

AIRPLANE SELECTION

If you're in the used airplane market and want to factor crashworthiness into your selection, we suggest considering the following factors:

RESTRAINTS

We think the restraint system should be the first consideration. We do not recommend buying an airplane without shoulder harnesses installed for each seat. If they aren't already there, at least the airplane should be capable of retrofit—many aren't. We like inertia reel shoulder harnesses rather than the basic strap because pilots and passengers are more likely to wear them if they allow freedom of movement.

We much prefer integral restraints—shoulder harness and seat belt in one unit—as in a car. The idea is to make the restraint system easy to use so it will be used. Our favorite is an integral double over-the-shoulder and seat belt restraint. It is standard equipment on a few airplanes and we've seen it retrofitted on others.

FLAIL SPACE

Look at the area in front of the seats, front and rear. Is the panel padded? How about the seat backs?

We think side sticks are safer than control yokes because yokes, even when padded, are on poles that can become spears. Center control sticks aren't perfect but, in our opinion, are safer than yokes.

In many forced landings and RLOC accidents, the nose wheel digs in or the airplane hits something low on the nose, driving the occupants up and forward and their heads into the ceiling. It was recognized in the 1960s that overhead switches increase the risk of head injury in a crash, and manufacturers did what they could to put all switches on the panel.

Unfortunately, overhead switches were deemed to look cool about 20 years ago, so some manufacturers have taken to installing them again. We recommend avoiding them.

EGRESS

Bluntly stated, the more doors, the better. We like little airplanes with at least two doors, or at least a decent-sized emergency exit if there is only one door. We're not crazy about canopies or upward-opening doors, although we have not seen data that indicates occupants are trapped in those airplanes more often than in airplanes with doors. However, if they invert in an accident, getting out can mean having to kick out the plexiglass or otherwise use something to batter one's way out.

BALLISTIC RECOVERY SYSTEM

Whole-airplane parachutes are not a panacea for safety. However, we like them even though they require fairly expensive maintenance on a time schedule. Simply put, when everything has gone wrong and the pilot has exhausted the available options, a B.R.S. offers one more chance that may keep everyone alive.

NOSEWHEEL

We know that tailwheel airplanes are cooler than nosewheel; tailwheel airplanes are more expensive than a directly comparable nosewheel airplane and tailwheel pilots are more macho than nosewheel pilots.

Yet, tailwheel pilots wreck airplanes at a much higher rate than nosewheel pilots. Are they worse pilots? No. It's the design. With the center of gravity behind the main gear, tailwheel airplanes are more difficult to control on takeoff and landing—the hard fact is that they therefore have a higher accident rate than nosewheel airplanes. Plus, many of them have significantly fewer occupant protection features, so the risk of injury is higher when they do crash.

If you want to reduce your risk of an accident and of getting hurt in an accident, swallow the macho pride and buy a nosewheel airplane.