FLYING NEAR MOUNT STUPID

Mount Stupid is a term associated with the 'Dunning-Kruger effect' – someone inexperienced, failing to accurately recognise the level of their (in)competence.



he Dunning-Kruger effect – also called 'illusory superiority' – is the false impression that someone new to a task, has of their skill at that task.

Not everyone new to a task has illusory superiority, and not everyone with illusory superiority is new to a task.

But generally speaking, it's new-timers who have it.

Social psychologist David Dunning says incompetent people cannot recognise how incompetent they are.

"For poor performers to recognise their ineptitude would require them to possess the very expertise they lack," he says.

"What's curious is that, in many cases, incompetence does not leave people disoriented, perplexed, or cautious. Instead, the incompetent are often blessed with an inappropriate confidence..."

New aviators are not immune to this. The American aviation author, Paul A Craig, says that during the period when a newly minted pilot is building experience, they seem to be caught between two worlds.

"On the one hand they are fully licensed and legal pilots, but on the other hand they've not had the opportunity yet to learn from experience."

Breakfast Cereal, Zach Weinersmith.

Paul says that when he had finished his private pilot test, his examiner said, "I'm going to give you your licence to learn".

He didn't really understand at the time what the examiner meant. After all, he'd passed his test and was a fully-fledged pilot!

"I was so naïve," he writes. "I thought all the learning took place while preparing for the test and that the learning stopped after the test. I was not only inexperienced as a pilot, but I also had an inexperienced attitude."

That attitude is characterised as 'level one' thinking by the FAA's runway safety specialist, Alan Gorthy.

Gorthy, a retired US navy attack pilot, argues there are four levels of competency in single-pilot decision-making. A level one pilot is so inexperienced they don't even know what they don't know. At level two, the pilot has had just enough scares to know what they don't know and wants to fill those gaps. At level three, despite having filled the gaps, the pilot continues to seek out knowledge and challenges. A level four pilot has become a 'natural', and having reached the apex of flying skill, can handle normal, abnormal and emergency procedures.

But, says Thomas P Turner, of US-based Mastery Flight Training, the lack of experience of a new pilot means that "flying as a level four 'natural', and being a level one thinker, feel a lot alike". ≫



Little experience

Avoiding the mountain

So how can a newly licensed pilot stand back from their achievement to acknowledge their lack of experience?

This is what David Dunning advises. "Be your own devil's advocate. Ask yourself how you might be wrong, or how things might turn out differently from what you expect... Consider 'the opposite'. Seek advice."

The CFI of Ardmore Flying School, Warren Sattler, has more than 30,000 hours flying experience.

"On getting their PPL, I often ask students to reflect on when they got their driver's licence and ask, 'how long did it take after that test before you gave yourself a fright, have an accident, or get a speeding ticket?"

"Virtually all of them own up to an incident, so I take that opportunity to remind them that flying will be no different."

Alister 'AB' Buckingham – a former accident investigator for both the Transport Accident Investigation Commission, and the CAA – has advice for low-hours pilots who've acknowledged their lack of skill and want to build valuable experience quickly.

"Sandbagging hours – that is, just going for a standard fly to build flying hours – is not a productive way to gain experience.

"Try instead to extend your skill. For instance, if you're solo, practise accuracy. If you're aiming to fly at 3000 ft, make sure the big hand is bisecting the zero. Or if your goal is to fly at 80 kts, fly so the needle is dead on 80, not 81, or 79."

AB, who has 4500 hours helicopter flying, and 3500 fixed wing, also says pilots should know the limitations of their aircraft.

The day you think you know it all is the day you're going to kill yourself.

// FLYING RIGHT

Writing in 2015 for *Flight Safety Australia*, Thomas Turner said the most-skilled pilots drift between Gorthy's level three and four thinking.

"They have learned a great deal about safe flying and decision-making ... and they employ well-reasoned limits on the risks they'll accept ... but actively seek new skills and knowledge.

"Sadly, the culture of flying often idolises the pilot who 'knows it all' and 'can fly anything with wings' when in fact such a pilot is often on the lowest level of Gorthy's scale of judgment."

"Explore those limitations if necessary, particularly how it performs at low speed. It's on final that you can screw it up.

"Get to know your aircraft systems intimately, especially the fuel system. And whenever you can, practise stalling – get a real feel for how the aircraft performs."

Paul Craig agrees that new pilots need to increase the quality of their flying experience, not just add hours.

"All flight hours are not the same. You receive greater benefit toward airmanship when the challenge is greater.

"An hour seeking an advanced rating is worth more than an hour of personal flying. In general terms, an IFR flight is more valuable than a VFR flight. A night flight is worth more in experience gained than a daytime flight. A flight into busy controlled airspace is more helpful than a flight into an uncontrolled aerodrome.

"An hour in a complex aeroplane teaches more than an hour in a fixed gear, fixed pitch aircraft. Winter usually is more challenging than summer. A crosswind teaches more than a calm wind. You learn more on an instrument approach than on a visual approach. You get better weather planning when the weather is marginal than when it is beautiful."

He recommends a five-year plan to improve flying skill, for instance, setting out to achieve a new rating. He advises being active in ongoing flight training.

"Go to safety seminars, take aviation courses at a college, get into a 'wings' programme." (Flying NZ runs a Pilot Proficiency Scheme allowing GA and microlight pilots to continue with valuable upskilling.) Paul Craig also suggests playing the 'what-if' game with another pilot, or group of pilots. What would each do if suddenly the engine started running rough, or cut out after take-off, or the radio became inoperative?

There may not always be one answer, and more than one may be right.

"If some day in the air, one of these what-ifs comes true, you will be better prepared," Paul says.

Next, read, read, read.

Warren Sattler says there's a plethora of written resources that all new pilots – indeed, all pilots – should make constant use of.

"Overseas websites, *Vector* magazine, the CAA's accident register – they all add to a pilot's learning curve."

It never ceases to amaze Warren how flight planning with an instructor can be done so well by a student, and then so disregarded in the 'real world' of flying.

"For instance, every year, pilots get caught out by the change in daylight saving," he says. "They clearly have given no thought to properly planning their flight. They just turn up at the airfield to go for a fly – that's the extent of their 'planning'.

"And I've lost count of the times newly licensed pilots arrive to take their friends for a flight with no thought to useable payload – 'it's a four-seater isn't it?' is as much as they consider."

Warren also has the following tips for training organisations.

"Observe a just culture, including establishing a de-personalised incident register." Refresher courses based on that register, he says, are of enormous benefit.

"Link new graduates to more experienced and suitable pilots for mentoring, the more senior pilot answering questions and helping to resolve problems in a non-judgmental way."

While Mt Stupid is usually referred to when talking about someone new to a task, David Dunning says we all have pockets of ignorance, and that continues to a certain extent our whole lives.

So it can be with more seasoned pilots.

As AB observes, "It's a pretty poor day when you don't learn something new.

"The day you think you know it all is the day you're going to kill yourself." 놀

REVISED ELECTRICAL STANDARD

A revised standard is designed to provide an improved level of safety when ground electrical equipment is connected to an aircraft.

The standard is NZS 6114 and Amendment 2 of Section 6 Aviation electrical installations, facilities and equipment.

The New Zealand standards system is used because the standard is about ground electrical supply and related equipment rather than the aircraft itself. The amendment is the result of extensive consultation with interested parties, and it applies to both civil and military aviation.

Section 6 applies to aviation electrical installations, facilities and equipment supplying or using electricity at voltages or frequencies other than 'standard low voltage' to:

- aircraft
- airport aprons
- aviation equipment
- aviation support, and
- aviation repair workshops.

It addresses the specific differences between the ground system and aircraft configuration – and builds a safety compliance bridge between the two disparate electricity regimes.

Having a standard will help airports and ground organisations meet their health and safety obligations.

It's particularly helpful in providing licensed industrial electricians with guidelines when they operate in an aviation environment. \succeq