

The



Left Seat

By Bob Worthington

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The Aging Aviator

What age and its effects have on a pilot's physical and intellectual abilities has always been a legitimate question. Especially when we renew our airplane insurance or get our FAA mandated medical exam. The question is not "if" our physical and cognitive skills decline as we grow older, because we know they do; but by how much and if this normal deterioration can be mitigated. The short answer is yes; the aging process of body and mind can be controlled to a certain degree.

From my late teens to my mid thirties, I earned my living as a combat infantryman. For 15 years, my paycheck came from working in a high-risk, high-stress occupation, which included three combat tours. Then I left the Army, went to graduate school and became a clinical psychologist. The Army invited me to return to active duty to become an observer rather than a participant in high-risk, high stress vocations. I studied the behavior of combat soldiers and the adjustment of America's military Vietnam POWs. When I became a pilot, I became an aviation psychologist, again studying how and why pilots decide what to do in difficult situations. Throughout my studies, I had a certain advantage over my colleagues because I was also a participant of the areas we were studying. I had a natural quest for answers to better understand why I did what I did in stressful times. Now that I'm moving gracefully into my mid 70s, understanding the aging processes and flying become dear to my heart.

Several major studies conducted in the mid 2000s revealed that becoming older and flying a plane did not increase the safety risk due to the pilot's experience and training. All studies concluded that

age alone was not a good predictor of risk in flying an airplane. However, the quality of training and active participation in flying did. The more one flew and the better the training, the safer the pilot. If you want more info on these studies, email me.

Just look at what 57-year old US Airways Captain, Chesley Sullenberger, did in saving his passengers and crew by landing in the Hudson River. His cognitive skills and ability to make the right decisions in times of high risk and stress were not impaired with age.

My research with combat soldiers and repatriated POWs showed that those who were best able to cope with the stresses of combat and incarceration and torture were the older, better-educated, more experienced military men. Youth, inexperience, and not being career military were excellent predictors of being less able to deal with the vigor and stress of war.

In the late 1970s, I was a psychologist for the US Olympics. The question posed was, "what psychological attributes could predict world-class abilities in a young athlete"? The answer is none. I conducted this research project using the US Army-based Olympic Pentathlon team. We first evaluated world-class athletes to detect their psychological characteristics, which made them world winners. Then we tested young athletes to see if we could identify these same behaviors. We could not. Our conclusions? Time, dedication, motivation, experience, and quality training made world-class competitors, not some identifiable innate traits just waiting to burst out.

Now what does all of this have to do with the aging pilot? And specifically, what can older pilots do to remain as safe as possible.

Two facts are known and understood by most pilots: our physical prowess and thinking skills do decrease as we age. However, we also know that this declining process can be slowed down considerably by extensive physical exercise and by either requiring the brain to constantly solve complex puzzles or actually seeking proper responses to the complexities of daily living.

Aviation psychologist, Bill Rhodes, is doing research for Avemco Insurance to try to identify what pilots are "at risk" and who are lesser risks. What Dr Rhodes is discovering is that pilots better able to handle stress are at less risk. My research shows that constant realistic training and experience over time make people better at whatever they do in high-risk, high-stress situations; be it surviving in combat; winning Gold medals or dealing with an in-flight emergency. When one encounters a stressful situation where the wrong moves can result in adverse consequences, those who respond properly and instinctively to the emergency are less likely to panic.

Several years ago, I lost an engine on climb-out. Due to the low altitude, I had no time to sit back and pontificate. I reacted by rote and instinctive response to get the plane on the ground safely. I controlled the plane until it broke up on the ground. My wife and I walked away from a plane that was totaled. My actions were not heroic, I just responded as I had been trained to do. My experiences in combat also reflect that. I am alive today because I did what I was trained to do.

So what do older pilots need to do to remain safe? Remain physically active, exercise all the time and eat right. Constantly engage in intellectually stimulating cerebral endeavors. Practice and train as often as possible. Get check-rides with CFIs often. Participate in the FAA Team Pilot Proficiency WINGS program and strive to earn your WINGS as often as possible (every year or two). Fly as much as possible. Older pilots moving into more sophisticated and complex aircraft is really frowned upon by the insurance companies, often making insurance coverage impossible to find. Moving down to smaller planes such as a Cessna 172 makes more sense to insurance companies.

One last caveat: as we get older, we tend to forget or ignore small things such as on take-off, failing to retract the flaps or closing the cowl flaps. Nothing real dangerous by itself but it leads to sloppy flying and perpetuates other forgetfulness. We need to rely more on checklists or other notes on things to remember to do.

Keep in mind this adage: Young pilots rely on their superior flying skills to get them out of trouble. Old pilots rely on their extensive experience to stay out of trouble to begin with.

Editor's note: Bob Worthington has been writing for aviation publications for almost 30 years. In the early 1980s he was an editor for General Aviation News. This column was originated and titled by Bob in May 1985 as a column for the magazine Cessna Owners Organization. Bob has written for close to 20 aviation periodicals over the last three decades. The author may be contacted at rworthin@zianet.com