the throttle to idle. As we approached circuit height over the upwind end of the runway, I opened the throttle – but there was no response from the engine. Looking down I immediately saw that instead of selecting carb heat, I had moved the mixture control to fully lean. I returned it to fully rich, and the engine immediately picked up – and then operated as normal for the rest of the flight. I should add that the carb heat and mixture have different colour and shaped knobs on the end, and have a switch between them – so not that easy to mistake if you actually look! Stress – slightly, although I didn't feel it when we arrived over the airfield; Distraction – I was trying to explain what was going on – but not at a particularly busy stage of flight; Complacency – probably – I didn't look at the control I selected.

Comment

CHIRP is grateful to the reporter for their frank and open report which provides an insight into a trap that we could all fall into so easily when chatting to passengers rather than focusing on what we're doing. Explaining what's going on to passengers is of course an important feature so that they understand and enjoy the flight, but there's a balance to be made between chatting to them whilst performing more complex tasks that are normally second-nature and to which we might not pay sufficient cognitive attention. Commercial pilots employ what is called a 'sterile cockpit' concept for take-offs, approaches and landings whereby only essential conversations are conducted. Whilst we don't necessarily think this is practical when passengers are in the GA cockpit, a mental check of 'now I must focus' and a brief to the passenger that you will be busy conducting flight critical activities so please be quiet would not go amiss. It's easy to be smart in hindsight, but we should all recognise that we are all fallible and predisposed to slip ups if we forget that we are error-prone humans – when conducting checks, the maxim 'think, look, do, check' is often useful.

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.

Distraction – chatting with passenger at a critical stage of flight.

Awareness – not checking control selection.

Complacency – assumptions during routine habitual tasks.

distractionDistraction

loss_of_awarenessAwareness

complacencyComplacency



