

NIGHT FLIGHT: TWO-THIRDS OF A WINTER FLYING DAY

So...are you night current? Really? The full boat?

We're talking about something more than what's required by FAR 61.57, Recent flight experience. When did you last go up with a safety pilot and do multiple landings to a dark runway, someplace where you can turn off the pilot-controlled lighting? How about the last time you practiced landing with the cockpit dark and only a flashlight to help? How about without even a flashlight?

An electrical failure at night shouldn't be the end of the world, but corroded night-emergency skills could tip the balance.

Meanwhile, many a pilot over the years has expressed considerable skepticism at the claim one of the best tools for night flight is an oxygen bottle and a cannula or mask. But it's true. Yes, simple O₂ can dramatically improve your night-flying experience and help minimize its risk.

It works like this: the color-sensitive cone cells in our retinas are less light-sensitive than the rod cells, which are more light-sensitive but don't detect color as well. Both types are oxygen-sensitive, the cones more so. So what happens when we fly? As we ascend, our blood-oxygen level declines and our eyes become less light-sensitive, even as our pupils dilate to their maximum diameter in the dark of night flight.

Lights on the ground grow dimmer, colors less become less pronounced. And this occurs at altitudes well below where the FAA requires us to use supplemental oxygen.

Try it. Go up with another pilot, at night, then fly off into the darkest direction you can find. After about 15 minutes put on the O₂, turn the flow meter up to the appropriate level, sit back and watch what happens. Over the next 10 to 15 minutes you should see a noticeable increase in the brightness of lights on the ground; colors should become more vibrant and acute; even the flat silver glow of moonlight gets brighter.

And that improvement in visual sensitivity is worth its weight during a dark night flight—particularly one in weather.

