

» Tauranga Tower asked if I'd like some vehicle lighting at the threshold as I had only nav and strobe lights. I accepted the offer, since I'd never landed in semi-dark conditions, and I didn't know how well I'd be able to judge my precise elevation just before touchdown, if going only by runway side lighting.

(As it turned out my strobe lights lit up the runway when I was still about 20 ft AGL so it was easy to judge the touchdown, and there was still just enough twilight for me to taxi to the hangar.)

I orbited twice waiting for the vehicle lighting to be put in place and made a safe and smooth landing without any control or visibility issues.

What did I learn?

- Check and then *re-check* all the information I'm using to make flight planning decisions.
- Allow a greater time safety margin when planning flights that will be anywhere near end-of-daylight.
- We've got an excellent resource in ATC. Both Bay Approach and TG Tower were calm, reassuring and extremely helpful.
- Self-reporting is a positive thing to do so, hopefully, pilots can learn from other pilots' mistakes.

The CAA:

What did this pilot do right?

- Contacted ATC straight away to explain situation and ask for advice.
- Didn't allow pride to prevent him accepting all help to land safely.
- Reported the occurrence.

And finally...

CAA flight examiner John Parker says there's a reason most aero clubs require their aircraft to be back on the ground at least 30 minutes before evening civil twilight.

"It allows for unexpected delays. It's the same reason aircraft have reserve fuel. You don't plan to use it, but it's there if you need it." ✈️

THE NEED FOR WATER IS REAL



A health and safety expert and trained medic, who's worked in some extreme environments, has seen first-hand the effects of dehydration. He says pilots in a hot New Zealand summer are a high-risk group as some have poor awareness of how it can impact them.

Tom O'Donnell has worked on pipeline projects in Saudi Arabia and offshore oil rigs in Northern Australia.

He's also an aircraft owner, who flies his Cessna 180 to some of the more remote parts of the South Island.

Tom says safety issues often have a commonality across industries, and dehydration is one that has the potential to lead to accidents and injuries in the aviation sector.

He's seen many incidents of severe dehydration as a medic in Western Australia where the temperatures regularly get to 40 plus degrees Celsius.

“They head out and they just leave their water behind and get dehydrated. They get focussed on their work and don’t plan for or have a good water tool onboard.

“One guy we medivaced who was showing signs of kidney damage, told me he’d been drinking plenty and then I talked to his workmate who said ‘I was telling him to drink water but he just wanted to finish the job’.

“I suspect there are days when pilots have that kind of drive and focus too, and they forget or decide not to drink.”

Dehydration can impair performance – through to a decline in peripheral vision and logical thinking, which is when usual practices like pre-flight checklists can fall by the wayside.

“I remember an ag pilot who was involved in an accident in the Otago region some years ago.

“He told me ‘I was dehydrated, I wasn’t making good decisions, and just realised I had to get on the ground’. On trying to land he turned the aircraft over.”

Tom believes there’s more potential for cases of dehydration in the agricultural industry where pilots can work very long days in summer.

“Other pilots might fly from A to B, drop people off, go to the toilet, have a cup of tea. They are in a position where they can get drinks, etc. But sometimes ag pilots don’t get this luxury and then there’s perceived pressure to get the job done.”

Check yourself and your workmates

Tom says it’s not that easy to recognise when someone is dehydrated.

“People who are dehydrated get very tired or grumpy so it would be quite easy to mistake it for tiredness or someone having a bad day.

“Loader drivers can help out with fluids when it’s refuelling time; fuel both the pilot and the plane.

“Just thinking of some flying days I’ve had where I’ve been really tested, with route finding, bad weather etc. The tipping point to a very poor outcome could be dehydration.

“Urine colour is a good indicator of hydration levels. Normally, it should be clear with a yellowish tint. Darker yellow is a sign that you need more water, though that’s hard to see when you’re having a leak behind the wing. If you haven’t felt the need to urinate in two hours you may be dehydrated.

Plan to drink

In the peak of summer a combination of factors can produce extreme temperatures.

“It’s not uncommon for it to be 36 degrees Celsius inside a machine on the Wanaka airstrip in summer. So you get somebody in the cockpit of a Fletcher for example, over a full day, there’s potential to become dehydrated which can lead to other heat related conditions.”

He says some pilots don’t have a plan for getting water or they don’t even have it in the cockpit.

“If it’s going to be a hot day, plan for that. I’ve been using a camel pack on long days – two litres of water on tap. I secure it in the aircraft and it’s got a hose with a self closing valve so there’s no issue with water leaking.”

The best way to keep hydrated is to eat and drink regularly. Drink around 4 litres of water every 8 hours of hot flying.

Tom says some pilots won’t drink because then they know they’ll have to land somewhere to relieve themselves and they don’t want the hassle.

But the consequences of not staying hydrated could be far worse.

Severe dehydration can lead to heat stress and heat stroke and seriously impair your decision making and performance.

“Build drink and toilet stops into your preflight planning. When you’re on a road trip you take breaks, do the same when you’re in the air.” ➤

Symptoms of dehydration

