

## HOW HIGH IS TOO HIGH?

There are some practical limitations to how high we might want to cruise. Without considering weather, they can include available power, which translates into indicated airspeed, traffic mix and physical comfort. Let's take them in that order.

### AVAILABLE POWER

A normally aspirated airplane might not be happy cruising at, say, 50 percent power. Indicated airspeed likely will be well down in the green arc, and the controls may be sluggish. A turbocharger will easily fix this—at least until you climb beyond the turbo installation's critical altitude. But expect a progressively higher-than-normal pitch attitude and sluggish control response as the airplane nears its service ceiling.

### TRAFFIC MIX

Generally, altitudes between, say, 10,000 feet and FL180 don't see much in the way of cruising airplanes. As one result, getting direct routing to or from just about anywhere outside of the Northeast U.S., or when your chosen altitude is too low for the MEA or off-airway terrain, should be a piece of cake. What traffic that's there usually is some other piston single or twin doing the same thing, or something turbine-powered climbing or descending. There are fewer ATC frequency changes, too.

### PHYSICAL COMFORT

This article's main text touched on supplemental oxygen, which is a larger topic. But spending all day above, say, 10,000 feet can have a measurable and detrimental effect. For one thing, the thinner air at altitude also contains less moisture. One outcome can be dehydration, which often results in fatigue and poor decision-making. Meanwhile, our internal physiology can produce unpleasant gases, resulting in discomfort. Finally, the effects of carbon monoxide poisoning can be more pronounced.

