January/February 2023

FAA Safety BRIEFING

LEADING BY EXAMPLE

How Modeling and Mentoring Can Elevate Aviation Safety

Federal Aviation Administration

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of Transportation

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ABOUT THIS ISSUE…

The January/February 2023 issue of *FAA Safety Briefing* explores mindset, skillset, and toolset items that can help you be a better aviation citizen. Articles highlight the importance of mentoring, modeling, and professionalism. We also look at the benefits of a personal safety management system and how social media engagement can help you better connect with your fellow aviators.

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FAA Safety BRIEFING

The FAA Safety Policy Voice of Non-commercial General Aviation

DEPARTMENTS

CUSTOMS, CULTURE, COMMUNITY

Several FAA employees travelled to Montreal in September to represent the United States at the International Civil Aviation Organization's (ICAO) triennial general assembly. This gathering provided multiple opportunities to interact with civil aviation authority counterparts from dozens of countries around the world. Throughout this meeting, members of our team were intensely aware that everything they said or did would reflect not just on them as individuals, but also on our country and on the agency they represented.

A Culture of Compliance

Like countries, communities of every kind have a culture that arises from customs and shared values. If you were to make a list of your own aviation customs and values, safety is surely at the top of your list. Here at the FAA, safety is the top priority. It's the reason this agency exists in the first place.

> IF YOU WERE TO MAKE A LIST OF YOUR OWN AVIATION CUSTOMS AND VALUES, SAFETY IS SURELY AT THE TOP OF YOUR LIST. HERE AT THE FAA, SAFETY IS THE TOP PRIORITY.

Our tasks include establishing the foundation for aviation safety. Regulations are part of that foundation, but there's much more. As stated in the FAA's Compliance Program (faa.gov/faa.gov/go/cp), our objective is to identify safety issues that underlie deviations from standards and correct them as effectively, quickly, and efficiently as possible. The FAA's approach to compliance stresses collaborative problem-solving (e.g., engagement, root-cause analysis, transparency, and information exchange) wherever possible.

The FAA Compliance Program is also aimed at furthering evolution toward a "just culture." That means a culture with both expectation of, and appreciation for, self-disclosure of errors. It gives due consideration for honest mistakes, especially in a complex environment like the National Airspace System (NAS). But since even unintentional errors can have a serious adverse impact on safety, we must ensure that the underlying safety concern is fixed every time.

Walk the Walk; Talk the Talk

In this issue of the *FAA Safety Briefing* magazine, we will explore some of the mindset, skillset, and toolset items that can help you do your part as a solid aviation citizen. But let me set the stage with a couple of fundamental ideas.

Although some see "etiquette" as a stuffy word, there's nothing stuffy about what it means: treat your fellow human beings with courtesy and respect. If you visit a country whose citizens treat you rudely, would you be eager to go back? Of course not. There are enough pressures already to deter potential aviators without adding discourtesy. Treat everyone you meet — fellow pilots, potential pilots, and non-pilots — with the kind of respect and courtesy that makes them eager to be part of our group.

Language is another important part of good aviation citizenship. When you visit a country with a different language, it is courteous to make efforts to use that language, even if you can only manage a few words. The community of aviation certainly has a language of its own, one with a long history and a highly specialized vocabulary. As good aviation citizens, we should strive to use that language as precisely and as correctly as we can when we are operating in the system. Listen before you key the mike to transmit. Speak clearly and succinctly. Use proper phraseology. Whether on the radio or speaking to student pilots, potential aviators, or non-flyers, speak our language in a way that achieves the goal of communication.

As the saying goes, we never get a second chance to make a good first impression. In an environment where there are many financial and other challenges facing those who want to fly, each of us needs to cherish the precious privileges of aviation and strive to bring honor both to our community and to our fellow aviators.

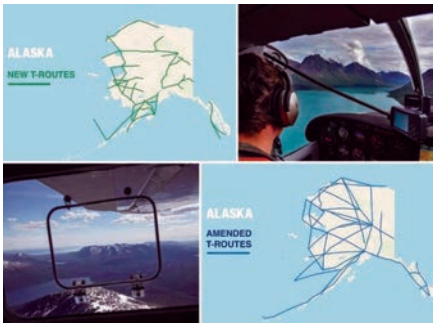
AVIATION NEWS ROUNDUP

New GPS-Guided Routes in Alaska Help Avoid Hazardous Weather

The FAA is publishing 54 GPS-guided routes in Alaska, allowing pilots to navigate direct flight paths at lower altitudes to avoid icing conditions. The 30 new and 24 amended Terminal Transition Routes, known as T-routes, are part of the FAA's Alaska Aviation Safety Initiative.

Pilots use T-routes to navigate along specific points while flying under instrument flight rules (IFR) using approved GPS/Global Navigation Satellite System (GNSS) equipment. Approximately 33 routes have been activated with the remainder going live in 2023.

The FAA launched the Alaska Aviation Safety Initiative in October 2020. The agency issued 11 recommendations last October on how to increase aviation safety in Alaska after a comprehensive yearlong examination of safety issues specific to Alaska, where more than 80% of communities are accessible only by air. The development of T-Routes was included in those recommendations.



The FAA is also developing additional T-routes to replace Low Frequency/Medium Frequency (LF/MF) airways between now and 2025.

Go to faa.gov/Alaska for more details.

SAIB Issued for Piper Aircraft

Special Airworthiness Information Bulletin (SAIB) 2022-20 alerts all owners, operators, maintenance technicians, and inspectors of Piper Aircraft PA-28 and PA-32 airplanes of information gathered as a result of a fatal accident of a Piper Model PA-28R-201 airplane in 2018 and the inspection findings that followed. The accident, determined to be caused by fatigue cracks in the lower spar cap, resulted in the FAA issuing Airworthiness Directive (AD) 2020-26-16, which requires several actions including a one-time inspection of certain lower spar cap bolt holes. AD 2020-26-16 was issued as an interim action and requires reporting certain inspection information to the FAA to help determine the number of cracks present in the fleet. The inspection reports received by the FAA thus far indicate the presence of numerous cracks and hole-quality issues in a significant number of airplanes.

The FAA is concerned that the presence of cracks and other hole-quality issues could lead to additional in-flight wing separations if additional actions or modifications are not taken. Analysis of the AD inspection data along with additional analysis by various contributors, including Piper and the Air Force, is guiding the FAA to develop further corrective action. These analyses are indicating a possible need for frequent inspections, and inspections of additional airplanes beyond those initially inspected per AD 2020-26-16, to ensure the proactive detection of fatigue cracks.

The FAA is recommending that owners and operators provide specific information outlined in SAIB 2022-22. Reporting is voluntary. The FAA will analyze the information received to determine further action. As part of its commitment to continued operational safety, the FAA

#FLYSAFE GA SAFETY ENHANCEMENT TOPICS Please visit bit.ly/FlySafeMedium for more information on these and other topics.

JANUARY

Safety Risk Management (SRM) — How to incorporate SRM before, during, and after each flight.

FEBRUARY

Transition Training — Benefits and best practices of an aircraft transition training program.

is monitoring the Piper PA-28 and PA-32 airplanes for issues related to lower main wing spar cap cracks and requests the submission of such reports. Go to bit.ly/SAIB2022-20 for more information.

Recreational Drone Flying Guidance Updated

The FAA issued guidance in October on how to become an FAA-recognized community-based organization for recreational drone flying.

Under federal law, recreational drone flyers must follow the safety guidelines of an FAA-recognized community-based organization. The organization is required to develop its safety guidelines in coordination with the FAA and an applicant may wish to tailor them to a particular type of unmanned aviation.

The FAA's guidance, Advisory Circular (AC) 91-57C, *Exception for Limited Recreational Operations of Unmanned Aircraft*, provides a comprehensive list of recommended safety guidelines that applicants may consider using in their application. Organizations that meet the legal definition of a community-based organization may apply for FAA recognition through the FAA's DroneZone at FAADroneZone-access.faa.gov.

The updated guidance also provides information on applying for recreational flying fixed sites, hosting sponsored events, and educational use requirements. Go to bit.ly/AC91-57C to read the AC.

New Collision Avoidance Guidance Issued

Advisory Circular (AC) 90-48E, *Pilots' Role in Collision Avoidance*, was published in October. This AC is issued to assist pilots with their regulatory obligation to see and avoid other aircraft. Specifically, this AC looks to alert pilots to human contributors to midair collisions and near midair collisions, and recommend improvements to pilot education, operating practices, procedures, and improved scanning techniques to reduce midair conflicts

Go to bit.ly/AC90-48E to read the AC.

Two New Videos for Helicopter Pilots Released

The FAA's "Rotorcraft Collective" posted two new videos aimed at rotorcraft pilots.

Performance Planning & Power Management is about understanding the performance capabilities and respecting the limitations of the aircraft being flown. Watch this video for steps to improve helicopter performance planning and power management.

Spotting a drone while flying is difficult at best. Watch *Sharing the Airspace with Drones* for 12 tips on avoiding collisions with drones.

The Rotorcraft Collective is a group of engineers, pilots, mechanics, accident investigators, and communication specialists from industry and the FAA who produce short safety videos packed with information on topics such as preflight inspections and passenger briefings, helicopter icing, and securing cargo. Produced by the FAA Safety Team (FAASTeam), this series is a collaborative effort between the FAASTeam, United States Helicopter Safety Team (USHST), Helicopter Association International (HAI), and the Helicopter Institute in Dallas.

Go to bit.ly/RotorYT for the video series on YouTube.

New Members Appointed to the Advanced Aviation Advisory Committee

The U.S. Transportation Department recently announced 12 new appointments to the FAA's Advanced Aviation Advisory Committee (AAAC). The committee provides advice on key drone and advanced air mobility (AAM) issues.

Members are executives and stakeholders who represent a variety of drone and AAM interests, including industry, research, academia, retail, technology, and state and local government. In addition, for the first time, the AAAC will include members able to raise awareness of potential impacts to communities, and advise on approaches that advance emerging aviation models while respecting neighboring communities.

Go to bit.ly/3gcDDIH to read more about the AAAC.

Watch

57 Seconds to Safer Flying

on YouTube

bit.ly/57Seconds

FLY SAFE

General Aviation Safety Enhancement Topics

FIT TO FLY?

Many pilots incorporate the I'M SAFE checklist (Illness, Medication, Stress, Alcohol, Fatigue, and Emotion) into the go/no-go decision process. While its use is not explicitly required by FAA regulations, pilots are required to determine fitness to operate an aircraft prior to every flight. A surprising number of pilots don't understand they have this responsibility even if they don't hold an FAA medical certificate. All pilots, including those who fly ultralights or operate drones, have an obligation to ensure that they are medically fit to fly before operating the controls as a required crew member. Let's review the regulations.

> **ALL PILOTS, INCLUDING THOSE WHO OPERATE DRONES, HAVE AN OBLIGATION TO ENSURE THEY ARE MEDICALLY FIT TO FLY BEFORE OPERATING THE CONTROLS AS A REQUIRED CREW MEMBER.**

Medical regulations exist to ensure that an aircrew member is physically and mentally able to safely meet flight duty requirements. The United States and United Kingdom military implemented them during WWI due to the high number of mishaps directly attributed to medical causes. The accident rate dropped dramatically with implementation of medical standards. We can trace today's guidance back to these standards, modified as medicine has advanced.

All pilots who fly with a certificate issued under 14 CFR part 61 are subject to one of the three paragraphs of 14 CFR section 61.53 (bit.ly/14CFR61_53). There is separate guidance for those who operate aircraft under 14 CFR parts 103 and 107.

For pilots seeking FAA medical certification, the aviation medical examiner (AME) determines whether the pilot meets standards on the day of the examination. The expectation is that the pilot will likely remain medically qualified for the duration of the medical certificate as long as nothing changes (new conditions, worsening, medications/treatments, etc.). It is also expected that the pilot *truthfully* disclose all medical conditions, medications, and disabilities. If something does change, paragraph A of 14 CFR section 61.53 addresses your obligations whether it's short-term (e.g., a cold) or long term (e.g., heart disease, cancer). For pilots who do not meet the medical standards in 14 CFR part 67, the FAA can authorize exceptions (special issuance, statements of demonstrated ability, or letters of evidence) if evaluation demonstrates that flight safety can be maintained. Remember, FAA issues to over 99.5% of medical certificate applicants!

Glider and balloon pilots do not need a medical certificate or a driver's license, but must self-certify that they are medically fit to fly. 14 CFR section 61.53(b) covers these pilots. Note, though, that a new rule requires commercial balloon pilots to hold at least a Class II FAA medical certificate when conducting non-instructional commercial balloon operations. The NTSB recommended this action, and Congress directed the FAA to proceed. The final rule published on Nov. 22, 2022.

Paragraph C of 14 CFR section 61.53 covers pilots who operate under BasicMed or as a Sport Pilot. They must hold a driver's license and also must self-certify. Pilots who fly using

BasicMed also have on-line training every two years and a medical evaluation every four years.

Pilots operating remotely piloted aircraft should self-certify prior to each flight in accordance with 14 CFR section 107.17 (bit.ly/14CFR107_17). For pilots of ultralight aircraft, 14 CFR part 103 does not specifically address medical fitness, but it does speak to hazardous operations (bit.ly/14CFR103_9).

Regardless of which rules we fly under, we are obligated to ensure we can do so safely without endangering ourselves or the public. Even a medical certificate issued yesterday does not guarantee that you are ready to fly today. Being truthful at the time of a FAA medical exam is critical but being *truthful with yourself* at flight time is even more important. As PIC, you are responsible for determining your fitness to fly before each flight. Preflight checklists for your aircraft are the hallmark of aviation safety. The I'M SAFE checklist is an excellent tool for making your pre-flight go/no-go decision, and should be *your* personal safety hallmark.

Dr. Susan Northrup received a bachelor's degree in chemistry, a medical degree from The Ohio State University, and a master's degree in public health from the University of Texas. She is double board-certified by the American Board of Preventive Medicine in Aerospace Medicine and Occupational Medicine. She is a retired U.S. Air Force colonel and a former regional medical director for Delta Air Lines. She is also an active private pilot.


FROM
THE
FLIGHT
DECK
FEDERAL AVIATION ADMINISTRATION
PRODUCTION
KNOW BEFORE YOU GO.
FAA.GOV/GO/FROMTHEFLIGHTDECK
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NOW PLAYING
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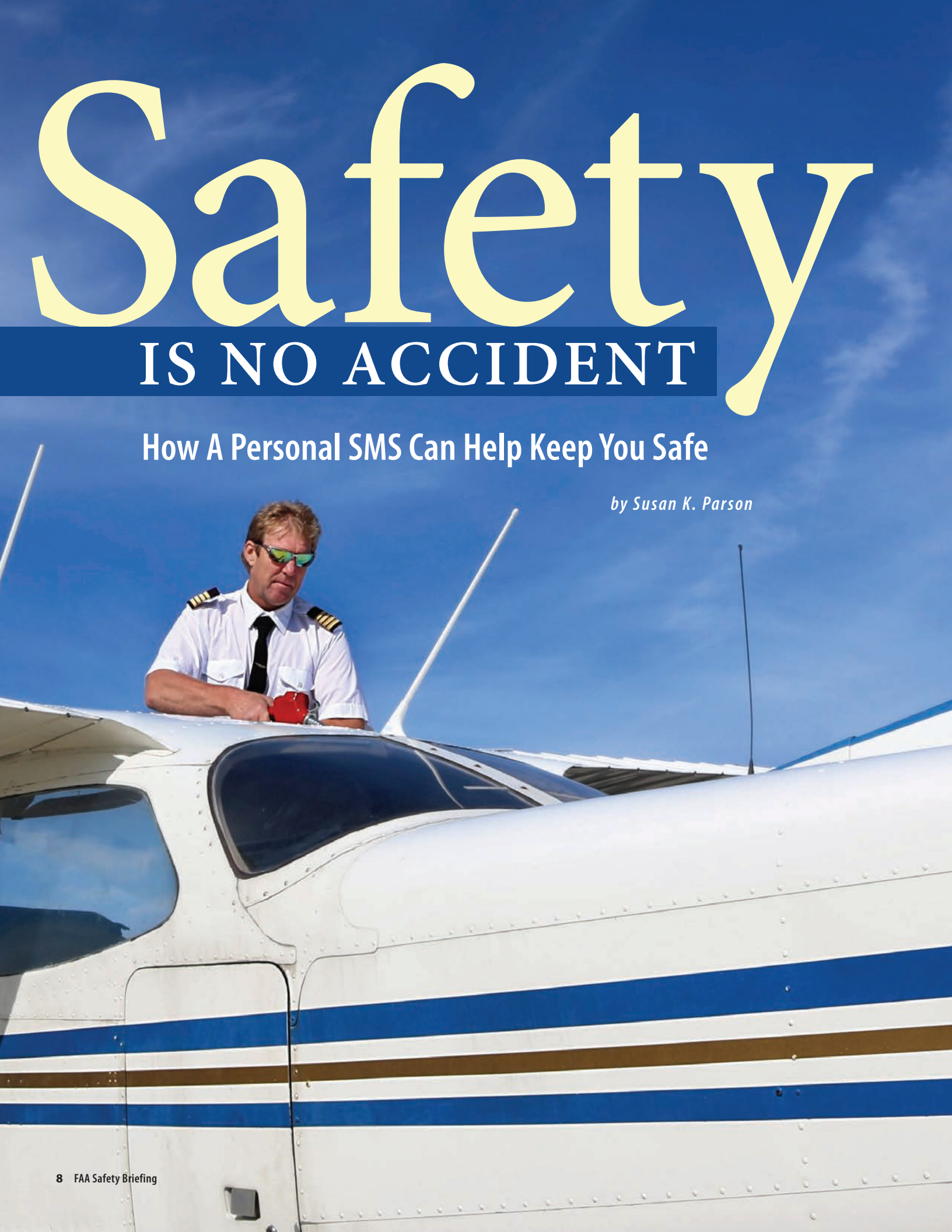
Safety IS NO ACCIDENT

How A Personal SMS Can Help Keep You Safe

by Susan K. Parson



You've probably heard the "safety is no accident" reminder in various parts of your life. At the most basic level, it is a clever word play with a double meaning. The most literal of these is that safety "means" or "equals" no accidents. The owner of a flight school I knew many years ago very much adopted this version, proudly stating to one and all that his organization was very safe because there had never been an accident involving its airplanes, its instructors, or its clients. Sadly, he lulled himself into believing that until one *annus horribilis* that saw a rash of accidents — including one that was fatal to both instructor and student. The ensuing investigations revealed that the previously spotless record resulted more from good luck.

The more important meaning of the phrase is that safety doesn't happen accidentally. It requires a level of thinking, planning, and acting that we often describe as "aeronautical decision-making" or "risk management." That's why the FAA incorporated context-specific risk management elements into each Area of Operation and task in the Airman Certification Standards (ACS) documents. In short, safety is not so much a state of *being* as it is a matter of *doing* the right things to create — and maintain! — safe operations.

Each of us could probably come up with a long list of DO and DON'T actions consistent with safety and good airmanship. The list would likely include actions that involve personal responsibility and accountability, concern for the community, and behaviors consistent with safety and risk management. Most items I might suggest are consistent with the four pillars of the Safety Management System (SMS) approach that the FAA, the international community, aviation operators, and many other industries have embraced as the best and most effective way to achieve acceptable levels of safety risk. So, let me offer an outline for how a simple personal SMS can frame both the conceptual and the participatory elements that can help you do the things that will truly make you a safe pilot.

Safety Policy — Define Your Aviation Values and Personal Minimums

A solid starting point for your personal aviation safety policy is the Aviators Model Code of Conduct (AMCC). This document (available *gratis* from secureav.com) suggests that a pilot should make safety the highest priority, seek excellence in airmanship, aspire to professionalism, adhere to laws and regulations, and act with responsibility and courtesy to others. The enumerated values also include the importance of situational awareness, risk management, and "prudent operating practices" such as personal minimums.

Clearly defined, individually tailored, written personal minimums should be part of a safety-minded pilot's individual SMS safety policy. Think of personal minimums as the human factors equivalent of the regulatory requirement for fuel reserves. That's because properly constructed personal minimums define the safety reserve between the skills and aircraft performance *required* for a specific flight, and the skills and aircraft performance *available*.

There are numerous tools available to help guide you through the process of developing personal minimums, and the *FAA Safety Briefing* team has in previous issues offered a guide with a worksheet that you can use for this exercise (*see Learn More for link*). Regardless of the tool you choose, the important thing for your personal safety policy is to include personal minimums tailored to your individual training, experience, currency, and proficiency, as well as to the characteristics and capabilities of your aircraft.

Safety Risk Management — Stick to Your Personal Minimums

Tools such as the AMCC and written personal minimums are very helpful when it comes to adhering to stated values. Predetermined and explicitly stated metrics for go/no-go and continue/divert decisions provide practical tools for meaningful risk management. For operations in instrument meteorological conditions (IMC), for instance, you might have personal minimums that say you will not operate in conditions defined as low IFR. Your personal minimums might keep you on the ground if thick haze significantly reduces visibility, or if the strength of a gusty crosswind is more than you can confidently manage. That's not to say that you shouldn't aim to expand your skills. But you negate the safety risk management value if you amend your personal safety policy just to make a specific trip. Consequently, good safety risk management means sticking to pre-established safety policy if conditions exceed stated limitations. If you are worried about disappointing passengers, consider sharing your written personal minimums with them before you even depart for the airport. That helps non-pilots understand why a delay or diversion might be necessary and reinforces to them that safety really is your highest priority.

Safety Assurance — Update Your Operating Policies

Since continuous improvement is highly desirable, you need a sound safety assurance process to account for changes to your circumstances. Is the airplane you normally fly unavailable for the flight you're making? Does that mean you will instead fly an aircraft with different equipment or performance characteristics? Are you ready for that challenge? Do you have a new certificate or rating? You naturally want to use it, and the training and checking required to earn it make your knowledge and skill as sharp as they may ever be. Alternatively, has it been a while since your last flight or your last no-kidding instrument approach?

These are just a few of the factors that go into deciding when, how, and to what extent personal minimums should

change. Rule number one is that changes should be well considered and well planned. If you want to expand your personal operating policies and limitations, it's never a bad idea to discuss your plans with a flight instructor who is familiar with your skills, your experience, and your aircraft. Better yet, "test" your proposed updated operating policies with an instructor on board. It's also essential to review personal minimums and other operating policies on a regular basis, maybe during WINGS proficiency flights or your next flight review.

Speaking of WINGS, continued education and training is another way to update skills and expand personal minimums. Opportunities abound, with options ranging from online courses to safety seminars to innovative simulation and much more.

Safety Promotion — Contribute to the Community

Safety-minded behavior includes safety promotion. Most pilots know about the Aviation Safety Reporting System (ASRS), colloquially known as "NASA forms." Yes, NASA forms provide a sanctions-relief benefit in the event of an enforcement action. But the fundamental point of this system is to maintain a "crowd-sourced" database that collects, analyzes, and shares information on issues affecting safety. Online submission makes ASRS easy to use and speaking up when you have a safety concern lets you contribute to the aviation community.

Mentoring offers still another opportunity to give back or, as the saying goes, to repay your own mentors and aviation benefactors by "paying it forward" to the next generation of aviators. If you have special skills or experience, offer to share your expertise with a pilot who can benefit from it.

There is undoubtedly plenty more that each of us can do to deliberately create the culture of safety we need. We are counting on you to do your part.

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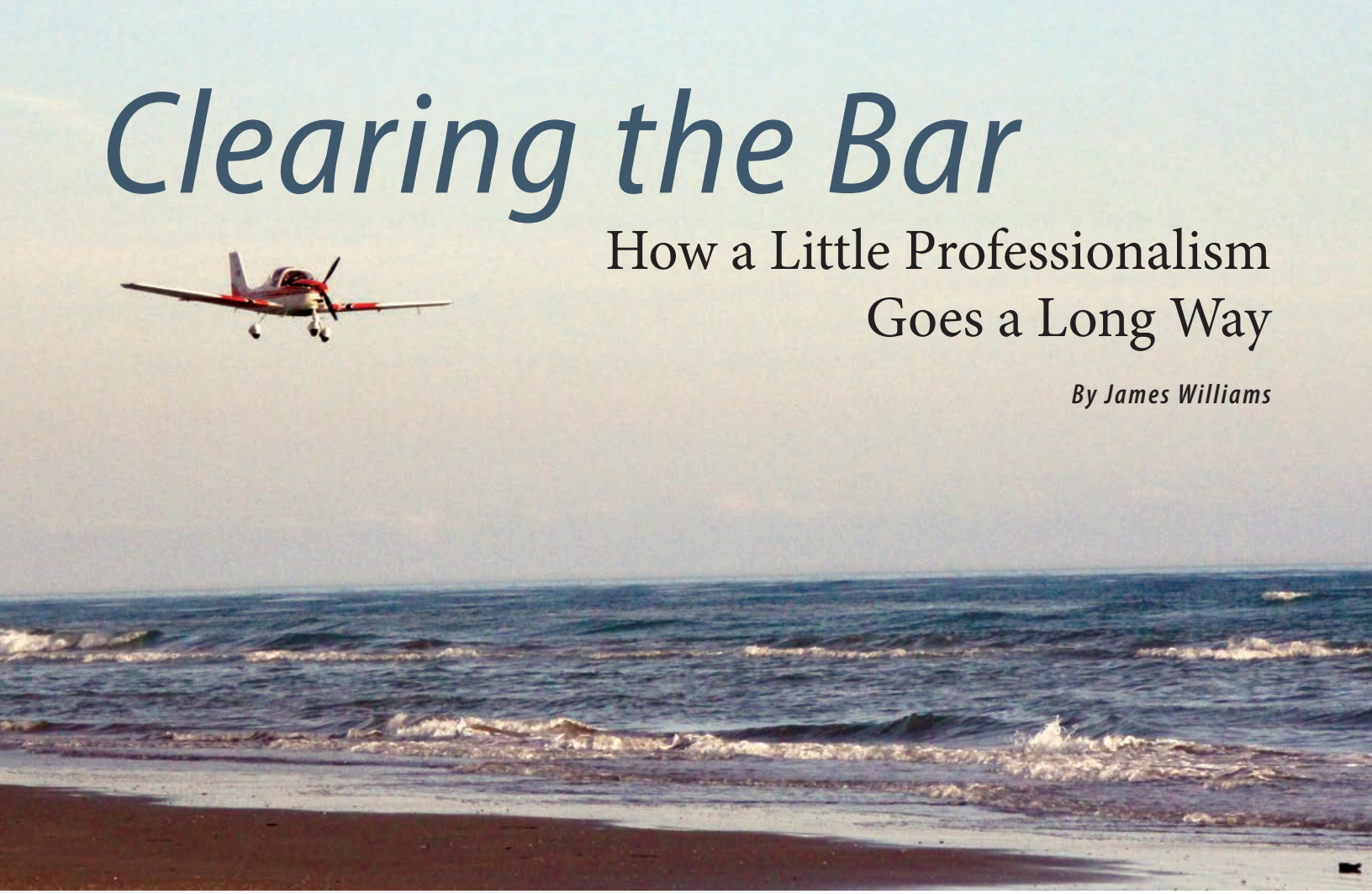
LEARN MORE

Your Safety Reserve: Developing Personal Minimums, *FAA Safety Briefing*, Mar/Apr 2015
bit.ly/FAASB-MarApr15

Clearing the Bar

How a Little Professionalism Goes a Long Way

By James Williams



Seventy-five percent of life is showing up. That realization is not original to me, but at some stage I discovered for myself that simply getting to the right point in time and space for the task resulted in having much of the job already done. You could still fail at the task, but simply applying the most basic level of professionalism — for instance, being at the right place at the right time — puts you in an advantageous position.

This idea certainly applies to aviation. Maintaining basic standards of performance and professionalism in your flying can avoid many accidents. That's not to say you shouldn't aspire to the highest possible standard — of course you should! — but clearing the bar for minimum professional standards goes a long way. Given the professionalism focus for this issue of *FAA Safety Briefing* magazine, I decided to take a closer look at some of the ways an aviator's decision to be rash could lead to a crash.

To investigate this question, I dove into the accident database. Specifically, I looked at general aviation aircraft accidents in the 2017-2019 timeframe involving certain key factors: inappropriately low altitude, aerobatic flight, lack of preparation/poor preflight, and improper certificate or operation issues. I took care to exclude any accident where mechanical issues or simple bad luck played a significant role. Also, I excluded operations like banner towing and agricultural dispensing activities, where operating close to the surface is necessary for the job. A key consideration was whether a single action would have prevented these accidents in accordance with normal operating standards. Things like obtaining a preflight briefing; following the approved aircraft preflight checklist for things like visually verifying fuel levels and sumping fuel tanks and sumps to check for water in the fuel; and, of course, not operating at an unnecessarily low altitude. These are not "Swiss cheese" accidents in which multiple actions or lack of actions happened, which led to the accident despite safeguards; they were easily preventable.

I did specifically look for incidents in which it appeared that the pilot was — no other words for it — showing off. Not surprisingly, the "show off" accidents generally involved some combination of low altitude and aerobatic flight. More on that shortly.

Overall, my search turned up 228 accidents. With 249 fatalities, about 62 percent of those onboard during the events were killed. Here's the breakdown. (Note: the percentages exceed 100 since more than one factor was often involved. This is the percentage of total accidents that included the cited factor.)

Respect the Limits

Improper certificate or privileges and improper preflight or planning fall into the "duh" category. It's really simple: if you aren't rated for the aircraft or the flight conditions, don't do it. Even if the weather forecast isn't saying what you'd like to hear, don't ignore it. If, for example, you encounter inadvertent instrument meteorological conditions (IMC) on a visual flight rules flight, ask for help. Don't try to fly through it to get on top or below, and assume it will be fine. It won't. Hope is not a good strategy, so turn around at the first sign of deteriorating weather conditions and return to the takeoff airport to fly another day. If it is not possible to return to your takeoff airport, land at the nearest suitable airport. It is much better to be safely on the ground worrying about how you will get back home rather than being in the air wondering if you are going to make it back at all.

Altitude is your friend. If you are considering a flight that requires low-altitude operations, start by making an honest assessment of your ability to conduct that flight safely.

Always perform a thorough preflight, and never forget what your ground school training and flight instructors taught you about putting your trust in fuel gauges that are designed to be accurate only when reading empty. The number of accidents involving pilots who checked fuel on board simply by looking at fuel gauges is surprisingly high. It may be a pain in some aircraft to visually verify fuel quantity, but taking the trouble to do it right is much better than having your engine stop at the worst possible time.

The bottom line is to know your limits, know the aircraft's limits, and respect both. Be ready (properly planned and preflighted) before you fly. In far too many cases, the pilot's intentional flight into challenging or deteriorating weather conditions ended with a controlled flight into terrain/object (CFIT). If you don't have an instrument rating, consider acquiring one. It will make you a better all-around aviator, and it will also help you obtain the knowledge and the skills to be a pilot in control as well as the pilot-in-command. If you already have an instrument rating, stay current and proficient (not the same thing).

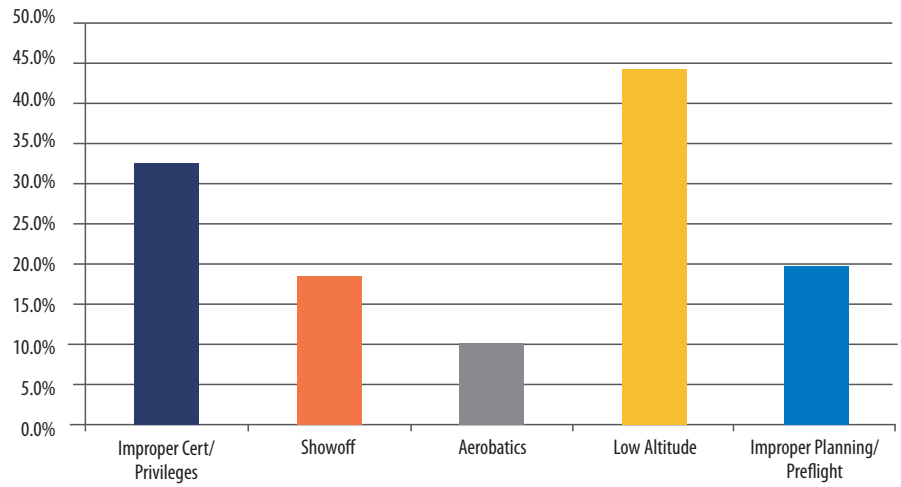
Putting on a Show

Most of us are rightfully proud of our abilities to pilot an aircraft. But that doesn't mean showing off is a good idea. Nearly 20 percent of the accidents I reviewed involved an element of showing off — either to people on the ground, or to people who were on board the aircraft. In fact, 10 percent of the accidents in my search involved improper aerobatic flight. In most cases, it was as simple as buzzing a friend's house or the pilot's own home. Buzzing is never — ever — appropriate. 'Nuff said.

Please don't misunderstand or think I believe that aerobatic flight is inherently dangerous. On the contrary, attending aerobatic flight training is an excellent way to enhance your knowledge and

A Breakdown of Accident Factors

(note: more than one factor may be involved in each accident.)



skills to recognize unusual flight attitudes and to apply the proper recovery technique. But these skills must be properly acquired and safely practiced. If you want to learn how to conduct aerobatic flight, seek an authorized flight instructor who is well-qualified to provide this type of training, and make sure your aircraft is certificated for the maneuvers you want to learn and practice. Check with friends, fellow pilots, and even social media to get recommendations. Although the aerobatic performers you see at airshows make it look easy, remember that they didn't start their aerobatic careers 25 feet off the deck. Neither should you.

> **The bottom line is to know your limits, know the aircraft's limits, and respect both.**

Don't Do the Limbo

Low altitude operations limit a pilot's recovery options, and this factor contributed to 44 percent of all the accidents I reviewed. It's easy to understand why. When operating close to the surface, there's rarely room to recover from an error.

Low-altitude maneuvering is necessary at certain points during any flight, but we tend not to give it the respect it deserves. While skimming around at 100 feet off the surface may be legal — assuming you maintain a safe distance from people and property and aren't in a densely populated area — it doesn't leave you much margin for safety. As you zip over hills and dales, all that stands between you and disaster is one tiny mistake — or even a sneeze that forces your eyes to close and possibly triggers involuntary hand movement. The professional and military crews who regularly conduct nap-of-the-earth flights are highly trained and highly competent. In addition, such pilots are constantly engaged in risk evaluation and mitigation, and they generally have sophisticated equipment and redundant systems to minimize the inherent risks.

Altitude is your friend. If you are considering a flight that requires low-altitude operations (e.g., aerial photography), start by making an honest assessment of your ability to conduct that flight safely. If you conclude that you have the training, experience, and proficiency, you must still develop a solid plan. How low will you go (personal minimums)? What are the terrain and obstacle considerations you need to accommodate? Will you be tempted — by "mission requirements" or by a passenger — to go lower? If you can't resist the pressure or the temptation to fly below your comfort level or regulatory requirements, say no and don't go.

The bottom line: know your limits, know the airplane's limits, get proper training, and don't put yourself into "no way out" situations. Most of all, remember that if you shun attitudes and behavior that could be called unprofessional or foolish, you are very likely to avoid finding yourself in a "what-was-that-pilot-thinking" kind of accident. Clearing even the lowest bar of professionalism — being fully present and fully prepared — can keep you from making a mistake that could prove fatal.

James Williams is *FAA Safety Briefing*'s associate editor and photo editor. He is also a pilot and ground instructor.

The best case scenario for this kind of accident is a damaged airplane and a bruised ego.

READ THE ROOM; TAKE THE HINT

If Other Pilots Aren't Flying, Should You Press Ahead?

By Jason Blair

The aviation community is a small world. In this environment, we each have the opportunity for positive influence on fellow pilots if we choose to use it. We particularly have a duty to influence each other in a positive way when it comes to safety. The examples we set may speak louder than words because another pilot may use our actions as a model for their own aeronautical behavior.

Too often, there are many factors pushing us forward. But that should be a signal to stop and think about the impact of our decisions, not only for ourselves and our own passengers, but also for pilots and passengers who happen to be watching us. Remember, we should never test our limitations merely to meet a perceived "need" to proceed.

> **The sense of external pressure often comes with hints, both subtle and explicit, that we need to carefully identify and evaluate.**

Pressure Testing

The sense of external pressure often comes with hints, both subtle and explicit, that we need to carefully identify and evaluate. Safety publications often focus heavily on obvious things, like "get-there-itis," that can arise on a family or business trip. But I have seen significant pressure mounting for other reasons as well.

For instance, pilots these days may feel great pressure to build flight time for an airline job or to meet requirements for a scheduled practical test (check ride). The flight training providers are being pressured to turn out more pilots and at a quicker pace to fill the demand for air carrier pilots. Flight instructors are under pressure to "get their hours" as soon as possible to be eligible for Airline Transport Pilot (ATP) certificates (restricted-ATP minimum or traditional ATP minimum requirements). In some cases, these flight instructors are being pressured by airline hiring departments to get hours however they can — and as fast as they can — to meet new-hire class date expectations.

External factors like wind can turn an easy flight into a challenge that you aren't prepared for.

I fear that some flight instructors are, therefore, taking students into conditions inappropriate both in terms of safety and learning effectiveness. Apart from being counterproductive as an instructional method, this practice can send a silent — but nonetheless loud and clear — message that students should push their own limits and fly in conditions that pilots without those pressures would choose to avoid.

Some training facilities already recognize this issue. One flight instructor I know observed that "we are doing too much teaching in the air and not enough on the ground just so we complete more hours in the air." The results of this approach are predictable. A training operation in my area experienced "damage" in eight individual moments over a 10-month period. Fortunately, no one was hurt, but incident reviews indicated that flight crews, instructors, and students were all pushing to "get flights done" in conditions that were, at best, marginal for both instructional effectiveness and overall safety.

Turn Down the Heat

Regardless of the reason for the pressure to fly, train yourself to stop and consider the possible (even likely) consequences of pushing the limits. Remember that a conservative approach will more likely result in a positive outcome. Be wary of (allegedly) "no big deal" temptations. It might "just" be exceeding a crosswind limit, but you could wind up with a runway excursion and possibly damaging runway lights and your airplane. It's better to wait for a day with crosswinds less than 75% or even 50% of the maximum demonstrated capability of the aircraft.

> **A pilot exercises good judgment and good aeronautical decision-making when they don't attempt demanding maneuvers in conditions that put the desired outcome in question.**

Here's an example from a practical test I conducted not long ago. The applicant had chosen to fly on a relatively windy day. Winds were mostly down the runway in use, but there were gusts between 20-25 knots. The applicant's power-off 180-degree accuracy approach and landing was clearly going to come up short of the designated touchdown point, potentially even short of the runway. When I had to ask the applicant to add power and either go around or transition to a normal landing, of course, my safety intervention resulted in a Notice of Disapproval for the applicant. During the debriefing, the applicant was somewhat indignant, asking whether I thought I could have done better in those conditions. My answer: "No. I wouldn't have even tried today."

Photo by Jeff Smith.

Flight instructors are a good resource to check your judgments with. They may see something that you missed.

Look Around!

I'm still not sure the applicant fully grasped the meaning of my response, but my point was simple. A pilot exercises good judgment and good aeronautical decision-making when they don't attempt demanding maneuvers in

conditions that put the desired outcome in question. I might also note that this particular applicant had also failed to take other hints I had offered. First, before I traveled to the applicant's location, I queried whether we were going to proceed with the test in the forecasted conditions. Second, the applicant might have noticed that I arrived by car rather than by airplane, because I had concerns that conditions would be beyond my comfort zone for flying.

You've heard about "reading the room" when you arrive at a business or social function. For flying, always remember to "read" the environment … and don't forget to peruse the fine print.

Hints don't just come from instructors or examiners. A pilot friend recently told me how an instructor from his airport had taken family members for a "fun" flight on a day when he and I had both chosen to stay on the ground. Flight conditions that day included winds already over 20 knots and forecasted to be beyond 35 knots by the time they expected to land. As my friend noted, "Why do I keep seeing a few people flying on days when most pilots I know stay on the ground?"

My friend decided to ask the instructor in question about what led him to a "go" decision. The answer? Family members were only in town for that one day and conditions were "technically VFR." Neither seemed like a good answer in the after-action evaluation of the decision chain. Did the instructor fail to notice that no other light GA aircraft were flying that day, either at that airport or at any nearby airports? For a safety-minded pilot, that fact should give you a strong hint that it's a good day to stay on the ground.

Humility goes a long way when it comes to safety. None of us are super pilots who can fly through anything. Many people who have been regarded as super pilots before us have met untimely ends when they pushed their own limits. We all need to take hints and think critically about mitigating risk for others and ourselves in our flying activities. You've heard about "reading the room" when you arrive at a business or social function. For flying, always remember to "read" the environment … and don't forget to peruse the fine print.

Jason Blair is a flight instructor and FAA designated pilot examiner (DPE) actively engaged in training and testing pilots in single- and multi-engine airplanes in both general aviation and commercial pilot training environments. He has been a DPE since 2007 and actively flies his 1947 Stinson.

Photo by Jeff Smith.

It's important to remember that a No-Go is always an option for any flight with questionable conditions, even check rides.

Defeating the Dragons of Doubt

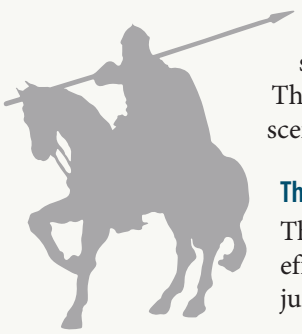
Mentors Can Help Safely Build Competence and Confidence

by Susan K. Parson

Let's say that the ink is still drying on your freshly issued certificate or rating. You're proud of the accomplishment, but you don't feel even close to confident enough to try it in real life.

To imagine another scenario, let's say that you've scared yourself on a flight, perhaps by venturing into dodgy weather or by barely managing a mechanical malfunction without mishap.

Or to try still another, let's say that a cluster of pesky "life happens" events has grounded you long enough to have you thinking you should learn to fly all over again.



The common denominator in each of these scenarios is the big D: doubt.

There Be Dragons!

The "dragons of doubt" can be fearsomely effective. They work by deterring you from just the kind of aviation activity that will douse the doubts they've inflamed. Doubts have a nasty way of seeping in and building on themselves, to the point that they burn your carefully cultivated confidence to cinders. When that happens, and especially when it truly puts you into the "rusty pilot" bucket, it can be tempting to close the hangar door for good.

Don't do it! You worked long and hard to earn your aviation credentials. Don't let the dragons of doubt drive you to the ground for good. That's not to say that you should race right out to the runway and "wing it" to ditch the doubts; the "wing-and-a-prayer" method is always a dicey proposition. To truly dispatch the dragons of doubt, you need reinforcements.

You Need a Knight!

When you are really rusty or particularly plagued by doubts about your aviation prowess, the best reinforcement is a good flight instructor. A few hours with a pro occupying the right seat can do wonders. Hiring a

Working with a flight instructor is a good way to dispatch the dragons of doubt.

flight instructor is a very good start to refurbishing skills tarnished by disuse and restoring the reservoir of self-confidence. That makes it a sound investment of your time and your money. But given the high demand for flight instructors these days, you might not be able to employ one for as many sessions — especially for as many *regular* sessions — as you might want.

That's where a mentor can be the perfect companion in your battle with doubt. Like the original Mentor, a character in Homer's *Odyssey*, a modern-day mentor is a trusted advisor who provides one-to-one support, encouragement, and advice.

You may already be familiar with the role a mentor can play in the workplace. Many professions use forms of mentoring to help newly trained novices transition to real-world application of book knowledge and basic skills. Mentoring can also give career guidance, provide a role model, and offer a seasoned sounding board for challenges and ideas. In all cases, though, perhaps the mentor's most important function is to transfer experience by sharing events and outcomes that can help a less-experienced colleague learn faster, and with fewer mistakes.

An aviation mentor can serve the same functions for a doubt-plagued pilot. Let's look at some specific ways that a mentor can help you dispatch the dragons of doubt to the dungeon.

Been There, Done That

The flight instructor's job is to impart knowledge, skills, and attitudes appropriate to the certificate or rating at hand. An aviation mentor can certainly play a role in advancing the pilot's knowledge, skills, and attitudes, but both the goal and the process are different. Khalil Gibran captures this idea in *The Prophet*, writing that the point is to "lead you to the threshold of your own mind" by offering experience to illuminate your individual decision-making process. Though it shares some characteristics with hangar flying, a mentor's transfer of experience should be a structured and thoughtful effort to help the less experienced pilot safely navigate real-world situations. A good mentor must therefore know not only how to select and share "there-I-was" stories, but also how to listen to the mentored pilot's concerns, ask questions to help address them, and tactfully offer appropriate feedback.

> **An aviation mentor can help you dispatch the dragons of doubt to the dungeon.**

Whether you seek to find a mentor or to be one, remember that the mentor pilot must be able to offer experience that is pertinent to the mentored pilot's needs and goals. Be careful not to equate a mentor pilot's *total* time with *relevant* time. The experience of an airline pilot whose only recent flying involves transport category airliners with a crew will not necessarily be helpful to someone flying single-pilot instrument meteorological conditions (IMC) in a small GA aircraft. It is also true that a 100-hour private pilot who trained in a glass cockpit aircraft could have much to share with a 1,000-hour pilot who has flown nothing but "steam gauge" aircraft.

Show How It Goes

A good mentor will be a practitioner as well as a preacher of good practices. My first flight instructor is a great example. Though his official role was "teacher" rather than "mentor," his greatest long-term influence arose from how he consistently modeled good practices. The instructor who guided me through multi-engine and multi-engine instructor qualifications has similar characteristics, and I literally trusted her with my life.

Never forget that you may be an unwitting mentor and model for pilots around you. Over the years, several pilots have unknowingly mentored me through their day-to-day actions. One was instrumental in showing me the ropes of long cross-country planning and operations. Another demonstrated the basic principles of crew coordination

and models the kind of calm but watchful demeanor I have sought to emulate in my instructional activities. It was through flying long GA cross-countries with still another pilot that I finally learned how to more effectively evaluate weather. Watching how he approached the process of gathering, evaluating, and applying weather data was invaluable. That's also what led me to develop the structured weather analysis model that I use today when I teach, write, and present on aviation weather and weather decision-making.

> **By providing guidance and, as appropriate, cockpit companionship on skill development flights, an aviation mentor can contribute substantially to building a less-experienced pilot's competence and confidence.**

Point to the Path

An aviation mentor can help the mentored pilot establish and work toward a range of aeronautical advancement goals. You need a flight instructor for work toward formal qualifications and privileges, but an aviation mentor can help you battle the doubts common to different phases of instruction. By offering a sounding board, a fresh perspective, and simple encouragement to overcome learning plateaus, the mentor plays a vital role.

An aviation mentor can help the less-experienced pilot with a variety of skill enhancement goals and activities. By providing guidance and, as appropriate, cockpit companionship on skill development flights, an aviation mentor can contribute substantially to building a less-experienced pilot's competence and confidence.

To be most effective, a good mentor should have:

- Substantial experience that is relevant to the needs and goals of the mentored pilot.
- Good "airside manner" that is friendly, affirming, non-judgmental, and respectful.
- Strong communication skills that include attentive listening and asking good questions.
- Clear understanding of the mentor's role, which is to support and guide the mentored pilot's efforts to apply knowledge and skills to real situations.
- Clear understanding of the pilot's goals, to include knowledge of how the aircraft is to be used (i.e., recreational flying for fun, personal transportation for business or pleasure, professional operation).
- Personal connection with the mentored pilot.
- Mutual understanding of responsibilities. Both individuals must have a clear understanding of responsibilities — and liabilities — in the mentoring relationship. In general, the mentored pilot should always be pilot in command..

Cheering Section

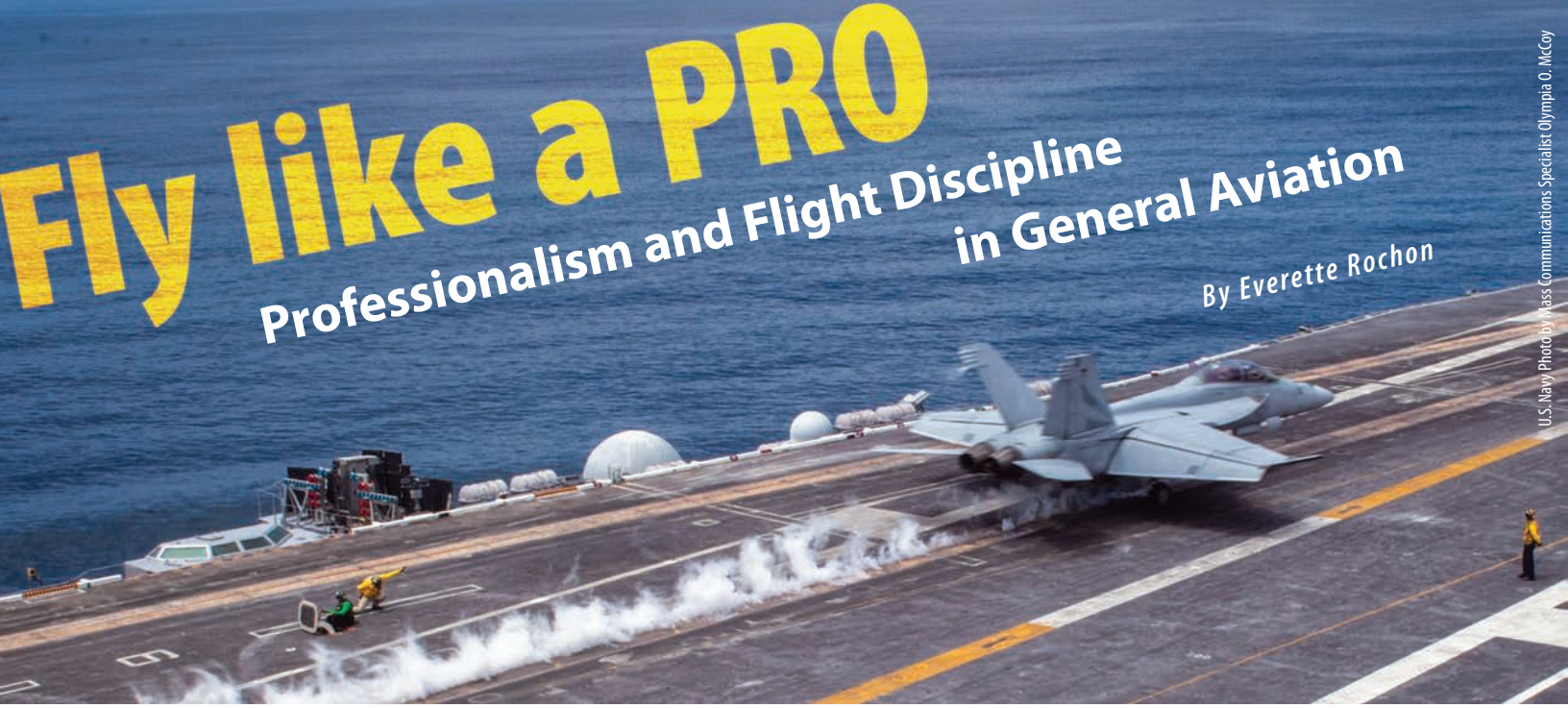
Flying is fun, but it isn't always easy. It's common to have doubts about your progress, and to think sometimes that the skills you seek will never come. The dragons of doubt can also wake up when weather or mechanical delays keep you on the ground. We've all had days when we wonder if it is really worth the effort it demands. When those days arrive, a mentor's encouragement and support can make all the difference in sending the dragons of doubt to the dungeons.

Susan K. Parson (susan.parson@faa.gov) is editor of *FAA Safety Briefing*. She is a general aviation pilot and flight instructor.

Fly like a PRO

Professionalism and Flight Discipline in General Aviation

By Everette Rochon



U.S. Navy Photo by Mass Communications Specialist Olympia O. McCoy

If you're interested in aviation, it's a safe bet that you have seen video of the carefully orchestrated operations on board an aircraft carrier flight deck. You've seen the pitching deck, the closely-packed jets, and the swarms of crewmembers in shirts whose color denotes the individual's role in launch and recovery operations: purple for fuel handlers, yellow for plane directors, red for ordnance, and white for safety observers.

I am lucky enough to have seen it in person. As a 20-year Navy veteran and former S-3B *Viking* Naval Flight Officer (NFO), I spent my share of sea time logging hundreds of "cats and traps" — Navy parlance for takeoffs and landings — on board ship. It's exciting stuff, but it's also demanding. Without uttering a word on the radio during "zip lip" VMC flight operations, several aircraft circle in a "stack" above the ship. At various altitudes, the stack is arranged in an orderly fashion by aircraft type. As each aircraft maintains its own safe interval, a "trap" occurs aboard the ship every 60 seconds.

> **My military flights were missions, with all of the get 'er done pressure a mission entails. In the GA flying world, my flights are simply flights.**

Do you wonder how so many aircraft and so many people can safely operate in such close proximity during radio silence? The answer boils down to one word — professionalism. Professionalism means flight discipline and adherence to regulations, guidance, training, and standard operating procedures (SOP). Safe carrier operations rely on each crew member's ability to maintain professionalism and discipline.

Different World, Same Strategy

Although I no longer fly in support of war-fighting exercises and operations, I have endeavored to keep my professional skills and attitudes as sharp as when I logged cats and traps in the *Viking*. Whenever my FAA position offers the opportunity to speak or work with GA pilots, I try to convey the idea that the agency — and everyone else in the aviation community — expects professionalism and discipline from every certificate-holding pilot in every kind of aircraft. That includes everyone from the first-day student in a Diamond DA-20 to the grizzled veteran ATP in the left seat of an Airbus A380.

As you may know, the foundation of the FAA's ongoing strategy to reduce the fatal GA accident rate is risk

Photo by Jon Hyde

identification, mitigation, and outreach. An important component of risk mitigation is to embed a professional attitude and take a professional approach to everything we do in aviation.

Here are a few ideas on how to fly like a PRO in your aeronautical activities.

Personal Integrity

A professional is characterized by a high degree of personal integrity. Among other things, that means unflinching honesty about your physical, mental, and emotional fitness for flight. Don't fly if you can't pass the venerable IMSAFE checklist outlined in the *Aeronautical Information Manual* (AIM 8-1-1). That means ensuring that you are free of Illness, Medication, Stress, Alcohol, Fatigue, or Emotion that could adversely impact the safety of your flight.

Still another element of the personal integrity professionals cherish is the ability to recognize and resist external pressures. For most people, this one does not come naturally — it is a skill acquired, sharpened, and maintained only through constant focus and discipline. That is because so many external pressures manifest themselves in subtle and insidious ways, making it difficult for pilots to perceive them until it is too late.

Here are a couple of tips for minimizing the effect of external pressures. The first comes from the AOPA Air Safety Institute, which advises pilots to avoid the word "mission" in connection with GA flying. When I was in the military, my flights were missions, with all of the get 'er done pressure a mission entails. Now that I am in the civilian GA flying world, my flights are simply flights. Nothing about a flight justifies exceeding personal minimums.

The second tip is to hone your awareness of pressure and, if you detect it in yourself or someone else, STOP. Do not make any additional moves toward flying until you clearly identify and mitigate or eliminate the source of the perceived pressure. Here's a related concept I have carried with me from my Navy career. When I reported for duty at my first Navy training squadron, I noticed the squadron safety motto in huge letters on the hangar: "If there is doubt, there is no doubt." At any time I am in doubt about what to do, I remove all doubt by taking the safest course of action.

Ready for Anything

A professional is physically and mentally ready for anything that happens. I would like to see my fellow GA civilian pilots prize readiness as much as we valued it during my Navy flying days.

There are several components to a professional's readiness. The first is training and currency. A good pilot never stops training, first to attain proficiency and then to maintain both proficiency and currency. Regardless of your total time and certificate level, it is crucial to recognize that

Photo by Stephen Early

The color-coded deck crewmen prepare the S-3B Viking for take off.

flying is a skill — and skills erode when they are not sharpened through regular and focused practice.

The second component of readiness is to develop not just plan A, but also plan B, plan C, and even plan D or beyond. Weather does not always follow the forecasters' expectations. No matter how well they are maintained, airplanes do not always adhere to their pilots' or mechanics' expectations. Play the "what-if" game with yourself before, during, and after every flight. If you're curious about the "after" advice in the previous sentence, consider that the immediate post-flight period offers one of the best opportunities for learning what you can take from one flight to the next.

The third form of professional-level readiness is the disciplined use of checklists. Aviation abounds with checklists and acronym-based memory aids. Choose and use the ones that work for you — the point is to apply consistent structure and discipline.

On Target

A professional strives to be on target in every aspect of the operation. Whatever the reason for a given flight, aim to stay precisely on altitude, on course, on heading, on airspeed, and on glide path. Practicing for perfection will contribute to professional-level proficiency.

A professional pilot will also be on target in terms of the aircraft's operating envelope. As you may recall from ground school, the "envelope" defines the maximum or minimum limits for safe operation of the aircraft. It generally includes items such as airspeed, load factor, and weight and balance. Don't try to be a test pilot, which is precisely the role you assume if you operate the aircraft outside its established design limits.

Though it pains this Navy veteran to quote an Army recruiting slogan, I urge you to be all you can be by flying like a PRO.

Everette Rochon is the Training and Certification Group Manager within the FAA's General Aviation and Commercial Division. He is a former S-3B Naval Air Training and Operating Procedures Standardization (NATOPS) instructor, and a current ATP and flight instructor.

LET'S GET SOCIAL!

How the FAA Engages Citizens through Social Media

By Paul Cianciolo

faa.gov/social

Scan this QR code to go to FAA's social media hub for easy access to all of our digital channels.

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If you're not on social media, do you even exist? Or, more to the point, are you the safest pilot you can be if you are not on social media? One of the most significant benefits of using social media is connecting directly with your fellow pilots as well as government and industry members. Here at the FAA, we aim to build trust as you get to know us on social media and understand how we provide the safest, most efficient aerospace system in the world.

Our national airspace system has a lot of different players, and not every social media channel is for everyone. We aim to meet you wherever you like to be. Here's a closer look at the platforms and channels the FAA uses.

The most prominent channels boasting nearly a half million followers each are the @FAA accounts on Facebook, Instagram, and LinkedIn, and @FAANews on Twitter. The FAA's YouTube channel has more than 50,000 video subscribers. Content shared on these platforms runs the gamut of all users — from pilots and mechanics, to drone operators, to the flying public and the entire aviation community.

Pro tip:

You can adjust your personal settings to ensure you get all the content from a social media channel. On a Facebook page, click "following" in the menu on a desktop or "manage follow settings" in-app to change content frequency. On Twitter, click the "🔔+" icon to get notifications. Click the "🔔" icon on a LinkedIn page to change content frequency. On the Instagram app, click "following" to change content frequency and the "🔔" icon to get notifications.

Several video playlists are valuable to our aviation community on the FAA YouTube channel. To find all the available playlists, click "created playlists" under the Playlists tab.

The FAA's "From the Flight Deck" video series uses aircraft-mounted cameras to capture runway and taxiway footage and combines them with diagrams and visual graphics to identify hot spots and other safety-sensitive items at more than 100 airports around the country. Another, "57 Seconds to Safer Flying," is an instructional video series that provides brief and informative overviews of critical safety subjects, such as a pilot's fitness to fly or aeronautical decision-making. The #FlySafe topics covered help mitigate the most common causes of general aviation (GA) accidents and follow the safety enhancements developed by the General Aviation Joint Safety Committee (GAJSC). These are just a couple of the playlists available to explore.

Pro tip:

Click the name of any playlist to see all the videos in that playlist. You can also save a playlist by clicking the "+" icon.

The *FAA Safety Briefing* magazine's Twitter channel @FAASafetyBrief is part of our official safety policy voice for non-commercial GA. We share stories from this magazine, the FAA Safety Team (FAASTeam), and other relevant content to the GA community. This content includes automated tweets from FAASafety.gov about TFR notices, GPS interference warnings, VIP movements, and airport-specific information. We also accept direct messages or DMs and strive to answer as best we can.

If you are on Facebook, joining our *General Aviation Safety* Facebook group is a must for traditional and remote pilots, mechanics, and others in the GA community. The FAASTeam moderates the nearly 16,000 members of the group to ensure content stays on topic and comments don't get out of hand. The number one group rule is intertwined with the FAA's Compliance Program (bit.ly/3sVOrh6) — that the FAA will not use safety discussions in the Facebook Group for any enforcement action. We want an open and transparent exchange of information with mutual cooperation and trust between the FAA and the GA community. This is a great forum to learn from your fellow aviators and avoid the same mistakes others have made.

Pro tip:

Make sure to fill out all membership questions when requesting to join a Facebook Group.

If you are a drone operator or remote pilot, make sure to follow the @FAADroneZone on Facebook or Twitter, which has around 10,000 followers each.

For those who like to sit back and listen rather than read, check out *The Air Up There* podcast, which is for people curious about the wide world of aviation. Join the FAA as we nerd out about the future of flight, drones, and ways to make the National Airspace System safer, smarter, and more efficient. You can subscribe to the podcast through Apple, Stitcher, and Google.

For those who like to deep-dive into aviation topics, our blog, *Cleared for Takeoff*, is hosted on Medium. Articles include the voices, stories, and news from the FAA, along with the articles from the *FAA Safety Briefing* magazine and educational content from the FAASTeam. Follow us there to stay up-to-date on great reading.

Pro tip:

While reading Medium content, select a snippet of text to highlight, share, or comment on a particular section. Click the "play" icon at the top of a story to listen to the article instead of reading it.

All these platforms open up new doors to connect with us. We encourage comments and replies, which we do read. We strive to improve GA safety by being good aviation citizens through social media engagement. Join us!

Paul Cianciolo is an associate editor and the social media lead for *FAA Safety Briefing*. He is a U.S. Air Force veteran and an auxiliary airman with Civil Air Patrol.

Here are some helpful reader comments we've received on social media:

Jake's response to "Aircraft Mufflers — The Hidden Danger You Need to Know" on Medium

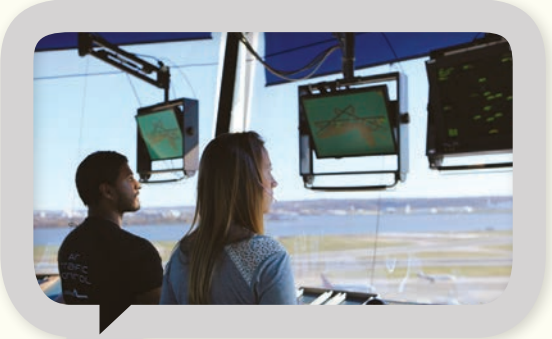
This was maybe 30 years ago. I was flying Eastward across the Appalachian mountains. I knew the weather at my destination was clear. I climbed above a cloud layer that later became an undercast with tops at 9000. My next VFR cruising altitude was 11,500. I filed a glowing PIREP. . . . By the time I got to the airport I had a splitting headache. I was exhausted when I landed. I taxied up to my parking space and then shut everything down. I wrote up the stuff I needed to in the log. By then I was so exhausted that I just set the parking brake and slept in the airplane for half an hour. . . . That's when the alarm bells went off with both of us. CHECK THE MUFFLER AND HEAT EXCHANGER. Sure enough, it was not in good shape. If I had not been in good physical condition at the time, I might not be here writing this.

Andrews's comment to "Welcome Back" about the FAA's Portable Reduced Oxygen Training Enclosure (PROTE) system on Facebook

Did this at the Mooney Safety summit a few years back. REALLY interesting and I am so glad I did. Fascinating how you can clearly hear what is being asked of you, and THINK you are performing the task perfectly.....NOPE, when you put the O2 back on, you have a load of squiggles all over the paper. I recomend this to EVERY pilot.

John's comment to "Surfing the Digital Atmosphere on Facebook

I'm wondering: maybe it's not a lack of weather knowledge that's the problem, but a lack of knowledge of how to deal with - fly in/handle - adverse weather.



Mimi's comment to "(Don't) Drop the Mic!" on Facebook

The word "unable" instantly notifies the controller that you have a good reason for not accepting the clearance. Sometimes they need the airtime a longer response would take to give instructions to another aircraft. An explanation can be added, but keep it short. "Unable, not ready."

RISING ABOVE AVERAGE

We tend to use the words "training" and "education" interchangeably, but they're not actually the same. Training is the acquisition of practical skills relating to specific useful competencies. Training is teaching someone how to do something. Education, on the other hand, is an experience that has a formative effect on an individual's character, intellect, or physical ability.

Let's apply that idea to aviation. Obviously, there is a very important training aspect to developing the trifecta of skills in aviation, navigation, and communication. But education is about teaching a person — in this case, a pilot — how to think, how to aviate no matter what, and how to navigate through problems that are not just rote experiences from the textbook or maneuvers guide. That's why the FAA included context- and task-specific risk management elements in the Airman Certification Standards (ACS), and also why the agency advocates things like scenario-based training and development of individually tailored personal minimums.

Up to Code

Adopting and implementing these educational activities can contribute to making you a better and more professional pilot — with the word "professional" meaning not a paycheck, but a mindset. It means having the attitude, the ethics, and the discipline to do the right thing every time, all the time, regardless of who's watching. Beyond what the FAA requires and advises, though, the Aviators Model Codes of Conduct (AMCC) offer yet more guidance on how to rise above being the "world's okay-est pilot," a moniker that's humorously emblazoned on more than a few pilot shop T-shirts. As we all know, aviation is too unforgiving for any of us to settle for being less than the best.

If you are a regular reader of *FAA Safety Briefing* magazine, you might recall seeing previous articles on the "family" of codes developed under the auspices of the Aviators Code Initiative. Just last fall (October 2022), the aviation professionals involved in this effort released the most recent update to the first and perhaps foundational document. As with each of these documents, AMCC version 3.0 received extensive industry review from a diverse group of highly respected trainers, professional pilots, regulators, and researchers. As the release information states, *"It presents a vision of flight excellence within its seven sections: (1) General Responsibilities of Aviators; (2) Passengers and People on the Surface; (3) Training and Proficiency; (4) Security; (5) Environmental Issues; (6) Use of Technology; and (7) Advancement and Promotion of Aviation. The Code of Conduct is a living document, updated periodically to reflect changes in standards, practice, and the aviation environment."*

If you have never looked at the AMCC, by all means use the link below to check it out and read any/all of the codes that apply to your areas of aviation interest and activity. If it's been a while since you visited the AMCC website, the release of AMCC version 3.0 provides an excellent reason to review. Revisions of note include a general update, enhanced treatment of new technologies, and a response to the increasing presence of uncrewed aircraft — otherwise known as drones.

There is much more excellent material in the AMCC than space permits me to discuss here, so I strongly encourage every aviation citizen to download, read, and heed the guidelines in this document.

Susan K. Parson (susan.parson@faa.gov) is editor of *FAA Safety Briefing* and a Special Assistant in the FAA's Flight Standards Service. She is a general aviation pilot and flight instructor.

LEARN MORE

Aviators Code Initiative
secureav.com

AMCC v3.0
secureav.com/Announcement-AMCC-v3.0.pdf

REBEKAH WATERS

DRONE REPORTS FOR ASRS

It can be easy to forget that a drone is an aircraft. But every drone, no matter how small, is an aircraft, and anyone who operates a drone is a pilot. This means that all drone pilots need to know the rules and always be safe when operating in the national airspace system (NAS).

There are many ways to ensure you have the knowledge required to operate an aircraft. If you are new to recreational drone flying, be sure to take The Recreational UAS Safety Test or TRUST (bit.ly/UAS-TRUST), register your drone, and download the FAA's B4UFLY app to help with airspace awareness. Also consider joining a Community Based Organization or other group where you can connect with other drone pilots or seek mentors.

Another important tool for improving aviation safety is NASA's Aviation Safety Reporting System (ASRS) available at asrs.arc.nasa.gov. This reporting system is voluntary, confidential, and non-punitive. Anyone can use it to submit information about aviation incidents, and reporting through the ASRS can help other drone pilots learn from what you experienced.

The ASRS collects, analyzes, and responds to voluntarily submitted aviation safety incident reports to help lessen the likelihood of aviation accidents. The FAA recognized its potential for developing data for drone safety enhancements several years ago. The agency worked with NASA to create an ASRS form specific to drone operations, and worked to make operators aware that the drone community could use this safety reporting system and receive the same protections as the rest of the aviation community. See AC 00-46F, *Aviation Safety Reporting Program* (bit.ly/AC00-46F) for more information.

ASRS report form

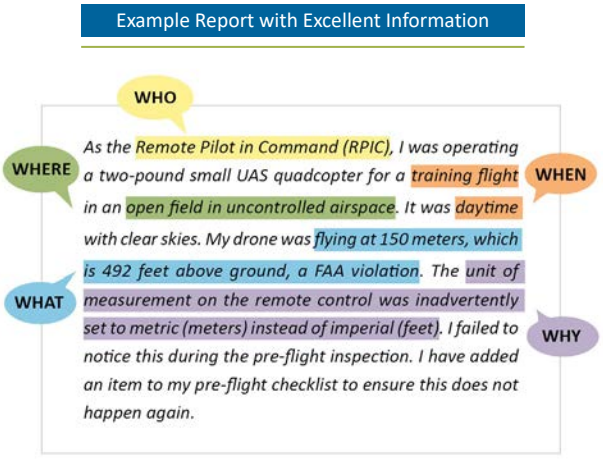
ASRS is currently the only voluntary safety reporting program that feeds drone-specific data into the FAA Aviation Safety Information Analysis and Sharing (ASIAS) system. ASIAS promotes open exchange of safety information in order to continuously improve aviation safety.

ASRS reports provide helpful information for policy development, human factors research, education, training, and more. Examples of reported drone incidents include conflicts between manned and unmanned aircraft, operational mistakes that endangered persons or aircraft, and events in which wind, weather, or equipment were important factors.

Knowledge gained from ASRS reports helps generate preventive measures to mitigate hazards and threats. ASRS reports also help identify and share information on common problems, complications, and nuances relating to drone operations.

Anyone involved in drone operations can go to asrs.arc.nasa.gov to report drone related safety incidents. Just as a reminder, all data is de-identified, and the reporter receives a numerical ID as receipt of submission. The ASRS Database Online (bit.ly/ASRS-Database) can then make drone safety information available for interested parties to review or research.

It's our responsibility to operate drones in a way that does not endanger people or equipment within our communities. Whether you are flying for work, or flying for fun, ASRS is a great tool to help promote and maintain safety within the drone pilot community.



Rebekah Waters is a senior communications specialist in the FAA's UAS Integration Office.

PROFESSIONALISM IN MAINTENANCE — BECOME A MODEL MECHANIC

What's the first occupation that comes to mind when you think of a professional? A doctor? A lawyer? Maybe a schoolteacher? While these are all important and highly respected professions, they are, after all, just that — professions. To be a *professional* takes much more than just having a title, prestige, or an advanced degree. It's the character and integrity of the person in that profession that defines a true professional. That's true whether your position entails a high level of exposure and public interaction, or if instead it involves a behind-the-scenes supporting role.

In the aviation industry, those in one of the most important supporting role professions — the Aviation Maintenance Technician (AMT) — are largely unseen by the public. Passengers see and interact with pilots, cabin crew, and customer service agents, all important professions (and hopefully professionals) in their own right. Though some may be predisposed to associate "professional" only with specific and high-visibility occupations, the men and women responsible for the safe upkeep of aircraft are undoubtedly professionals as well.

Are You A Professional?

So what makes someone a professional? Is it someone who is extremely knowledgeable and can solve problems quickly? Or maybe it has more to do with having a respect for the responsibility of the position, as well as for your co-workers. Professionalism is admittedly a squishy and intangible concept, difficult to directly see and feel. But there are several tangible ways you can perform to be the best professional you can be, and a role model for others in the aviation maintenance community.

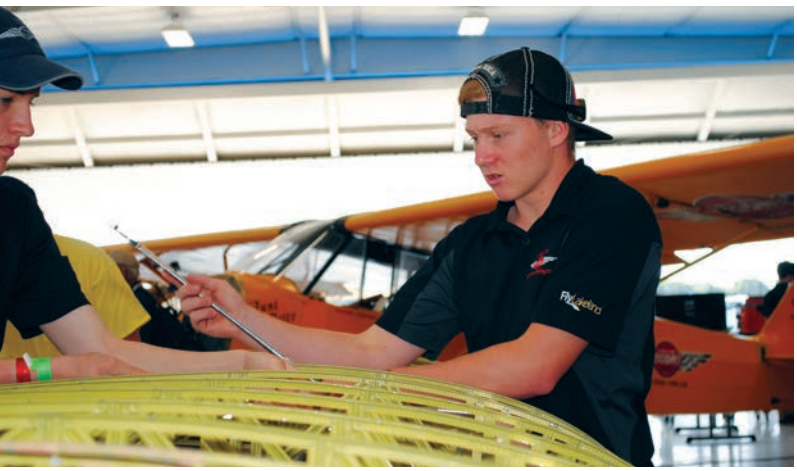
Stay Fit and Focused. Keep yourself fit for duty at all times. While fitness often refers to a physical condition, the real challenge is to ensure a mental fitness for duty. Proper sleep is an important way to ensure necessary mental awareness and attitude. Aim for about eight hours of sleep every night.

Get Smart. You worked hard to earn your aircraft mechanic certificate, but don't stop there. Maintaining a thirst for learning and an eagerness for challenge is a sure sign of a true professional. Just reading this article demonstrates a commitment to professionalism. If glass cockpit technology is not your strong suit, consider attending a seminar or course that can expand your knowledge on the subject. And, of course, don't forget the training available with the AMT Awards Program available on FAASafety.gov.

Pass it on. Knowledge is only good when you put it to use, and more importantly, share it, so try to pass on that wisdom when possible. The AMT profession is already one in which mentoring is an integral part of learning and becoming a good mechanic. Mechanics take pride in mentoring one another, and often find satisfaction in providing guidance for newer employees or co-workers who may be unfamiliar with a certain aircraft or procedure. The mentee demonstrates professionalism by accepting help from another worker. It is a two-way street.

Use the Right Tools. Aircraft mechanics have several tools and resources available to help them perform tasks more efficiently and accurately. A professional will approach any procedure with the same meticulous care a medical team displays when preparing surgical tools for an operation. Are you trained and proficient with the procedures and tools being used? Do you have the correct manuals and/or data for the procedure you are performing?

It's true that the public may not always see or think of what an AMT does to preserve safety, but that is never an excuse to let down your guard or be any less proud of the significant effect you have on safety. A simple, but well-known anonymous quote on professionalism sums up the concept nicely: "It's not the job you do, it's how you do the job."



Students learn the craft of aviation maintenance.

Tom Hoffmann is the managing editor of *FAA Safety Briefing*. He is a commercial pilot and holds an A&P certificate.

WHAT'S YOUR TYPE? HOW TYPE CLUBS ENHANCE SAFETY

If you have a hobby or favorite activity, no matter how common or unconventional, there is probably a club somewhere out there that caters to that interest. Auto clubs, TV show fan clubs, and book clubs; these are just a few among the myriad organizations that appeal to nearly anything you can imagine. But how about a club that can help save you time, money, and possibly even your life one day? Sound good? If you're an airman, it most definitely would.

Of course we're referring to aircraft "type clubs," which, for decades, have helped aircraft owners and pilots become more in tune with the performance and safety of their flying machines. In fact, anecdotal data, as well as accident data collected by some specific type clubs, suggest that members of an aircraft type club are less likely to have an accident than their non-member colleagues. Let's have a closer look.

Getting "Type" Casted

Aircraft type clubs are organizations formed to support airmen who share a common interest in a specific make, model, or manufacturer of aircraft. Although type clubs vary in how they operate and the services they provide, they generally function as a safety and informational support network to keep members abreast of best practices, as well as any changes or news regarding their aircraft. This is particularly important for a pilot transitioning to a new aircraft type, or one who owns an aircraft no longer supported by the manufacturer.

Enhancing safety among type club members is accomplished in a number of ways. It is facilitated chiefly through the availability of technical and safety-related information and supplemented by the first-hand knowledge and expertise of its members. How this information gets disseminated can vary among different type clubs, but websites, publications, and seminars are the more common vehicles.

In addition to making available a ream of online statistics and data about their aircraft, many type club websites also use blogs and chat rooms, allowing users to ask questions, post comments, and exchange ideas about anything ranging from which engine oil is the best to use, to where the best airport diners are.

> TYPE CLUBS GENERALLY FUNCTION AS A SAFETY AND INFORMATIONAL SUPPORT NETWORK TO KEEP MEMBERS ABREAST OF BEST PRACTICES, AS WELL AS ANY CHANGES OR NEWS REGARDING THEIR AIRCRAFT.

"It may seem trivial, but simply providing a forum for networking and discussion about safety issues and the discussion of approaches and techniques is actually profound," says Coyle Schwab, president emeritus of the International Cessna 195 Club and current chairman of the Experimental Aircraft Association's Type Club Coalition (TCC), a consortium of more than 40 agencies and type clubs formed in 2015. Schwab states that these information-sharing opportunities among like-minded aviators "are a type club's greatest asset" and a feature the TCC continues to leverage to improve knowledge transfer among the coalition.

In addition to keeping pilots more in tune with the performance and safety of their aircraft, type clubs also provide an important social and professional networking outlet.

The access to open communication has also been the catalyst for some aircraft type club members, particularly those of more recent design, to play a part in discovering and developing safe practices for undocumented issues, sometimes before the manufacturer gets wind of a problem.

Type clubs also provide outreach via newsletters and magazines, as well as organizing safety seminars and pilot proficiency programs for their members. These live programs usually feature speakers well-versed in safety matters germane to their type-specific audiences, and can sometimes be supplemented with additional, one-on-one flight training sessions.

Among the excellent safety promotion tools some type clubs offer are service clinics, where maintenance professionals will check a club member's aircraft for items that are historically problematic. So, whether you're more technically inclined, or prefer a more traditional hands-on approach to keeping up to speed on your airplane, you're bound to find a type club learning solution that suits your needs.

My Type of Club

Directories available online (*see links in Learn More*) list hundreds of type clubs and flying associations, covering every group of aviators from Cessna, Piper, and Mooney pilots, to those more taken with amateur-built, light-sport, or vintage designs. Then there are niche organizations based on pilot demographics, occupation, or locality and which have targeted audiences ranging from musicians and chiropractors to octogenarians and wheelchair aviators. While these groups don't necessarily focus on the safety aspects of a particular aircraft, they are still extremely useful in keeping members up to date with more generic safety matters, or issues that are relevant to their profession, area of interest, or specific environment.

For example, maybe you're new to the Colorado area and want to expand your knowledge of high-altitude flying. What better way than to chat with experienced mountain flyers in your area?

In case there isn't a club in your particular area, start one! All it takes is a few folks with a common interest to get it going. In fact, the TCC has made starting a type club even easier by publishing an online how-to guide (bit.ly/TCCTypeClubGuide). This comprehensive document incorporates first-hand experience from other type clubs and covers everything from finances to club leadership roles.

Spreading the Good Word: Safety

In keeping with its strategic plan to reduce GA accidents, the FAA is looking to leverage the tremendous influence type clubs have on aviation safety. One example can be found in Advisory Circular (AC) 90-109A, *Transition to Unfamiliar Aircraft*, in which the FAA recommends using type clubs to help build familiarity when transitioning to a new experimental or unfamiliar aircraft.

"We recognize the significant safety value type clubs have for the aviation community," says FAA's General Aviation Operations branch manager Mark Giron, who is also a proud member of the American Bonanza Society. "In addition to providing and sharing tailored best practices, type clubs also help members to connect with qualified flight instructors specific to their type, a task that can often be very challenging." Giron adds that the FAA's work with type clubs, in particular the Lancair Owners and Builders Organization, led to development of the Additional Pilot Program for flight testing experimental aircraft. (*See AC 90-116 for more*).

Members of the FAA offered suggestions and collaborated with the TCC during the development of their Transition Training Guide. This guide is a seed document for type-specific pilot transition training programs and incorporates the experiences of other type clubs. "We hope this will become the baseline upon which type clubs can build custom, detailed training curricula that address their concerns," says Schwab.

There's a lot to gain from being a member of an aircraft type club: shared information, tried and true tips, trend data, and locality-specific issues, not to mention a club's ability to provide important social and professional networking outlets for like-minded aviation enthusiasts. You may also consider joining a type club to offer up some of your own talents and expertise. So don't delay — join one today!

Tom Hoffmann is associate editor of *FAA Safety Briefing*. He is a commercial pilot and holds an A&P certificate.

FOR MORE INFORMATION

List of Associations and Type Clubs on AOPA website
aopa.org/go-fly/aircraft-and-ownership/aircraft-type-clubs

EAA's Type Club Corner
eaavintage.org/about-us/type-clubs

Type Club Coalition website
eaa.org/eaa/aviation-interests/type-club-coalition

GENE TRAINOR

AIMING HIGHER

The FAA is issuing new Special Airworthiness Information Bulletins (SAIBs) outlining how the rotorcraft community can voluntarily improve safety through FAA recommended actions and technology.

The SAIBs are part of the Rotorcraft Safety Promotion Concept (RSPC), an initiative that seeks to promote safety through voluntary compliance by highlighting rotorcraft safety features and designs. The first SAIB was issued September 13, 2021, and covered preventing and mitigating the effects of bird strikes. The FAA's Strategic Policy for Rotorcraft section plans to issue additional SAIBs through 2023, with the next focused on crash resistant fuel systems.

For those unfamiliar with SAIBs, these bulletins serve to alert, educate, and make recommendations typically regarding safety. They are published in the FAA's Dynamic Regulatory System, more commonly known as DRS. It's the FAA's depository for regulatory guidance material (drs.faa.gov).

The RSPC SAIBs focus on the continuous improvement of helicopter safety and allow for safety recommendations to be shared as information and technology become available.

The bird strike SAIB in part recommended:

- **Learning about the local bird population** and using that knowledge to safely plan and fly a route. Key considerations include seasonal migratory times and concentration patterns within an operating area.
- **Reducing airspeed when practical.** Three out of four bird strikes (77%) occur during operations with airspeeds greater than 80 knots. When operating rotorcraft in areas of high bird concentrations, the likelihood of a damaging bird strike increases with airspeed. Fly at 80 knots or less, particularly at lower altitudes.
- **Increasing altitude as quickly as practical.** The likelihood of a bird strike drops 32% for every 1,000 feet gained above 500 feet above ground level. Also, birds fly higher at night, so increase your altitude even more than during the day to try to avoid them.
- **Wear personal protective equipment (PPE).** A helmet and visor, at least for the crew, should be worn when practical.

With regard to crashworthy fuel tanks, the FAA Reauthorization Act of 2018 requires any rotorcraft manufactured on or after April 5, 2020, to be equipped with crash-resistant fuel systems. This will require updates to a significant number of helicopters now in service.

The forthcoming crash-resistant fuel system SAIB highlights a three-level continuum for crashworthy fuel systems. Ultimately, the FAA recommends a multitude of steps to prevent fuel tanks from rupturing after a crash. The continuum of options include:

- Using crash resistant fuel bladders in the fuel tanks. Designs incorporating fuel bladders made from crash resistant materials, even if no certification credit was received by the installer, have been shown to reduce fuel leaks after an accident.
- Fuel systems that comply with the subset of regulations in the congressional mandate codified in Title 49 USC section 44737 (Helicopter fuel system safety) are very effective in preventing post-crash fires.
- Full compliance to latest amendment of Title 14 part 27 or 29 for fuel systems (sections 27.952, 27.963, 27.967, 27.973, and 27.975) assures the highest level of protection from post-crash fires in helicopters.

These fuel system regulations include a broad set of requirements, and are intended to accomplish the following:

- Minimizing crash-induced fuel leaks, typically through installation of crash-resistant bladders and reduction of puncture hazards to these bladders.
- Minimizing fuel contact with potential fuel ignition sources during and after a crash.
- Increasing the time occupants have to get out of the helicopter before a post-crash fire.

This SAIB was expected to be published by the end of December 2022.

Gene Trainor is a technical writer/communications specialist for the FAA Compliance & Airworthiness Division.

Check out our GA Safety Facebook page at **Facebook.com/groups/GASafety.**

If you're not a member, we encourage you to join the group of nearly 16,000 participants in the GA community who share safety principles and best practices, participate in positive and safe engagement with the FAA Safety Team (FAASTeam), and post relevant GA content that makes the National Airspace System safer.

Paper Preference

I would like to get *FAA Safety Briefing* magazine in print form if possible. What do I need to do? Thank you.

— Tony

Hi Tony. You can order a print subscription of the magazine through the Gov't Printing Office's Bookstore here: bookstore.gpo.gov/products/faa-safety-briefing. The link is also available from our main page here: faa.gov/safety_briefing. Note that you can also sign up for email notifications for each new issue of the magazine at bit.ly/FAASBemail.

Space-Based Weather Tips

In response to the FAA's #FlySafe post on Use of Weather Information bit.ly/FlySafe_UseofWx:

For a big picture overview of the Eastern US, I keep the GOES satellite near real time images handy for planning. [Gulf of Mexico sector: bit.ly/GOES_GOMsector, Northeast sector: bit.ly/GOES_NEsector]

— Joe

Sometimes You Don't Want to "B" Seen

Thanks for sharing this report [To "B," or Not to "B" Jul/Aug 2020 issue]. It's very valuable to know the PIA [Privacy ICAO Address] program. With more and more ADS-B data sharing on Internet, privacy turns out to be a very important concern. PIA program could be a useful reference for other countries. But seems ICAO has no guidance for this yet. Will keep an eye on this issue.

— Lowell

Thanks for your comment. Please continue to monitor our ADS-B Privacy web page at faa.gov/air_traffic/technology/equipadsb/privacy for any future updates to the PIA program.

Just the Facts Please

Been a long time subscriber and reader of *FAA Safety Briefing* magazine. I think you are not covering the subjects that provide me with the info/facts I need in order to promote flight/ground safety with my clients. In years past, you presented reports of safety significance. Now it is just info on the FAA, but no data I can use to convince clients that this or that happens and you should be aware.

— Dave

Thanks for taking the time to write and share your feedback on the Sep/Oct 2022 issue of FAA Safety Briefing that was focused on the FAA's Flight Program Operations team. We are sorry to hear some of our material was less helpful to you. While our Sep/Oct issue did have an atypical focus, we determined that it was important to help educate GA pilots on what "flight check" aircraft do, what pilots need to know and, most importantly, how to maintain safety when a flight check aircraft is in the vicinity. In a time when aviation careers are booming, we also wanted to make aviators of all kinds aware of possible career opportunities at the agency.

We hope you will stick with us. Our first issue of 2023 focuses on the importance of airmanship and what we call good aviation citizenship. Thank you again for your feedback.

Let us hear from you! Send your comments, suggestions, and questions to SafetyBriefing@faa.gov. You can also reach us on Twitter @FAASafetyBrief or on Facebook at facebook.com/FAA.

SUSAN K. PARSON

LIFE HAPPENS

Surprises are foolish things. The pleasure is not enhanced, and the inconvenience is often considerable.

— Jane Austen

It's probably fair to say that pilots don't like surprises, at least not when they are flying. By nature and by nurture, we are schooled in planning for pretty much everything. We are even exhorted to "expect the unexpected," although I've never known quite how to do *that*. Aviators take pride in our well-planned lives. So it was with me.

When we talk about avoiding mid-air collisions, it's almost a cliché that you never see the one that gets you. In that too, so it was with me. But mine didn't happen in an airplane. Sometime in late 2021, I had a mid-air with a mosquito. I never saw it. I never heard it. I don't even recall seeing the bite. But that unseen, unheard, and utterly unexpected encounter had an outsized impact. Its magnitude became clear in early November 2021, when my left leg and my upper right arm went on strike. The doctors suspected it right away, but only after many tests did they conclude I had a particularly virulent case of West Nile Virus.

Attitude Determines Altitude

I believe the only thing that we really have control over is our attitude. If we focus on the positive things in our lives and learn how to cope with all the surprises, we will be happier people.

— Brandon Jenner

The mosquito mid-air led to a lengthy hospital stay. I came home in a wheelchair with an uncertain prognosis. My long-time beau is a no-kidding candidate for sainthood, having dropped everything in his regularly scheduled life to shepherd me through months of medical appointments and physical therapy. Along with many wonderful others in my network of family, friends, and colleagues, he kept me firmly focused on the positive.

> THANK YOU FOR ALLOWING ME TO WRITE FOR YOU. YOU WILL BE IN GOOD HANDS WITH TOM TAKING THE LEFT SEAT, LEADING THE CREW IN OUR MISSION TO SERVE AS THE SAFETY POLICY VOICE FOR NON-COMMERCIAL GA.

However much I wanted my healthy, mobile, independent, and normal life back *immediately*, we both had to adopt the attitude that I could live, breathe, and act only in the present. I had to remember that each step forward required intense minute-by-minute work on what needed to be done right then. Only through that here-and-now focus did physically impossible movements become merely difficult and, eventually, normal.

The lesson aligns with this issue's theme: as in life, we achieve personal aviation goals and improve safety only by aiming for professionalism and best efforts in each moment.

Changing Course

Life throws surprises, sorrows, sadness, and hardship, and I think that writing has actually grounded me. It kept me grounded when everything else was falling apart.

— Sandra Brown

The people in my life were, and are, everything. They kept faith in the darkest days and rejoiced over every milestone achieved in clawing my life back from the beastly bite of that bug.

Writing also kept me going. It has been a special privilege in my years with the FAA to serve as editor of *FAA Safety Briefing* and work with its talented team: Tom Hoffmann, James Williams, Jennifer Caron, and Paul Cianciolo. But since a life-changing event demands actual changes in life, I have opted to retire in January 2023 and open a new chapter, as yet unwritten.

Thank you for allowing me to write for you here. I will miss meeting you in these pages. But you will be in good hands with Tom taking the left seat, leading the crew onward in our mission to serve you as the safety policy voice for non-commercial GA. Godspeed!

Susan K. Parson (avi8rix@gmail.com) has been editor of *FAA Safety Briefing*. She hopes you will continue to read this publication, and she wishes you blue skies, strong tailwinds, and smooth landings.

BETH ANN SENK

Manager, FAA Flight Program Operations Aviation Safety Training Group

Having an Air Force pilot as a dad is a surefire way to fall in love with aviation. At 16, after settling in Denver, Beth Ann dove into summer flying lessons after exploring flight schools throughout the area with her father. She answered phones and cleaned airplanes and hangars in exchange for flight time in a Pitts S-2B aerobatic biplane.

Beth Ann couldn't keep her feet on the ground or her flying just "straight and level." At 19, she landed a flight instructor job teaching aerobatics and formation flying for an aerial combat company in Englewood, Colo. Her passion for teaching continued as she transitioned to the assistant chief pilot at a large part 141 flight school in Phoenix and then to teaching at Lufthansa's training academy.

The spark that brought Beth Ann to the FAA started with her husband, who was flying for an airline, and who one day had an aviation safety inspector (ASI) in his jumpseat. Her husband's experience led Beth Ann to phone an ASI friend she had flown with in the past.

"My old colleague, an inspector at the Milwaukee [Flight Standards District Office], convinced me to apply for an ASI job," Beth Ann said. "She helped me through the process and the transition into my career at the FAA. The Milwaukee FSDO was a wonderful office to start my new career."

Beth Ann's FAA experience spans ASI field work, a part 142 Certificate Management Office (CMO), international and policy work, and flight check operations. Now, she is the Aviation Safety Training Group manager under FAA's Flight Program Operations at Fort Worth Alliance Airport (AFW) in Texas. The group provides training and currency flying for all ASIs at the FAA.

"From day one of becoming a civil servant, my motto has been to do for one what you wish you could do for all," noted Beth Ann. "As an ASI, this is how I approach work, and as a manager, this is how I approach my employees and peers in FAA's Air Traffic Organization and Flight Standards."

The aviation community is strong, but there is even greater strength in being with a group of peers. Finding a good flying mentor helps us all fly a little safer. Beth Ann's advice for being a good mentor is to never give up on people — they will surprise you.

"There were times when my mentors could have given up on me. However, they were patient and gave me a safe space to grow and figure out how to show up for my peers and excel in leadership," she said. "We live in a wonderful time in aviation, with many changes and opportunities on the horizon. Find a mentor to find your flightpath."

Paul Cianciolo is an associate editor and the social media lead for *FAA Safety Briefing*. He is a U.S. Air Force veteran and an auxiliary airman with Civil Air Patrol.

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