Microlight **Type Ratings**

An advanced microlight, a Tecnam – about 600 kg, cruise 118 kt, stall 35 kt.

Microlights are hugely popular, and there's a great range to choose from, but they are not like for like.

If you're type-rated on a Quicksilver, you can't fly your friend's BushCat without a type rating for that aircraft.

Evan Belworthy, who's been involved with amateur-built aircraft for 25 years, says there's good reason for that.

"If you drove a Bentley versus driving a Toyota Yaris, for example, you'd need to have a different rating because you've got a far heavier vehicle that you need to understand."

There are three Part 149 organisations administering microlight operations, including issuing type ratings: Recreational Aircraft Association of New Zealand (RAANZ), Sport Aviation Corp (SAC), and Flying NZ.

Kevin Mattson, an Authorised Testing Officer (ATO) and Safety Officer with SAC, says if you want to fly an aircraft significantly different in type to what you're rated on, you must get a rating from a qualified instructor on that type.

Using Evan's car analogy, Kevin says a key factor in microlights is their low inertia.

"Part 61 licence holders require a type rating for microlight aircraft as well. They're moving from aircraft with much higher weight and inertia.

"We teach them to always keep a hand on the throttle and watch the airspeed. With low-inertia and high drag microlight aircraft, descent can be very rapid once the throttle is closed."

The CEO of RAANZ, Evan Gardiner, says there's a huge difference between some microlight types, "Particularly between first and third generation microlights.

"The latter are fast, composite aircraft that can cruise at 140 knots. You wouldn't get out of a Bantam or a Quicksilver, for example, and hop into something as radically different as that."

Kevin adds that even some differences between the same brand of microlight can mean a type rating is required.

"If a person hasn't flown that model with a constant speed propeller, or with a turbocharged engine, or retractable undercarriage, they would still need to get checked out by an instructor. The various models of Tecnam are an example."

Evan Belworthy is also an ATO with SAC and says the type-rating system is there for safety.

"With a very lightweight and high drag machine, if you lose power or close the throttle for landing, the aircraft descends very rapidly. If you've got a heavier and cleaner machine it will continue because the inertia's behind it. So you need to understand the performance limitations of a new aircraft."

The type-rating requirements for microlight aircraft are in Part 103, and the Part 149 organisations expand on that in their operations manuals.

Evan Gardiner says there's generally a good awareness of the type-rating system in the microlight community.

"We tend to accept as a philosophy, that anybody that's well trained as a pilot has, in that process, learned about good decision-making.

"That includes asking yourself, if you're going to hop into another aircraft, 'am I currently rated in this type', and if the answer's 'no', then you need to seek a type rating in that aircraft." ■

A basic microlight, a Solo Wings Trike – about 350 kg, cruise 43 kt, stall 27 kt.