» Easy as

It may not be a legal requirement but having a PLB is, according to Lionel, a no-brainer.

"They've got a fantastic app to register the beacon," he says.

"You can go in any time you like, edit it, update your details, change the distress call phone numbers, anything you like."

In his methodical way, Lionel makes sure his details are kept current with beacons.org.nz.

"One of the RCCNZ guys was telling me that a PLB had been activated and when they rang the distress numbers listed by the beacon's owner, it turns out the aircraft the beacon was registered to, had been sold six years earlier. The new owner had never re-registered it.

"What's the point of having a beacon and uncurrent details?"

Lionel says that, at a bare minimum, pilots should let someone know what they're doing, their destination, the route, and the time they expect to arrive.

"Then keep that line of communication open, especially if your plans change," he advises.

He says he learned his own lesson some years back, when he told someone all those things, then, because it was such a beautiful day, changed his plans - without letting anyone know back at the base aerodrome.

"I returned later than I had anticipated to a very worried group. One was really distressed because she'd lost a family member in a flying accident some years before.

"That taught me the value of having all communication lines open - and a PLB.

"You never think you'll ever have to use it - that's how I felt, anyway. But I'm glad to have been prepared when the worst did happen." 📥

// MORE READING

Read the Vector Online article "Overdue. Now what?" about RCCNZ's response in a search and rescue situation. Go to aviation.govt.nz/ vector-online.

Comments or queries? Email vector@caa.govt.nz

THE PROPER USE OF s13A

Section 13a is a valuable emergency exemption from the rules – but it's not an everyday operational tool.

The basics

In some emergencies, Section 13A of the Civil Aviation Act 1990 allows pilots-in-command and operators to breach civil aviation rules but only in the following circumstances:

- (1) People or essential supplies urgently need to be flown somewhere.
- (2) People and/or property are in danger and need to be protected.
- (3) You use s13A only for what is necessary to deal with the actual emergency. (For instance, if you breach the rules on minima to pick up a patient in cardiac arrest and deliver them to hospital, you can't use the s13A exemption to fly back to base, still breaching the rules on minima, because that final leg is not part of dealing with the actual emergency.)

- (4) There are no other reasonable means to alleviate or avoid or help with the emergency.
- (5) The degree of danger involved in breaching the rules is clearly less than the degree of risk involved in failing to attend to the emergency.
- (6) The aircraft is registered.
- (7) The aircraft is airworthy.
- (8) The pilot is lawfully allowed to fly the aircraft.
- (9) The relevant air traffic control service is notified immediately of the breach of the rules.
- (10) The Director is notified as soon as practical via the s13A report.

Don't be pressured

A 'tasking agency' (for instance, Fire and Emergency, district health boards, RCCNZ) can supply information to help an operator decide whether or not to fly, but that agency has no power to say to the operator or pilot, "Make the flight and use the s13A to breach the rules".

The executive officer of Aviation New Zealand, Bill MacGregor, says it's the operator or pilot who has to shoulder all responsibility for making a flight that may require a s13A report.

"We don't want people getting into a situation where the tasking agency influences their decision, and they end up making a flight, inappropriately. Because it's them, not the agency, who'll have to wear that," Bill says. CAA Investigator Jason Frost-Evans agrees, saying the s13A is used solely at the discretion of the pilot-incommand (PIC), or the operator.

"The main areas where a PIC or operator can rely on information provided by other parties are in assessing whether there's a threat to life or property, and what the alternative available means are to deal with that."

Jason says if attending to emergencies is an operator's daily business, they should be resourced and equipped to the level that they don't have to routinely use an s13A to operate.

And yet, of the 139 section 13a reports since 2017, 134 were related to air ambulance work.

"The s13A is primarily for unforeseen events," says Jason. "Perhaps you're a pilot being called on to do what you can to help because you happen to be flying near to a sudden disaster. That's where s13A may be warranted.

"Emergency services should have sufficient risk processes and resources in place to deal with most emergencies safely, without the need to breach the rules on a regular basis."

Emergencies and restricted aircraft

"Operators of an aircraft with a restricted certificate of airworthiness should think very carefully before using their aircraft in an emergency," says Bill MacGregor.

"There are a number of limitations to operating such an aircraft and s13A may not release them from those limitations." »



// When Amalgamated Helicopters receives a callout – from LandSAR, for instance – it carries out a risk assessment, then checks with the tasking agency as to the critical nature of the emergency.

Those limitations are noted in the aircraft flight manual and relate to airworthiness.

"If your aircraft has a restricted certificate of airworthiness, the difference between an emergency arising in flight versus one arising when the aircraft is still on the ground is important," says Jason.

"Let's say the emergency arising in flight is one that makes the aircraft unairworthy. The pilot needs to be able to take the safest course of action to ensure the safety of those on board. That potentially includes continuing the flight.

"If the aircraft is still on the ground, and it has airworthiness limitations or is otherwise not airworthy, it cannot be flown under the provisions of s13A.

"This makes sense because – while the pilot and operator are responsible for ensuring an aircraft is airworthy – they're not necessarily qualified* to make decisions about to what degree the airworthiness issue is a direct safety issue."

Operator obligations

Rule 135.553 requires operators to establish a training programme to make sure crew members are trained and competent to "perform their assigned duties".

And if assigned duties include emergency operations, the training programme should cover those operations, including the use of section 13A. This should be supported by an 'emergency situation action plan', as required by rule 135.91, and the associated risks and mitigations should be addressed in the SMS.

"So the pilot can say, 'I did this assessment under our SMS, and I assessed that the risk to life, limb, and/or property (in the emergency) was greater than the risk of flying. I've gone through a formal process, I can justify what I did, and I reported it under 13A," says Bill.

"Operators involved in emergency work like search and rescue, or medevac, or firefighting should make sure their pilots and crews have a short, easy-to-use 'what if' flow chart to assess whether the use of \$13A is appropriate.

"We want operators and pilots to actually think this through, and not just react with, 'Oh, it's an emergency, we've got to go, and fast'."

Operators should, at the very least, ensure their crew are aware of \$13A and what it's for, Bill says.

"They need to realise that it's not something that should be automatically invoked to justify the unjustifiable.

"It's not a 'get out of jail free' card for PICs or operators." 놀

// MORE READING

To read more, go to **legislation.govt.nz**, search on Civil Aviation Act 1990, and scroll down to 13A *Duties of pilot-in-command and operator during emergencies*.

 $^{^{\}star}$ Assuming they're not also LAMEs or working under the authority of a Part 145 certificate.