

Strip Flying

Landing on short, unofficial strips requires skills quite apart from those needed for other types of flying. And most of those skills are to do with human factors.

“That man deserves a beer.”

That radioed comment changed a pilot Nigel Griffith's flying from then on.

It came from someone watching Nigel go around – his first in earnest, he says – rather than follow through with a marginal landing on a challenging strip in the Marlborough Sounds.

“Before then, like many people,” says Nigel, “I would try to avoid the go-around, and just back myself that I would land safely.”

“But now I've embraced the go-around, am proud of it, and believe if everyone adopted the same attitude, it would solve 90 per cent of landing problems at these small strips.”

“The first thing about landing on private strips,” agrees CAA team leader of heli ops, Grant Twaddle, “is to have an early decision point. And once you have made the decision, follow through. If you decide to land, land – even if it's on the paddock beside the strip. If you decide to go around, go with it. There's no point having a decision point, then flying on past it still trying to toss up what to do.”

“Many private strips butt up against rising terrain and you may not have the option of a late go-around.”

Queenstown-based Jules Tapper, who's landed on mountain strips for more than 50 years, says the pilot needs to ask themselves why they want to land on a strip. “Is it really necessary, or am I just trying to put another strip in my logbook?”

Jules says if a pilot intends landing on a private strip, they need thorough preparation.

“Have they been briefed by a local, more experienced pilot in landing there? What are the specific considerations for flying in there *today* – wind, turbulence, shear, temperature relative to ISA sea level performance?”

“What about anticipation of an incident? Who knows where I am? Who local can help me? What emergency gear and food supplies do I have if we get stuck here?”

“Are all the boxes ticked for a landing? Weight, recent currency on type, experience in landing on demanding strips with reduced margins, the wishes of any passengers?”

“And finally, what about the strip? Its length, width, surface conditions, slope, side clearances, braking effectiveness, approach and overshoot considerations?”

“You should never land on a strip, outside an emergency, on a whim. Evaluate the considerations first.”

Another piece of advice from Nigel Griffith is to come in steep. “The three guys who won their class in the recent Healthy Bastards Bush Flying competitions, all had steep approaches.”

“If you come in low, you're dragging the plane in on to the strip. If you decide to go around, you've got a really high drag situation.”

“But if you're high on approach, you can see where you're going to land, and if you do have to go around, you just put on a bit of power and go.”



Nigel says if a third go-around is unsuccessful, "it's time to knock off".

Grant Twaddle says taking off from a sloping strip has its own challenges.

"If you're taking off from a downward sloping strip, you get airborne very quickly, then level off and lose airspeed, which means you can bump down again on the strip, but now you are running out of strip to take off from."

Jules Tapper says there are other considerations in taking off from a downward sloping airstrip. He says it can be particularly difficult in a downwind, especially with the wind coming from the left.

"I'm in a taildragger, and that downwind is going to accentuate all the negative takeoff factors of torque swing, P effect (the effect of power) and gyroscopic effect. Will I have enough length and width on the strip, and braking and rudder effectiveness, to safely take off while maintaining directional control in my high groundspeed and low airspeed configuration?"

Nigel Griffith also flies a taildragger. He uses a formula he read in an Alaskan flying book, for taking off.

"At the midway point of the strip, your speed should be two thirds of your stall speed. So, in my aircraft, with the stall speed around 45 knots, 70 per cent is going to be about 35 knots. So at the midway point, I have a quick glance and if I've got more than 35 knots, it's going to take off no problem. If I haven't got 35, I can easily stop in the remaining half of the runway."

CAA Aviation Safety Adviser, Carlton Campbell, says that inexperienced pilots should consider making that decision at about the one-third mark.

"That means that by the time they do reach the midway point, they have started to decelerate.

"I can't emphasise enough the importance of getting training before flying into airstrips," he says.

Jules Tapper says experienced pilots like him are increasingly concerned by the recent, and rising, number of 'big scares, narrow escapes or accidents' resulting from inexperienced or 'gung-ho' pilots attempting something beyond their skills or failing to recognise potential traps.

Nigel Griffith agrees, saying it actually takes a much better pilot to decide that, right now, they cannot land safely, "and it will be better to go around and do a really good landing".

Jules Tapper encourages pilots to be thinking ahead and having an 'out' regarding the possible downside of landing in marginal areas.

"It does not seem to be uppermost in some people's minds when they take on some landings and takeoffs."

He also encourages experienced pilots to "spread the info around".

"If they're the first in a group to land somewhere, let the others know what the conditions are like. If the grass and mossy runway is like glass, warn the less experienced pilots off.

"I've known of pilots, carrying passengers, landing on strips they're completely unfamiliar with. And the more experienced pilots in their group have given them no mentoring at all. I don't think that's acceptable. Pilots used to landing on these short runways should be taking every opportunity to help others with general advice about strip flying, and tips about landing that particular day on that particular strip.

"I learned how to land on strips, and how not to, the hard way, during the venison recovery days. I wouldn't recommend it as a way of gaining knowledge.

"Far better, as the old adage goes, to learn from the mistakes of others."

Further Reading

To read more about the skills involved in strip flying, email info@caa.govt.nz for a free copy of the GAP booklets, *Takeoff and Landing Performance* and *Weight and Balance*. ■



A rural strip with deceptive upward-sloping ground.