



CHARLIE PRECOURT

COMMENTARY / FLIGHT TEST



Join the Club

Increasing your flight safety through type club participation

BY CHARLIE PRECOURT

IN CASE YOU HADN'T noticed, the focus of the last many months in this column has been loss of control. That issue remains far and away the number one cause of general aviation and experimental amateur-built accidents in our community. LOC is on the NTSB "Most Wanted List" and is the FAA's theme issue this year. It is also the focus of the EAA Founder's Innovation Prize, described in a four-page spread in the December issue of *Sport Aviation*. And we'll keep pounding on LOC until it goes away, just like we did with controlled flight into terrain (CFIT), which was a big issue for us until the advent of GPS mapping displays in our cockpits. So, what will be the equivalent solution for LOC? We don't yet know, but we will figure it out! In past articles I've covered upset recoveries with Mike Goulian, transition training with Dave Morss, the use of angle of attack systems, which have been made easier to retrofit by FAA policies, the use of crew resource management, stick shakers, controllability checks, and a few more. Each of these topics contributes to a portfolio of tools for us to use to stay far away from a loss of control in flight problem. And there's yet another one to consider I want to advocate this month—relying on each other's experiences. There's nothing like learning from someone else so you don't have to learn it the hard way yourself—and the best way to do that is to join a type club! I've been associated with four different type clubs myself, and I have to say the experience has been nothing short of awesome.

In both my military and NASA experience I was the beneficiary of a very extensive training system with facilities and assets that are hard to match. In general aviation those kinds of assets are simply not available—but in type clubs you can get very close to the same training experience you'll find in the best military and airline flight schools out there. In the military and commercial airline communities, there were considerably higher accident rates prior to 1990 than exist today. Those communities took on the issue by creating highly professional training systems with a focus on crew resource management, and they also improved the redundancy in system designs of the airframes—a training-oriented solution and a system oriented solution. Together they resulted in plummeting accident rates—type clubs can be a part of the same answer for us in general aviation.

I want to acknowledge some very significant research in the area of type clubs by one of our members, Jeff Edwards. Jeff is an accident investigator, former Navy A-6 bombardier, and the founder and president of the Lancair Owners and Builders Organization (LOBO), a type club for Lancair experimentals. Jeff conducted a comprehensive study on the efficacy of type clubs that was published earlier this year in the *Journal of Aviation Technology and Engineering* (JATE). You can get a copy of his entire study at www.EAA.org/sportaviation under This Month's Extras. The study is entitled "The Efficacy of Aircraft Type Club Membership." In his study, Jeff researched the question of whether type clubs actually improved safety and if so, why. His study was both qualitative and quantitative in nature, examining both the statistics and the attitudes of members in three distinct type clubs. From his study we can't determine if pilots become safer because they join the clubs, or if it's the safer pilots who join type clubs. The study groups agreed it was probably a bit of both—safer pilots tend to join and in turn become even safer because of their involvement.

When you look at the statistical data, you have to ask yourself why you wouldn't be a member of a type club for your aircraft. The three type clubs Jeff studied were LOBO, the American Bonanza Society (ABS), and the Cessna Owners and Pilots Association (COPA). The data from these three clubs represent more than 20,000 aircraft and owner/pilots. For the Bonanza accidents analyzed, 87 percent involved nonmembers, and 92 percent of the fatalities were nonmembers. Members in the ABS were 11 times less likely to be in a serious accident than nonmembers and 11 times less likely to be involved in a fatality. COPA members were 1.5 times less likely to be involved in an accident and 2 times less likely to be involved in a fatality. For LOBO, members were involved in only 16 percent of accidents and 18.2 percent of fatalities. Pretty significant results!

Qualitatively it gets even more interesting. Pilots who are members identify four themes of importance: sharing information, sharing experiences, learning, and safety. Most type clubs have websites with tons of type information and blogs for members to ask each other questions, share experiences, answer questions about engine occurrences in flight, find best deals on parts, and in general keep each other from repeating past mistakes. In other words you're not alone! Novel concept. These clubs also tend to have annual fly-in events that are fabulous social gatherings. Hangar flying, presentations by industry experts, and contact with vendors providing the latest information on the maintenance and upgrade of a particular airframe are all part of three- to four-day events that bolster proficiency,

awareness, and camaraderie among other owners of the same aircraft.

In my own experience I've associated with the Rutan EZ group, LOBO, Citation Jet Pilots, and most recently the Malibu and Mirage Owners and Pilots Association (MMOPA). In building my VariEze I scoured every one of Mike Melvill's newsletters for insights into lessons learned and accidents others had experienced, all in striving to avoid repeating the same mistakes. That information in the Rutan Aircraft Factory newsletters was absolutely invaluable to my VariEze flying experience. Today I am active in the MMOPA, which helps me immensely with my new JetPROP. One of the common gotchas for PA-46s has been aircraft leaving the runway on touchdown in crosswinds. Through MMOPA I learned some things about my PA-46 that I wouldn't have learned

Those communities took on the issue by creating highly professional training systems with a focus on crew resource management, and they also improved the redundancy in system designs of the airframes—a training-oriented solution and a system-oriented solution.

elsewhere. It turns out nose tire pressure in my JetPROP is a big deal; let it get well below the spec 47 psi and you are inviting controllability problems on touchdown in crosswinds, and the big gotcha is you can't easily detect low nose tire pressure visually because the aircraft weight on the nose is less than other designs. So we all carry tire pressure gauges in the tool kit to take regular readings and stay ahead of that problem. I also have really enjoyed trading stories about flying the aircraft with many others who have more experience than I in

that airframe. Not having to figure things out on my own is incredibly valuable.

So join the club—the type club that is. For a list of the type clubs focused on your particular aircraft visit www.EAA.org/sportaviation and click on This Month's Extras. It's certainly worth pursuing, is loads of fun, and might just save your bacon!

Fly safe! **EAA**

Charlie Precourt, EAA 150237, is a former NASA chief astronaut, space shuttle commander, and Air Force test pilot. He built a VariEze, owns a Piper JetPROP, and is a member of the EAA board of directors.