

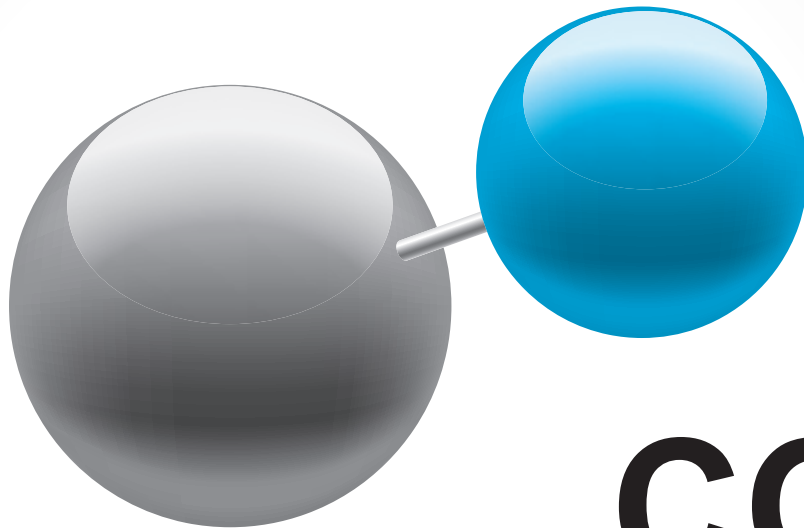
Clued^{up}

GA Update

July 2021

CARBON MONOXIDE





CO

Carbon monoxide

PASSIVE OR ACTIVE?



For many years pilots have been using 'passive' carbon monoxide detectors in the cockpit, but 'active' electronic sensors are becoming less expensive and more available

As most people are probably aware, the trouble with carbon monoxide (CO) is that you can't smell or taste it and it affects people quite quickly. When breathed in it enters the bloodstream and mixes with haemoglobin (the part of red blood cells that carry oxygen around your body) to form carboxyhaemoglobin (COHb).

The trouble is that it's so good at binding to the cells — up to 240 times better than oxygen — that the blood carries less oxygen, causing cells to fail and die, effectively producing the effects of hypoxia — mainly a headache, drowsiness, or dizziness. Other symptoms

include impaired vision, feeling or being sick, tiredness and confusion, stomach pain, shortness of breath and difficulty breathing. Recovery can take up to 24 hours or longer.

If you've been around flying for a while you might know the intriguing story of American GP Dr Robert Frayser — he's the chap who Lady Luck devoted her biggest smile to one day. It happened when he was flying a Comanche 400. Just after switching to the auxiliary fuel tank and setting up the navigation system for his destination he, in his own words "lost about an hour and a half of my life".

He'd passed out from CO poisoning but

the Comanche continued to fly a straight course on autopilot until it ran out of fuel. Miraculously, it then glided down with Dr Frayser still unconscious until it 'came to rest' in a field.

The good doctor woke up confused, disoriented and groggy with a severe headache — so groggy in fact that he thought he was still in the air and started to go through his landing preparations. As he became less confused, he realised he was on the ground in a hayfield. The engine was silent, the right wing had been almost torn off after hitting a small tree, but the Comanche was, fortunately, otherwise more or less still intact.