CARRIAGE OF LPG CYLINDERS

You cannot carry LPG containers on a passenger, or passenger-and-cargo, flight.

iquified petroleum gas is a 'dangerous good' under both ICAO's *Technical Instructions for the Safe Transport of Dangerous Goods by Air* and IATA Dangerous Goods Regulations.

But there's a common misconception that LPG cylinders can be carried on an aircraft – normally helicopters – that's also carrying passengers, using rule 92.11(c) *Carriage of Dangerous Goods – Exceptions*, or rule 133.65 *Helicopter External Load Operations – Dangerous Goods*.

Both rules, however, have further conditions that make such an assumption incorrect.

Rule 92.11(c) says, "A person may offer or accept dangerous goods for carriage by air that are for the recreational use of a passenger without complying with this Part if.... Then paragraph (2) carries on "...the dangerous goods are not listed in the Dangerous Goods List in the Technical Instructions as being forbidden for carriage by air in an aircraft that carries passengers...".



And rule 135.65(b) says, "A pilot-in-command of a helicopter may accept Class 2 to Class 9 dangerous goods for carriage as an underslung load beneath a helicopter without complying with Part 92 if... Then paragraph (1) carries on "... the carriage of the dangerous goods are not forbidden by the Technical Instructions...".

And to be clear, LPG is forbidden under both.

The only way that LPG cylinders can be carried on a passenger aircraft is by applying Special Provision A1 of ICAO's Technical Instructions which allows the CAA to issue a prior approval, and establish written conditions for that approval.

One of the limitations of such an approval is that the CAA may approve the carriage of a cylinder of only up to five kg – not a nine kg cylinder, as commonly believed.

An empty LPG cylinder is treated as a full cylinder for the purposes of dangerous goods transport, unless it can be proven that you have adequately 'nullified the hazard'.

That means you have scrupulously washed the cylinder, then thoroughly flushed it with a neutralising agent.

LPG cylinders may be carried on cargo-only flights, but the maximum net quantity per cylinder must not exceed 150 kg, although there's no limit to the number of cylinders that can be carried.

The cylinders must be certified for carriage by air, and marked with the appropriate manufacturing marks, operational marks, and certification marks, as required by the ICAO Technical Instructions.

These include the UN symbol and the technical standard (ISO number) used for design, construction, and testing.

Cylinders must be re-tested every 10 years.

For more information go to aviation.govt.nz > safety > safety advice > transporting dangerous goods > carriage of dangerous goods - LPG bottles.

Comments or queries? Email jim.finlayson@caa.govt.nz

// LPG cylinders cannot be transported with passengers.