

The Boiling Frog – How's That Heat?

The myth of the boiling frog can help aviators, operators, and engineers look at their work objectively, and just maybe identify where they're going dangerously wrong.

Headed about the boiling frog? It's a fable about a frog placed in cool water, with the water temperature turned up regularly, but so slowly the frog doesn't feel discomfort.

It gets used to each temperature before the heat rises again – until it's too late.

The story is used to illustrate some people's inability to recognise a risk that evolves gradually.

CAA inspector of helicopter flight operations, Mitch Jones, regularly uses the analogy with operators, "because it illustrates very easily what I'm seeing in their operation.

"If I talk about the 'normalisation of deviance' and how they need to apply critical thinking, and objectivity, and carry out root cause analysis, people's eyes roll back. I don't blame them!

"But if I ask 'are you the frog in the pot?' They immediately understand what I'm saying and some have said thoughtfully, 'we might well be, we might well be.'"

Mitch says the boiling frog analogy can be applied across a gamut of aviation activities.

"It could be a pilot who takes off into iffy weather, and it gets just a little bit worse, which they get used to, and it gets a little bit worse, which they get used to, and so on, until it's too late to 'jump out of the pot'.

"Or it could apply to an engineering workshop where corners are being cut, but they seem to get away with it, so they cut a few more, and get away with it, and so on, until there's an accident created by that corner-cutting."

To make the fable useful to operators, Mitch introduces a second frog to the story.

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"If that frog is outside the pot and jumps into what is now very hot water, it will jump right out again, while its mate sits in the water wondering what the problem is.

"But the second frog, coming from outside, knows the water is too hot to be safe.

"Let's take that pilot flying in deteriorating weather. Right now, they're in the pot of heating water. But they can also take the role of the second frog by, figuratively speaking, stepping outside the cockpit and looking, as objectively as possible, at their own decision-making, 'Is what I'm doing right? Really?'"

An operator who has enlisted the services of a 'second frog', is Mosgiel-based HeliOtago.

The company regularly calls in Neil Scott from Garden City Helicopters, and Peter Turnbull from Northland Emergency Services Trust, to check over HeliOtago's processes and procedures.

Chief Pilot and CEO, Graeme Gale, says both men have the experience, knowledge, and professional attitude to assess all his company's areas of operations.

"They conduct annual instructor, agricultural, Part 135, Part 133, night vision goggles, instrument, and flight competency checks. The minimum standard of competence they expect in all those areas means HeliOtago is kept up to scratch.

"Their words of wisdom over a cuppa about our approach to things like training, checking operational matters, and SOPs, are invaluable.

"We're actually privileged to have their expertise."

PS: In actual experiments, no frog has ever boiled to death, but inevitably, has found a certain temperature intolerable and jumped out.

Someone inadvertently in IMC may not have that option. ■

