

September/October 2023

FAA ▶

BRIEFING

Safety

ASPIRING AVIATORS



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Program Promotes
Accountability



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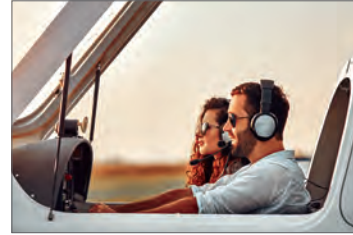
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ABOUT THIS ISSUE ...



The September/October 2023 issue of *FAA Safety Briefing* focuses on aspiring aviators and airmen-in-training. Feature articles provide an update on the Airman Certification Standards (ACS), explore the important role of the FAA's Compliance Program, and offer a personal account of an airmen's pathway to a private pilot certificate.

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FAA **BRIEFING** Safety

The FAA Safety Policy Voice of Non-commercial General Aviation



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A LICENSE TO LEARN

“It is possible to fly without motors, but not without knowledge and skill.”

— Wilbur Wright, aviation pioneer

“Prepare for the unknown, unexpected, and inconceivable ... after 50 years of flying I’m still learning every time I fly.”

— Gene Cernan, American astronaut

Welcome to this aspiring aviator-themed issue of *FAA Safety Briefing*. We’re excited to share what we hope will educate, motivate, and inspire you to embark on a path to pilothood, or perhaps continue on a journey to broadening your aviation horizons. It’s an incredibly exciting time in aviation, with industry change occurring at near light speed.

With that change comes multiple opportunities for aspiring aviators, whether their pursuits are tied to more traditional paths of recreational and/or commercial flying, or involve some of the newer and up-and-coming sectors like drones, electric air-taxis, and commercial space flight. In fact, in June the FAA proposed a new set of rules to train and certify pilots flying powered-lift aircraft, an important step toward safely advancing advanced air mobility or AAM. These new rules are necessary because many of the proposed AAM aircraft take off and

land like a helicopter, but fly enroute like an airplane. These proposed rules follow closely to another integration milestone, an updated blueprint for airspace and procedure changes for these future air taxi operations. You can find out more about these here bit.ly/43jqEYh.

At the FAA, we’re committed to helping strengthen the pipeline of aviators and attracting new members to the aviation community. This is critical to help address workforce shortages spurred by the pandemic and the rapid growth of the industry. Earlier this year we provided \$10M in grants to 23 schools in the U.S. to help train students for careers as pilots and aviation maintenance technicians as part of an Aviation Workforce Development grant program (bit.ly/FAAgrants), as well as an additional round of grants announced in July. Recipients can use the funding to establish new educational programs; provide scholarships or apprenticeships; conduct outreach about careers in the aviation maintenance industry; and support educational opportunities related to aviation maintenance in economically disadvantaged areas.

For those younger folks aspiring to get involved with aviation, the FAA’s Airport Design Challenge provides students in grades K-12 with a uniquely interactive and collaborative learning experience. Students work in small groups along with FAA aerospace and engineering experts to design virtual airports using the popular video game Minecraft. The challenge offers first-hand experience in an aviation-related application of STEM concepts and helps students apply their academic knowledge and skills to professional simulations. To



learn more and see some of our previous finalists, go to faa.gov/adc.

If you’re already considering becoming a pilot, we’ve got resources on our online pilot portal to help you find information on certification, training, regulations and more (faa.gov/pilots). And be sure to check out our “How to Become a Pilot” episode (season 3, episode 3) of the FAA’s *Air Up There* podcast series at faa.gov/podcasts. In it you’ll hear perspectives from Jacqueline Camacho Ruiz, the author of *Latinas in Aviation*; Dawne Barrett, the leader of the operations supervisor workshop for the FAA; and Captain Jill Mills, Chief Pilot at United Airlines.

Regardless of what type of aeronautical endeavor you choose to pursue, safety should always be your north star. That requires — as both Wilbur and Gene point out above — a dedication to continued learning and practice of your skill. Be sure to take advantage of the many resources available at the FAA, including those discussed throughout this issue, to continue on a path of professionalism and safety.

A perfect example of this is the FAA Safety Team’s WINGS Pilot Proficiency Program (faasafety.gov/wings), which is designed to help improve your skills and knowledge as a pilot. In fact, you can earn a stage of WINGS after certain flight certification activities, like a private pilot checkride. It’s a great way to stay sharp and safe, so check it out today.

Safe flying!



AVIATION NEWS ROUNDUP

GAJSC Incorrect Surfaces Study

Incidents where an aircraft takes off or lands on the wrong surface — or at the wrong airport — pose a serious threat to aviation safety and occur more often than you might think. According to the FAA, there were 1,641 incorrect surface approach and landing events from October 2016 through December 2022, an average of five per week. During that same period, there were 326 incorrect surface departures, about one per week. The vast majority of the incidents — 83% for the landing events and 87% for takeoffs — involved general aviation (GA).

The stakes are immense when this type of error occurs, particularly at major airports. On Aug. 10, 2018, at Philadelphia International Airport, controllers cleared a part 135 Gulfstream G-IV to land on runway 35. The pilots however aligned with taxiway E, which is parallel to runway 35. On the taxiway were four aircraft that the G-IV overflew when the pilots ultimately performed a go-around.

A new analysis by the General Aviation Joint Safety Committee (GAJSC), a data-driven, government and industry safety group, delves into the problem and offers pilots

some advice on how to avoid a wrong surface incident.

In Phase 1 of the study, the team quantified the locations and types of incorrect surface events, as well as the aircraft and operation types for 2,786 incorrect surface events received through mandatorily and voluntarily submitted reports. They determined that the majority of reported events were wrong runway approaches, followed by wrong runway landings, wrong airport approaches, wrong airport landings, and taxiway landings, respectively.

Phase 2 further refined Phase I results by identifying human and operational contributing factors to incorrect surface events. Not surprisingly, pilot error topped the list of contributing factors for incorrect surface events, primarily linked to failure to monitor or cross-check, not following procedures and rules, insufficient planning, and flawed communications. In addition to pilot error, the study found issues with pilot human factors, environment, airport layout, air traffic control (ATC), human factors, and ATC operations.

There are several key takeaways for pilots from the study. First, remain vigilant when it comes to all the contributing factors, especially when

more than one is present. ATC-pilot-CTAF communications must be clearly understood and read back to ensure all entities have the same understanding of what to expect for the takeoffs or landings. And be particularly wary of parallel runways that are offset from one another — it's very tempting to choose the more visually dominant runway, although it may be the wrong one. It's also very important to adopt and adhere to best practices like pre-planning your departure and arrival, and using call-outs or helpful reminders like setting a heading bug to the assigned runway and checking it before starting your takeoff roll.

Be sure to also leverage training materials like the FAA's *From the Flight Deck* video series at faa.gov/flight_deck and the FAA's runway safety page at faa.gov/airports/runway_safety.

New Features on Leidos Flight Service Interactive Map

Leidos Flight Service (FS) released two new features this spring to enhance the experience of pilots who use the FS Interactive Map. These new features, the Range Bearing Line (RBL) Tool and the Weather (WX) Cameras Overlay are available online, including mobile.

#FLYSAFE GA SAFETY ENHANCEMENT TOPICS

Please visit bit.ly/GAFactSheets for more information on these and other topics.



SEPTEMBER

Preflight After Maintenance —

What items should you focus on and/or add to your preflight inspection checklist after maintenance?



OCTOBER

Gaming the System —

The importance of disclosing and discussing all medical conditions and medications with your AME.



The RBL Tool is designed to help pilots accurately measure distances to weather phenomena, temporary flight restrictions (TFRs), terrain, and other fixed positions. The tool works by allowing pilots to draw a range-bearing line between two points, while simultaneously displaying a range-ring. The range-ring is centered at the starting point of the line, with a radius defined by the ending point of the line.

The WX Cameras Overlay is a new layer of the FS Interactive Map that provides convenient access to FAA's camera imagery. The map layer displays camera icons in locations where an associated FAA WX Camera exists. By clicking the camera icon, a dialog box will open with the camera image viewer. Pilots can access any of the thumbnail images to enlarge the image from the camera. A clear day view is also available for reference purposes and may be accessed by selecting the "View Clearday" button.

Feedback and suggestions for new and existing features are welcome. Pilots can submit their feedback at www.1800wxbrief.com/Website/help-feedback.



Change to Foreign Data on Enroute IFR Aeronautical Charts

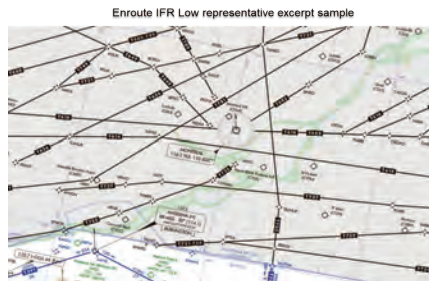
On June 15, the FAA changed how foreign aeronautical data is represented on instrument flight rules (IFR) enroute charts for low and high-altitude flights. Refer to charts from host countries for situational awareness of detailed and accurate non-U.S. data.

U.S. IFR Enroute Charts joined the FAA's visual charting products by emphasizing the transition point

beyond U.S.-controlled airspace where aviators will then consult charting products of other nations or third-party providers.

The FAA does not reliably receive foreign data with sufficient lead times to produce the foreign areas of FAA charts with the same robust, for navigation, content as within U.S. airspace. Additionally, foreign aeronautical information is not supported by the U.S. NOTAM System.

The FAA charts will continue to provide aeronautical information for orientation and transition to the appropriate non-U.S. aeronautical information publications.



Updated Procedures and Best Practices for Non-towered Airport Flight Operations

The FAA recently published Advisory Circular (AC) 90-66C, *Non-Towered Airport Flight Operations*, (cancels AC 90-66B CHG 1) to reflect current procedures and best practices at airports without an operating control tower or an airport with a control tower that operates only part-time.

This AC specifies the regulatory requirements, recommended operations, and communications procedures for operating at non-towered airports and recommends traffic patterns, communications phraseology, and operational procedures for use by aircraft, lighter-than-air aircraft, gliders, parachutes, rotorcraft, and ultralight vehicles.

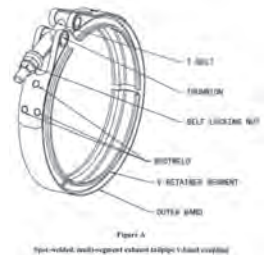
The AC stresses safety as the primary objective and provides general operating practices, including preflight actions, flying the standard traffic

pattern, being alert for other than a left-hand traffic pattern, and self-announcing position and/or intentions.

You can review this AC at bit.ly/AC9066C.

AD Issued for Exhaust Turbine System

The FAA adopted a new airworthiness directive (AD) for turbocharged, reciprocating engine-powered airplanes and helicopters and turbocharged, reciprocating engines with a certain V-band coupling installed. This AD was prompted by multiple failures of spot-welded, multi-segment V-band couplings at the tailpipe to the turbocharger exhaust housing flange and establishes a requirement for repetitive inspections as well as a life limit for the V-band coupling.



Go to bit.ly/43WOPNt for additional information.

FAA Proposes Rule to Enhance Safety and Performance of Light Sport Aircraft

The FAA recently published the proposed Modernization of Special Airworthiness Certification (MOSAIC) rule to enhance the safety and performance of Light Sport Aircraft operations by implementing performance safety standards around larger aircraft and expanding the definition of Light Sport Aircraft. Under the proposal, the aircraft's weight limit is based on its stall speed, allowing larger and stronger aircraft to qualify as Light Sport. The proposal also expands the type of aircraft sport pilots can operate and allows them to use their aircraft for a wider range of operations, including some aerial work. You can view the NPRM and provide comments by Oct. 23, 2023 at bit.ly/43UOFoW.

REVIEWING THE MEDICAL PROCESS

Happily, the recent uptick in student pilot applications has reversed the downward trend in pilot numbers seen over the past few years. However, this has both the training environment and the FAA's Office of Aerospace Medicine working hard to keep pace. Not only are we seeing an increase in the total number of applicants, but many of the initial applicants have an underlying medical condition that requires further evaluation. Moreover, this is now true even for younger pilots. Let's review the certification process and what you can do to expedite your medical application.

First, a brief history lesson (see the *Learn More* link for a more expanded historical lookback). Medical certification actually began in World War I because more pilots were lost in accidents secondary to medical conditions than were lost in combat. Once standards were put in place, the accident rate dropped precipitously. These military standards formed the basis for the initial civilian standards, which were developed in the 1930s. Our current FAA regulations, found in 14 CFR part 67, evolved from these. Initially, these regulations were very restrictive. However, we now grant a special issuance (waiver) for many conditions that were previously disqualifying. These include many cardiac conditions, insulin-treated diabetes mellitus, substance use disorder, etc.

When we consider medical certification, our fundamental concern is the safety of the national airspace system (NAS). We focus on the risk of sudden or subtle incapacitation for the duration of the medical certificate. As such, we sometimes allow certification even if a condition does not meet current medical guidelines — examples

include hypertension and elevated lipids. Conversely, if a significant medical condition is present, the need to mitigate the risk to public safety drives the requirement for some of the additional testing and observation times that we request. The standards that we use are found in part 67. These provide a basis for the AME Guide that we provide to aviation medical examiners (AMEs).

Even if a pilot does not meet all the criteria in part 67, we recognize that many pilots can safely fly after appropriate evaluation, treatment, and mitigation of the condition which determine there is not an increased risk to the NAS. In these cases, we have a number of options for medical certification. For relatively straightforward conditions, we allow the AME to determine that the condition is appropriately managed. The AME can issue a certificate based on some conditions simply by following the disposition tables in the AME Guide. There are 22 conditions that an AME can issue (CACI) if the pilot brings the necessary paperwork to their appointment and everything is acceptable. Pilots with some static conditions are issued a statement of demonstrated ability (SODA). More serious and/or progressive conditions may warrant a special issuance (SI), which is time-limited and has specific follow-up criteria. For these, the AME (or other representative) sends the information to the FAA for review prior to issuance of the medical certificate. After the initial SI is granted for some conditions, we allow the AME to issue a medical certificate if the information is favorable, but the AME still sends all documentation to the FAA for review. These are called AME-assisted SIs (AASIs). Again, these are time-limited with specific follow-up

requirements (see the *Learn More* link for additional info). For those interested in the regulatory basis, you can find this in 14 CFR section 67.401.

Many of you have experienced or heard that there can be delays for some pilots in receiving their medical certificates. While this is true in some cases, it's worth noting that more than 90% of applicants for a medical certificate leave the AME's office with their medical certificate in hand. Of the 10% who do not, most receive a medical certificate through one of the above pathways. Of the 1% who are ultimately denied, it is mostly because they failed to submit the requested information. Nonetheless, this 10% is the group where the delays occur. In the next issue, we will look further into some reasons for delays and what you can do to help avoid them.

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.

LEARN MORE

14 CFR part 67, Medical Standards and Certification
bit.ly/Part67

AME Guide
faa.gov/ame_guide

New Insulin-Treated Diabetes Mellitus Policy for Pilots
bit.ly/445E1f1

Smooth is Fast, *FAA Safety Briefing*, Jan/Feb 2022
bit.ly/47qzW8b

Decoding ACS

UNDERSTANDING THE AIRMAN CERTIFICATION STANDARDS

by James Williams



The FAA's Airman Certification Standards (ACS) project started in 2011-2012 with a simple idea: finding a logical, data-driven way to clean up outdated knowledge test questions. The result is a system that enables pilots and prospective pilots to be more prepared — and more comprehensively prepared — with less digging.

In the Beginning

I have personal experience with the reasons for this project. While we generally referred to this part of the certification process as the “written” test, they were all computer-based tests by the time I took my first of many. But some of the questions were downright prehistoric. As the test taker, you just learned to memorize your way around those questions and move on. This represented a waste of both the applicant's time and the FAA's chance to measure the applicant's knowledge — you know, the whole point of the exercise.

To ensure that we got it right, the FAA invited a number of aviation community experts to join a team (formally convened in an “Aviation Rulemaking Committee” and later in a series of Aviation Rulemaking Advisory Committee working groups) to share their expertise. It quickly became clear that “getting it right” required a systematic approach. In the “old” days, your exam consisted of three separate but interlocked activities, each handled

somewhat differently: the knowledge (“written”) exam, the oral exam, and the practical exam. The knowledge test drew from a bank of test questions, and the oral and practical exams drew from the Practical Test Standards (PTS). Over time, these had become disconnected and effectively separate activities instead of being integrated to provide the best possible certification testing.

It would take more than five years for this government/industry effort to become the first integrated ACS, and you can read all about it in the article “The ABCs of ACS,” (see link in Learn More).





Enter the ACS

The ACS unifies knowledge and skill elements with risk management elements to create a one-stop solution for airman certification. The ACS sorts elements into three kinds of tasks — things the applicant must *know*, *consider*, and *do*. The *know* portion is derived from the aeronautical knowledge portion of each certificate. The *consider* portion allowed FAA to formally introduce risk management concepts like Aeronautical Decision Making (ADM) that are critically important, and to integrate them into specific tasks. The *do* portion largely consists of the traditional PTS tasks in the new format. You can find all the ACS documents and additional support here at bit.ly/3DB6PBc.

There are current ACSs for private pilot, commercial pilot, airline transport pilot, instrument rating, remote pilot, and aviation maintenance technician (AMT). ACS now covers many more certificates than when it initially rolled out.

The Flight Path Ahead

So what is the status now? Currently, there are 18 Practical Test Standards (PTS) in use today. An ongoing rulemaking effort will codify these 18 PTSs along with 15 ACS documents as listed in [Regulations.gov](https://www.regulations.gov).

“The ACS is a comprehensive testing approach that connects the standards for knowledge, risk management, and

skills to the knowledge and practical test,” explains Daron Malmborg, an aviation safety inspector and expert in airman certification with the FAA’s Regulatory Support Division. “The FAA will continue to use the PTS for some certificates and ratings until the corresponding ACS is completed.”

“The future does hold some updates to the ACS that are already available. Due to the intended regulatory nature of the PTSs and ACSs, the FAA proposed and initiated action, via rulemaking, to Incorporate by Reference (IBR), into the Code of Federal Regulations (CFRs), the aforementioned PTSs and ACSs,” Malmborg said. “They contain requirements for pilots, flight instructors, flight engineers, aircraft dispatchers, and parachute riggers. This rulemaking can be viewed at: bit.ly/45fimlQ. Once this rulemaking is final, the FAA intends to continue its collaborative work with the Aviation Rulemaking Advisory Committee (ARAC) ACS Workgroup (WG), to produce future ACS documents, from the remaining original IBR’d PTS documents.” He continued, “Each document will be required to progress through rulemaking in order to comply with the Administrative Procedure Act (APA), which allows public comments during rulemaking.”

This rulemaking can be viewed at [Regulations.gov](https://www.regulations.gov) by referencing Regulation Identifier Number (RIN) 2120-AL74.

Why does the FAA want to make this change?

“There are multiple reasons to codify the ACS and PTS documents,” Malmborg explained. “The first being that the PTS and the ACS impose requirements on all persons seeking an airman certificate or rating. The PTS and ACS require an applicant seeking a certificate or rating to complete specific tasks, which must be performed to a minimum standard, in order to obtain the applicable

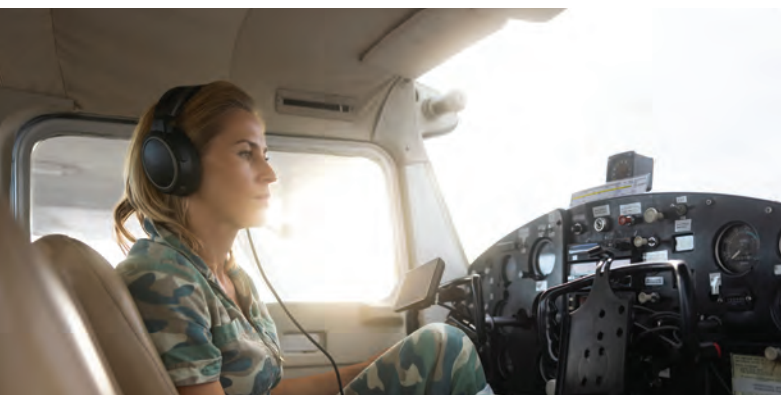




certificate or rating. As such, if an applicant does not perform a task in the PTS or ACS, to the prescribed standard, the applicant cannot obtain the applicable certificate or rating. Unsatisfactory performance results in a notice of disapproval and denial of the airman certificate.”

“Also, the FAA has recently determined these testing and certification standards are indirectly referenced in the regulations, particularly in parts 61, 63, and 65; and require compliance in order to successfully complete an FAA test and obtain an airman certificate or rating,” Malmberg added. “As such, the FAA discovered it had not consistently provided the regulated community with the notice or opportunity to comment as mandated by the APA, before the community was required to comply with the standards set forth in the PTS and ACS. As a result, the FAA initiated this rulemaking to bring the PTS and ACS documents into the FAA regulations through proper notice and comment procedures required by the APA.”

Another reason for codifying is the unique nature of the PTS and ACS documents. “They are lengthy and contain complex technical information and tables that may prove difficult and inefficient to be traditionally printed in the Federal Register and CFR,” said Malmberg. “As such, the FAA has identified the most efficient and effective way to integrate the required elements in the PTS/ACS into FAA regulations is through IBR. In other words, the FAA proposes to IBR these standards, rather than reproduce the documents in their entirety,” Malmberg concludes. “IBR is a mechanism allowing federal agencies to comply with the requirements of the APA by publishing rules, in the Federal Register and the CFR, and referring to material published elsewhere. Material incorporated by reference has the same legal status as if it were published, in full, in the Federal Register.”



Decoding

As noted above, the ACS can be pretty lengthy. In fact, the Private Pilot Airplane ACS comes in at more than 100 pages. In addition, each element covered in the ACS has a code like this one: PA.I.D.K4. What does that mean? Here’s a quick guide.

I. Preflight Preparation	
Task	D. Cross-Country Flight Planning
References	14 CFR part 91; FAA-H-8083-2, FAA-H-8083-25; Navigation Charts; Chart Supplements; AIM; NOTAMS
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with cross-country flights and VFR flight planning.
Knowledge	The applicant demonstrates understanding of:
PA.I.D.K1	Route planning, including consideration of different classes and special use airspace (SUA) and selection of appropriate and available navigation/communication systems and facilities.
PA.I.D.K2	Altitude selection accounting for terrain and obstacles, glide distance of the airplane, VFR cruising altitudes, and the effect of wind.
PA.I.D.K3	Calculating:
PA.I.D.K3a	a. Time, climb and descent rates, course, distance, heading, true airspeed, and groundspeed
PA.I.D.K3b	b. Estimated time of arrival to include conversion to universal coordinated time (UTC)
PA.I.D.K3c	c. Fuel requirements, to include reserve
PA.I.D.K4	Elements of a VFR flight plan.
PA.I.D.K5	Procedures for activating and closing a VFR flight plan.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
PA.I.D.R1	Pilot.
PA.I.D.R2	Aircraft.
PA.I.D.R3	Environment (e.g., weather, airports, airspace, terrain, obstacles).
PA.I.D.R4	External pressures.
PA.I.D.R5	Limitations of air traffic control (ATC) services.
PA.I.D.R6	Improper fuel planning.
Skills	The applicant demonstrates the ability to:
PA.I.D.S1	Prepare, present, and explain a cross-country flight plan assigned by the evaluator including a risk analysis based on real-time weather, to the first fuel stop.
PA.I.D.S2	Apply pertinent information from appropriate and current aeronautical charts, Chart Supplements; NOTAMS relative to airport, runway and taxiway closures; and other flight publications.
PA.I.D.S3	Create a navigation plan and simulate filing a VFR flight plan.
PA.I.D.S4	Recalculate fuel reserves based on a scenario provided by the evaluator.

ACS Coding: PA = Private Pilot Airplane (applicable ACS);

I = Preflight Preparation (Area of Operation); D = Cross-Country Flight Planning (Task); K4 = Elements of a VFR Flight Plan (Task Element)

We now see that PA.I.D.K4 is Elements of a VFR Flight Plan. While that one is fairly self-explanatory, other tasks, especially the skill-based ones, will have additional criteria like the following for normal takeoffs: *Establish a pitch attitude to maintain the manufacturer’s recommended speed or V_y , +10/-5 knots.* This is your performance standard. The knowledge test report will generate codes for missed questions that will correlate to an element in the applicable ACS. These codes will help you focus on areas of weakness and better prepare for the oral exam.

While lengthy, each ACS is relatively easy to skim through to find specific tasks. This allows you to look through the ACS, find your weak spots, and determine what the examiner will be looking at and what you need to know, consider, or do. That way, you can focus on those areas with your instructor and make sure you are going to ACE your encounters with the ACS. ▶

LEARN MORE

Airman Certification Standards
bit.ly/3DB6PBc

The ABCs of ACS, *FAA Safety Briefing*, Jul/Aug 2016, Page 10
bit.ly/3DD82YT



(Photos courtesy of Kerri Beuker)

PROFILE OF PERSISTENCE

A Personal Journey to Piloting

by Tom Hoffmann

The path to *pilothood* can sometimes be a rocky and steep uphill climb. Various factors conspire to steal away our free time, halt momentum, fuel frustration, and deplete our available resources to continue with training. Being able to start — and complete — flight training can, at times, feel like an insurmountable task. But it is absolutely achievable with the right mix of perseverance, positivity, and flexibility.

Former flight attendant and newly certificated private pilot Kerri Beuker was no stranger to those traits, putting in just over two years of hard work in the metro-Chicago area to earn her wings. I sat down with Kerri to discuss her journey to becoming a pilot, including the various obstacles she faced and how she overcame them. I was inspired by her story and hope it will help educate and motivate others to embark and/or continue on their journey to obtaining a pilot certificate.

Tell us a little about your background and how you got interested in aviation.

I grew up in Pittsburgh until my teens when my parents decided to relocate to the south. I didn't particularly care for moving since Pittsburgh was always home for me. However, the move provided some key inspiration for my dream job of being a flight attendant during several flights I made back to Pittsburgh as an unaccompanied minor. I was so impressed with the flight attendants that looked after me and knew that's what I wanted to do.

Fast forward to the summer of 1994, I joined Continental Airlines as a flight attendant. I only flew the line for a couple of years. While I really enjoyed it, I began to have a passion and interest for flying and realized I might be working on the wrong side of the flight deck door. I made it a point to visit the flight deck frequently and talk with pilots so I could learn as much as possible. It was truly eye-opening.

I transitioned over to management and flight attendant training in the years that followed but never lost sight of becoming a pilot one day. While I was living in Chicago, my job with United Airlines' Aviate pilot recruiting program rekindled my desire for a flying career. But lack of money, time, and resources were still major obstacles for me. A close friend's similar quest to be a pilot, and his search for the right flight school and instructor, sort of paved the way for me to try and begin a parallel journey. Before I knew it — although much later in my life than I would have liked — my journey to being a pilot took off.

You mentioned a lack of time and resources as initial barriers to getting started with flying. Were there other obstacles you encountered while completing your training?

Before I started my pilot training, I had a delay with getting my Class III medical. It took some back and forth with the FAA to get things sorted out with some past medical issues, but it was important to be upfront with my [aviation medical examiner] AME about everything. This happened during COVID too. As soon as I got my medical, I literally soloed the very next day and kept moving forward.

They don't call Chicago the Windy City for nothing. What kind of weather challenges did you face and how did you overcome them?

There were certainly some weather challenges during training, many of them attributed to gusty winds. My checkride alone was rescheduled 14 times, mainly due to the wind. We were always patient and stuck it out when the weather wasn't right. My instructor would wisely use the time to cover some important ground school items.

What type of aircraft did you train in?

All of my training was in a Cessna 172M *Skyhawk*, a plane that my friend and I purchased. I love the plane and even

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named it “SkyJack” after my dad who recently passed. It makes me feel like he’s always with me. I learned with a traditional six-pack of instruments but later upgraded to dual Garmin G-5 displays.

What kind of training resources (videos, handbooks, apps) worked best for you? What would you recommend?

I read and watched everything I could get my hands on — books, manuals, articles, YouTube videos, you name it. I was motivated to learn as much as I could and even took the step of studying for and passing the Fundamentals of Instruction and Advanced Ground Instructor exams. These things, along with regular flying to reinforce that knowledge, were a big part of my success.

What were some milestone moments of your training?

I scheduled my first solo long cross-country flight on the anniversary of my dad’s passing. I remember touching down at 12:10 p.m., twenty minutes after the time he had passed several years earlier. I felt like I was doing that for him and felt on top of the world. At that moment, despite everything I had been through in terms of delays and disappointments, I felt like it was all worth it.

I also vividly remember the first time I *greased* a landing. It was on my birthday nearly a month after I started my lessons, and I felt extremely proud of that perfect touchdown.

Transitioning from a non-towered airport, Lewis University Airport (LOT), to a towered airport, DuPage Airport (DPA), was an important learning experience. In fact, during my checkride, my [designated pilot examiner] DPE made it a point to tell me my radio work was excellent. Things came full circle for me at that moment as I recalled several years earlier listening in awe to my fellow airline crewmembers handling air traffic communications with relative ease. Now I was doing the same!

How was your checkride experience? What advice would you tell someone you know who’s about to take theirs?

As I mentioned, we had some issues with rescheduling due to the weather, but my DPE and I decided to do an early

morning flight the day after Thanksgiving Day last year. I was super nervous about the flight, but I followed some good advice someone gave me, which was to imagine the DPE as your first passenger. That, along with my determination to make this happen and the confidence I gained during training, made for a successful flight. I practiced, knew what to expect, and handled everything she threw at me. Even though it took a long time to complete my journey, I kept at it and let it be my priority.

What do you enjoy about being a private pilot?

I believe strongly in mentorship and the concept of pilots helping other pilots. So for me, it's important to seek ways I can give back to the pilot community. I see it as a duty and a privilege to give back in a way that encourages fellow pilots because I know there are many things that can knock you back or make you feel that flying might not be for you.

Do you fly regularly? Are you planning to pursue additional ratings/certificates? What does the future hold?

I fly occasionally, just not as much as I'd like to with my current job as Director of Talent and Engagement (pilot recruiting) for Silver Airways. However, I do plan to take some time later this year with a part 141 flight school to get my instrument rating in a more immersive environment. I already have a lot of time under the hood and I absolutely love instrument flying, so I think I'll do well. After that, I plan to continue with all of my certificates and ratings and see myself flying clients all around the world with a part 135 operator within two years.

What advice would you give an aspiring aviator to become a pilot?

Finding the right instructor is critical. If you start feeling any level of disrespect during training, it's important to know that there are other options out there, even if it sets you back a bit. You need to find an instructor that you can click with. If money is an obstacle, try to look for scholarships in your area that might provide some assistance.

I also think it's important to get involved with groups and organizations that can offer support. For my fellow female aviators, I would recommend some online groups like LIFT (Ladies in Flight Training) and FAST (Female Aviators Sticking Together), as well as Women in Aviation and the Ninety-Nines. Find out what groups are in your local area. Mentorship is important so seek guidance where you can and network as much as you can. Joining a flight club can help too, but just be sure to do your homework beforehand.

Finally, remember that even though you have a pilot certificate, you never stop learning. The journey never ends. Every flight should be a learning experience. And know your limitations. If something feels off before you're set to fly, heed those warnings. Don't have a fly-by-the-seat-of-your-pants mentality. Make sure you're ready, you're not distracted, and make sure you use your checklists. ▶



WOMEN IN AVIATION LAUNCHES MENTOR PROGRAM

Women in Aviation International (WAI) has launched a new Mentor Connect program allowing members at every level of their aviation journey to connect, engage, and inspire. Designed to connect aspiring WAI members with seasoned aviation professionals, Mentor Connect provides a forum where women with various levels of experience can connect with mentors across a wide range of aviation disciplines, including pilots, engineers, air traffic controllers, mechanics, and more. The program helps mentors/mentees set goals, establish milestones, set up meetings, and track progress.

Be sure to enroll again if you've previously participated in the WAI mentorship program. The updated program is on a new platform that features fresh capabilities and tools. Visit wai.org/mentor-connect to learn more.



HERE'S MY ADVICE

Training Tips from Award-winning Flight Instructors

by Rebekah Waters

To support this aviation training-focused issue of *FAA Safety Briefing*, we invited some winners of the National General Aviation Flight Instructor of the Year Award to offer tips to pilots in training. Here are their responses. See if you can spot some consistent points.

What do you know now that you wish you had known when you were a student pilot?

Gary Reeves (2019 Flight Instructor of the Year):

All instructors want their students to do well and be safe, but some matchups don't always work. My first several flight instructors were all great pilots but needed to be more organized. The most important things are a written curriculum and at least two weekly lessons. Starting an online ground school before you start lessons will save you money and time.

Amy Hoover (2022 Flight Instructor of the Year):

Since I was a student pilot almost 35 years ago and learned to fly in a small rural town in the Idaho mountains, I did not know there were resources available other than reading the FAA publications and asking questions of my flight

instructor. I wish I had known about the various oral exam guides and practical test prep guides from a variety of publishers. I did fine on my checkride, but it would have been easier with more help from those types of publications. Now there is a plethora of online courses, test prep software, and other resources to help student pilots gain the knowledge, skills, attitudes, and best practices required to obtain their pilot license.

Bob Raskey (2023 Flight Instructor of the Year):

I wish I had known how inspiring, rewarding, and life-changing it is to fly. I was 18 years old when I officially became a student pilot. After completing high school, I joined the New York Army National Guard, and I was selected to attend helicopter mechanic school at Fort Rucker, Ala. I loved learning how to repair helicopters and thought this would be my future career. Then, one day an Army warrant officer came up to me and said, "Looks like you are doing a great job there, have you ever thought about learning how to fly?" I thought, "Why not?" and joined the Fort Rucker Aero Club. I obtained my FAA student pilot certificate, and then took to the skies with my instructor to basically see if I really wanted to be a pilot.



On my first instructional flight, I was completely taken by the sheer beauty and motivating challenge of flying a plane. I was so motivated that I flew almost every evening and weekend, around my helicopter repairman training, and received my FAA private pilot certificate in about 30 days. I left Fort Rucker as a certificated FAA private pilot — airplane single engine land. I was fortunate to have someone ask me that question that changed my life's trajectory: "Have you ever thought about becoming a pilot?" I wish I had heard that question when I was 14! So, anyone even remotely considering flying, obtain that FAA student pilot license and stay in the game.

Take your time to find the best instructor for you.

There is a plethora of online courses, test prep software, and other resources to help student pilots gain the knowledge, skills, attitudes, and best practices required to obtain their pilot certificate.

What is your best advice to someone who is considering becoming a student pilot?

Gary Reeves:

Take your time to find the best instructor for you. Interview at least three, at different schools if possible, and check for five key things:

1. Do they provide you a written curriculum with assigned study topics and details of what will be covered in each lesson?
2. Do they teach ground before each lesson to make sure you are prepared and review each lesson after a flight?
3. Are they and the planes available when you are? Is there another instructor that can fill in if needed?
4. Are they active in the FAA WINGS program?
5. Does their personality match yours?

Schools that promise you will finish in exactly 40 hours of flight time for the lowest price available are often unrealistic. 40 hours is the minimum, but not the goal. Your goal is to be safe and confident when you fly, to enjoy this new hobby, or build a solid foundation for a possible career. Be

active in the FAA WINGS program, attend EAA chapter meetings, and join groups like AOPA. The more you immerse yourself, the safer you will be.

An important part of your success is to surround yourself with like-minded individuals who will motivate and mentor you as you learn to fly.

Amy Hoover:

Getting a pilot certificate is expensive and will take longer if you are not able to be consistent with your training. Ideally, plan to fly at least twice a week, and more often if able. Save enough money in advance so you do not have to stop training due to lack of funds, as that will prolong the process and cost more in the long run. Find a mentor who can assist you with the process; most pilots are excited about helping up-and-coming aviators and will be happy to help you. Most importantly, have fun and enjoy the process!

Bob Raskey:

Find the nearest airport/flight school and take that first discovery flight as soon as you can. It will be that first flight that will hopefully take you past the interested phase to the inspired phase of flying. You are no longer interested in becoming a pilot; you are now committed to becoming a pilot! I can say that some of the greatest



Bob Raskey and his daughter during a flight lesson.

pilots I know did not have in their thoughts a future as a pilot. My own son and daughter both initially said no to flying. Yet, after taking them flying in my airplane, a Piper Cherokee, their perspectives changed, and each earned a private pilot license. My daughter then took it further, similar to me, by joining the Air National Guard at 18 years old, after high school. She continued flight training and after receiving her commercial pilot license and graduating college, she was selected to fly the Air Force F-35 fighter jet. She is currently at Luke Air Force Base in Arizona training to become a fighter pilot. I have learned in my lengthy career as a civilian and military pilot, that your degree of success in aviation will be enhanced by your willingness to take on the challenges along the way. An important part of your success is to surround yourself with like-minded individuals who will motivate and mentor you as you learn to fly. You should always keep the end game in view as you progress in your goal of being a professional pilot. The world really needs pilots more than ever, so take this moment in time to get out there and FLY! Be relentless, resilient, and respectful as you progress on from student pilot. You will find success, and, more importantly, you will find mentors in aviation who will be honored to assist you on your journey. >

DO YOU KNOW ...

Do you know an outstanding flight instructor, mechanic, or FAATeam Rep?

Consider nominating them for a national GA award. Go to generalaviationawards.com/nominate on or before November 30 to submit your nomination!



Gary "GPS" (Guy in the Pink Shirt) Reeves has two decades of teaching experience in the U.S. and internationally. He is the 2019 FAA National Flight Instructor of the Year and a lead representative for the FAA Safety Team. He is considered the top expert in general aviation using GPS and autopilot systems. For more info, visit www.PilotSafety.org.



Dr. Amy Hoover (NAFI#16135) of Ellensburg, Washington, was the 2022 National Flight Instructor of the Year. Amy has dedicated over three decades of her life to advancing aviation education with 3,000-plus hours of aircraft instruction time and 15,000-plus hours of ground instruction time. She specializes in tailwheel and

mountain flying instruction and teaches backcountry flying in her home state of Idaho.



Robert "Bob" Raskey was the 2023 National Flight Instructor of the Year. Mr. Raskey is a current FAA Gold Seal Flight Instructor; FAATeam industry member; and United Airlines Boeing 777 captain with over forty years and 23,000 hours of general, commercial, and military flight experience. Mr. Raskey has been a flight instructor

and pilot examiner on various airplanes, helicopters, warbirds, and experimental aircraft.



Mistakes Happen

How the FAA's Compliance Program Promotes Accountability for All Pilots

by Jeffrey Smith

“Mistakes happen.” Certainly not a profound statement and there are plenty of affirmations that can be found about mistakes, how to recover from them, and how to learn from them. One that I particularly like is, “Mistakes have the power to turn you into something better than you were before.” Seems like great advice for life overall! But what about when mistakes happen in aviation? Do we view them from the same perspective as we do for mistakes in other areas? How should we react to them? And, of course, how does the FAA treat mistakes committed by student pilots and instructors?

Despite all of the encouraging phrases about mistakes, people generally strive to not commit them in the first place. This reminds me of another quote: “An ounce of prevention is worth a pound of cure.” This is very true in aviation where even simple errors can have disastrous and deadly consequences. So how do you and I prevent mistakes from occurring in the first place? Well, the regulations are a good place to start as a minimum baseline for safety standards. From the general aviation pilot's perspective, Title 14 Code of Federal Regulations, Title 14 (14 CFR), parts 61 and 91 contain a wide range of requirements intended to support safe operations in the National Airspace System (NAS). And while regulations present the minimum requirements, our

obligation as good and safe pilots also includes looking at risk that extends beyond the regulations.

Our obligation as good and safe pilots includes looking at risk that extends beyond the regulations.

For example, it is critical to maintain knowledge of the aircraft you are operating to include limitations, V-speeds, system operations, and emergency procedures. Do you have a way to ensure familiarity when you fly in a different aircraft? Knowledge of the airports you intend to operate at is also critical, as is weather and enroute airspace. External pressure to arrive at the destination by a certain time can influence our willingness to accept risk. And this brings us to another applicable quote, “know thyself.” Your mental and physical state should certainly be a factor in your go/no-go decision-making. Further, the baseline regulatory limitations may not be enough for you given your current experience and proficiency level.

So how do we take the above and turn it into action that helps prevent mistakes? As pilots, we should be executing

repeatable processes for every flight. Using a checklist is probably the most basic and familiar way to do this. Checklists provide items to inspect and actions to perform during all phases of flight. But do you have a checklist or other method that covers all applicable preflight preparation items? This can include checking past, current, and forecast weather, ensuring acceptable weight and balance, reviewing NOTAMs and TFRs, offering proper passenger briefings, and confirming you have your necessary documents (e.g., pilot certificate, medical certificate, and photo identification). Incorporating the PAVE and IMSAFE acronyms into your preflight routine can also be beneficial. When it comes to personal minimums, do you review those before each flight and update them as needed? Further, do you have a post-flight assessment process that has you challenge yourself on how you could improve before the next flight?

To help prevent mistakes, pilots should be executing repeatable processes for every flight, like using a checklist.

We need consistent and systematic methods of ensuring safety as noted above (e.g., checklists, personal minimums, etc.). Maintaining safety should not be based on luck. If luck is your strategy, you may want to examine that before — as the saying goes — “your luck runs out.” But sometimes, despite our best efforts, mistakes do in fact happen. So how should we react?

First, we must address any immediate safety concerns. These concerns can be wide-ranging and, at the extreme end, involve an in-flight emergency. This is not the time to dwell on how the situation came to be or the potential reaction from your pilot peers or the FAA. For instance, if you’re running low on fuel, please do not waste critical time wondering if you erred in your preflight calculations, if your instructor will be disappointed, or if your certificate will be in jeopardy. Rather, focus on finding a nearby alternate landing location. Remember, ATC can be a real lifesaver in this situation. As a good practice, you should have the contact frequencies for your areas of flight or at least know how to quickly determine those frequencies from your electronic or paper-based navigation products. In all cases, your main focus should be on addressing the emergency and landing safely.

Other in-flight concerns may not be life-threatening but can necessitate immediate action. Realizing you have flown into controlled airspace without a clearance is a good example. Take steps to exit the airspace, if able, and attempt to communicate with ATC. Trying to evade detection will only increase the immediate safety risk and will ultimately result in a strong reaction from the FAA.

Finally, some situations involve simply ceasing the operation until the safety issue or noncompliance can be corrected. For example, you have planned a flight on the first day of the month only to realize your aircraft’s previous annual inspection expired the day before. Please do not take the flight with the mindset that one day doesn’t matter. Even if the flight is conducted without a negative outcome, committing one intentional violation of the regulations can lead to routine noncompliance. This ultimately results

PAVE CHECKLIST





in a degraded safety posture until, as noted above, “your luck runs out.” And, as we’ll explain later, intentional acts, regardless of the outcome of the flight, will result in strong reactions from the FAA.

Okay, so how does the FAA handle deviations from the regulations? As part of its oversight model, the FAA has developed the Compliance Program. The Compliance Program has, at its foundation, an appreciation for transparency and an expected willingness/ability to prevent reoccurrence of the noncompliance. Deviations resulting from flawed procedures, simple mistakes, lack of understanding, or diminished skills may be addressed with compliance actions. Compliance actions are non-enforcement and include an on-the-spot correction, counseling, or additional training and education. So that example of running low on fuel, even if you did not take off with the required amount per 14 CFR section 91.151, could be resolved outside of enforcement.

In all cases, the intent is to address the root cause of the issue to preclude it from happening again. There may be additional follow-up performed on the part of the FAA to validate the corrective actions were effective. This brings us to what the Compliance Program is not: a “get out of jail free” card. Rather, the intent is to use the most effective means to address safety concerns. This can even include corrective action taken by you prior to being contacted by the FAA following a regulatory noncompliance, such as receiving ground or flight instruction in the relevant subject areas.

Sometimes, however, the most effective means to restore safety in the NAS is through the use of legal enforcement actions. These include certificate suspensions, revocations, or monetary penalties. These actions will be taken in cases where repeated noncompliance indicates the person is either unable or unwilling to remain in compliance. Also, intentional, reckless, or criminal acts, as well as failure to complete agreed-upon corrective actions, are also grounds for the FAA to take legal enforcement action. Administrative actions (e.g., warning letter) may also be used when appropriate to formally convey and document a regulatory deviation.



Additional information regarding the Compliance Program can be found in the Learn More Section below.

While we should be taking steps to prevent safety deviations, as long as humans are involved, mistakes will occur. But rather than attempt to ignore, dismiss, or even hide the error, we should address it head-on. First, let’s resolve the immediate safety concern and cease any ongoing non-compliance. Then, let’s take action to prevent future reoccurrence, such as adding items to a checklist or receiving additional flight instruction.

Convention holds that we appear flawless as pilots, and we should be confident and capable in any operation we conduct. However, we should also strive toward a culture that appreciates those who hold themselves accountable and are willing to take meaningful corrective actions. This type of conduct will continue to elevate safety within the NAS. As the next generation of pilots (or those teaching and mentoring them), you can, and should, always be seeking to be “... better than you were before.” ▶

Jeffrey Smith is the manager of the FAA’s Flight Standards Safety and Compliance Team. He holds an ATP certificate, is a flight and ground instructor, and an A&P mechanic.

LEARN MORE

FAA Compliance Program Webpage
[faa.gov/about/initiatives/cp](https://www.faa.gov/about/initiatives/cp)

Compliance Program Brochure
bit.ly/3NXGqTd

Compliance Program Presentation
bit.ly/3Di02MH

DO YOU WANT A RIDE?

How to Protect Your Certificate and Prevent an Illegal Air Charter

by FAA's Safe Air Charter Team

SOMETHING NOT QUITE RIGHT? BE ON THE LOOKOUT! NO MATTER HOW THEY'RE DISGUISED, ILLEGAL AIR CHARTERS ARE A THREAT TO SAFETY.

THE FAA NEEDS YOUR HELP TO IDENTIFY, REPORT & SHUT DOWN ILLEGAL AIR CHARTER OPERATORS

faa.gov/charter



ILLEGAL AIR CHARTERS PUT US ALL AT RISK



KNOW YOUR FAA PILOT & OPERATOR / AIR CARRIER CERTIFICATIONS



PART 119
REQUIRES PART 135 OR PART 121 AIR CARRIER CERTIFICATE WHEN THE AIRCRAFT IS AVAILABLE FOR HIRE FOR AIR TRANSPORTATION



PART 91
PILOTS CANNOT PROVIDE AIR TRANSPORTATION FOR HIRE

Flying in our nation's airspace is more complex, congested, and costly than ever before. The lure to cut down on some of those costs may motivate operators to offer their flight services without meeting proper FAA requirements. It's important to note that just having a current commercial pilot certificate doesn't always mean you can take a passenger for a ride. Something as simple as accepting a six-pack to fly a friend, to a complicated leasing scheme, could be considered an "illegal air charter" by the FAA — often characterizing the rogue operator as either *clueless*, *careless*, or *criminal*. An illegal air charter is a safety risk, so read on so you don't find yourself in the *clueless* category.

An Unlawful Upsurge

Over the past four years, the FAA and industry organizations such as the National Air Transportation Association (NATA) have seen a 300% increase in illegal air charter complaints. In response, the FAA tasked a specialized investigative unit, the Special Emphasis Investigations Team (SEIT), to focus on the issue. This safe air charter team raises awareness about the issues and warning signs of

illegal air charters to the FAA workforce, the public, and to civil aviation agencies around the globe.

Rogue operators have been levied more than \$18 million in civil penalties. Two situations that commonly lead to illegal air charter operations are the sharing of flight expenses and the improper use of a dry lease.

Splitting the Bill

The FAA broadly defines what compensation is, which includes receiving anything of value, a promise of anything of value, or even the accrual of flight time. Operating an aircraft is expensive, and sharing aircraft operating expenses is compensation. However, an exception exists to offset some of that cost by allowing certain operating expenses to be split with your passengers.

No matter the pilot certificate held — sport, recreational, private, commercial, or airline transport — a pilot can equally (on a pro-rata basis) share the cost of fuel, oil, airport expenditures, and aircraft rental fees as long as your passengers have a common purpose and you are not holding out to connect with them.

The pilot must pay for any expenses not specified with their pilot privileges and limitations in 14 CFR part 61. Some examples of prohibited costs that can't be shared are aircraft maintenance, insurance, depreciation, supplemental oxygen, and navigation charts. No one else may pay the pilot's share.

A commercial or airline transport pilot (ATP) exercises their private pilot privileges under 14 CFR section 61.113 when sharing costs with passengers. A common misconception for commercial and airline transport pilots is that their certificates allow unlimited operation for compensation or hire. The only exceptions, like student instruction, crop-dusting, etc., are listed in 14 CFR section 119.1(e).

Destination Unknown

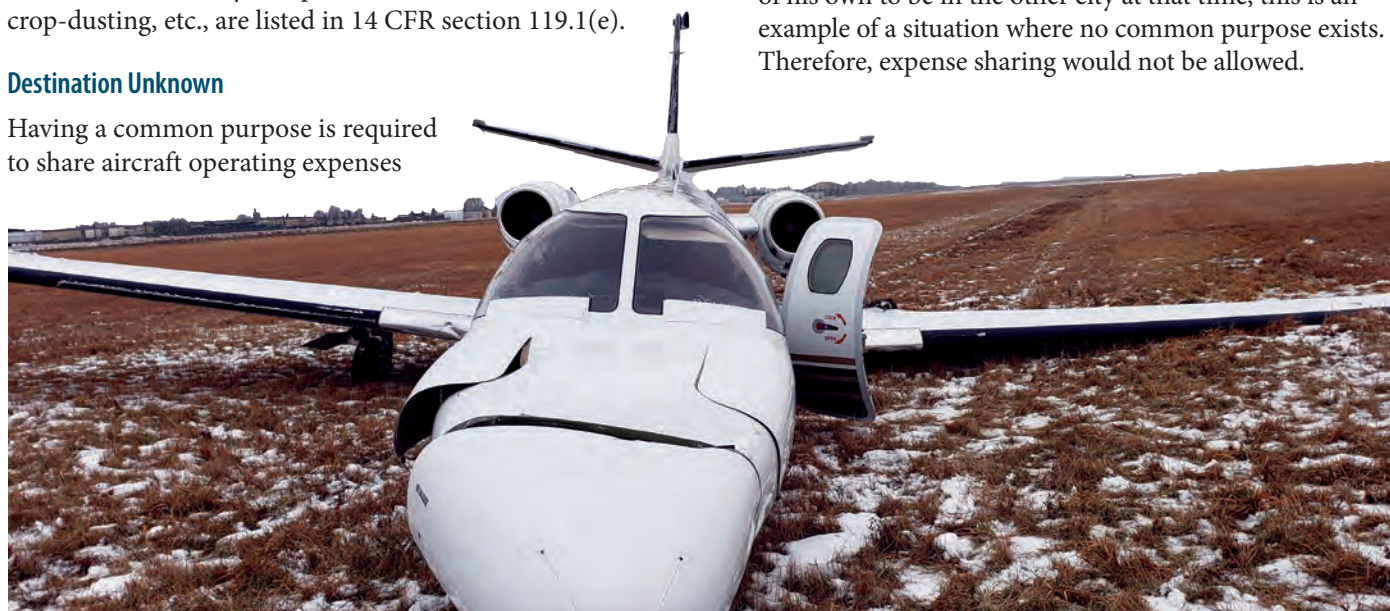
Having a common purpose is required to share aircraft operating expenses

with your passengers legally. There may need to be more than just flying to a common destination to show a common purpose. The FAA considers whether you, as the pilot, have your own reason for traveling to the destination.

When the pilot, not the passenger, chooses the destination, it suggests that the pilot is not simply transporting passengers for compensation. The common destination satisfies the common purpose test even if the pilot and the passengers have different business to conduct at the destination. No common purpose exists when the pilot has no particular business to conduct at the destination, or the flight is only to transport passengers.

If the passenger identifies the destination first, and then the pilot elects to travel to that destination, it could present the appearance of air transportation, which may require additional FAA certification. The common purpose test can be stated as “but for the receipt of compensation, the pilot would not have taken that flight.” Here are two examples.

- John, a private pilot, plans to fly from Charlotte, N.C., to Boston to accumulate flight time. Pete, his friend, asks if he can hitch a ride to Boston and share the flight expenses with him so that he can visit his great-grandmother for the weekend. A common purpose exists for this flight because John was already flying to Boston and would be making the trip regardless of whether Pete shared the flight.
- A friend asks a pilot to fly him to another city to pick up a new car he ordered and offers to share the flight expenses. The private pilot agrees, as he is not doing anything else and would enjoy the flight. As the passenger chose the destination and the private pilot does not have a purpose of his own to be in the other city at that time, this is an example of a situation where no common purpose exists. Therefore, expense sharing would not be allowed.



This 8-passenger Cessna 550 Citation crashed in Fargo, N.D., in 2018 with 10 people aboard. The pilot was flying the airplane under a single-pilot exemption, which he was not fully qualified to do. The FAA deemed the private business flight as an illegal air charter.

Don't Hold Out on Me

It is helpful to understand the definition of common carriage and how it relates to sharing aircraft operating expenses. Common carriage is “(1) a holding out of a willingness (2) to transport persons or property (3) from place to place (4) for compensation or hire.” When an operator meets all four elements of common carriage, they cannot operate under the expense-sharing exception and, unless an exception applies, needs to hold a part 119 certificate and operate these flights under 14 CFR part 121 or 135.

With expense sharing, the element of whether the pilot is “holding out a willingness” to fly is critical. Holding out is accomplished by any means that communicates to the public that a transportation service is indiscriminately available to the members of that segment of the public that it is designed to attract. There is no specific rule or criteria as to how holding out is achieved. Instead, holding out is determined by assessing the available facts of a particular situation. Advertising in any form raises the question of holding out.

The FAA distinguishes between offering expense-sharing services to a broad audience and a limited group because holding out to the public may suggest to unsuspecting passengers that the pilot has met the higher regulatory requirements to carry passengers. Absent this limitation on holding out, an unsuspecting passenger may unknowingly assume the safety risks of flying in aircraft flown by pilots who lack the training, experience, and operational oversight that the FAA requires of common carriage operators.

Here are two scenarios that illustrate what the FAA would consider in determining whether an operator is holding out. These examples are fact-specific and not all-inclusive.

- A small neighborhood book club has set up a private Facebook group. Only members of the club who are approved by the board are allowed to join and see posts. A member of the club posts that they are piloting a plane

to the beach for the day and asks if any other members would like to join and share expenses. Here the group is limited and defined with a prior personal relationship, and the FAA would likely not consider this pilot to be holding out.

- On a public Facebook page viewed mainly by the local community college student body, a pilot posts availability to share expenses for a flight for spring break. This would not be considered a defined and limited group because it would not be limited to people with whom the pilot has an ongoing, pre-existing relationship. Further, even if a Facebook group were limited to only to the student body, the size of the student body likely would cause that group to be considered a broad segment of the general public that the pilot would be willing to provide transportation services to; and, therefore, the pilot would be considered to be holding out.

Sharing is Caring

Pilots may share operating expenses with passengers on a pro rata basis when those expenses involve only fuel, oil, airport expenditures, or rental fees. These exceptions are themselves further limited. In assessing whether an expense-sharing flight is appropriately conducted under the exception in 14 CFR section 61.113(c), the FAA considers whether the pilot and passengers have a common purpose and whether the pilot has held out as offering services to the public. The “common-purpose test” anticipates that the pilot and expense-sharing passengers share a “bona fide common purpose” for their travel, and the pilot has chosen the destination. Communications with passengers for a common-purpose flight are restricted to a defined and limited audience to avoid the “holding out” element of common carriage.

For a deeper dive and more scenarios about cost sharing, review Advisory Circular 61-142, *Sharing Aircraft Operating Expenses in Accordance with 14 CFR § 61.113(c)*. You can also talk to your local FAA Flight Standards District Office.



REPORT SUSPECTED ROGUE OPERATORS

Contact the FAA Hotline

1-866-835-5322

[Hotline.faa.gov](https://www.faa.gov/hotline)

Contact the National Air Transportation Association (NATA)

1-888-759-3581

[AvoidIllegalCharter.com](https://www.avoidillegalcharter.com)

Who's on First

For pilots with commercial or ATP certificates, the issue of who has operational control of a leased aircraft is essential to understand. Operational control is not dependent on aircraft size or the number of aircraft operated; it is a matter of legal responsibility.

An aircraft lease is either called a wet lease or a dry lease. A wet lease is any leasing arrangement whereby a person agrees to provide an entire aircraft and at least one crewmember. Leasing an aircraft without the crew is considered a dry lease. Typically, in the case of a dry lease, the lessee (renter) exercises operational control of the aircraft. Conversely, the lessor (owner) exercises operational control in a wet lease.

Aircraft owners can evade compliance with the applicable certification and operating rules of 14 CFR parts 121 and 135 governing air carriers and commercial operators through devious leases and conditional sales contracts. This evasion of compliance makes it appear that the lessees and conditional buyers are responsible for operational control when they do not have that responsibility. This knowing or unknowing assumption of responsibility creates a serious problem in air safety and may involve legal liabilities. As a pilot hired to fly a leased aircraft, here are some red flags.

- ✚ Am I the flight's lessor (owner) and pilot?
- ✚ Did the lessor (owner) schedule me for this flight?
- ✚ Is the lessor (owner) paying me directly for this flight?
- ✚ Am I required to coach the passengers on what to say in the event of an FAA ramp check?
- ✚ Have I been discouraged by the lessor (owner) or others to answer questions about the operation from passengers or the FAA?
- ✚ If there are maintenance issues, must I call the lessor (owner)?
- ✚ Does the lessor (owner) provide the aircraft and at least one crewmember yet attempt to transfer operational control to the passenger?

If the answer is yes, then you may be at risk of flying an illegal air charter.

Review AC 91-37B, *Truth in Leasing*, for a more comprehensive discussion about aircraft leasing and operational control. If you are considering operating an aircraft under a lease agreement, visit [faa.gov/charter](https://www.faa.gov/charter) and seek the advice of a qualified and experienced aviation attorney to help navigate the many requirements.

We hope this gave you more insight and a clue to keep you safe and prevent an illegal air charter. ➤

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.

Greg Young is an aviation safety inspector on FAA's Special Emphasis Investigations Team (SEIT). He is an airline transport pilot with more than 35 years of domestic and international aviation experience.

QUESTIONS FOR THE SAFE AIR CHARTER TEAM

safeaircharter@faa.gov

Advisory Circular 61-142, *Sharing Aircraft Operating Expenses in Accordance with 14 CFR § 61.113(c)*
[bit.ly/AC61142](https://www.faa.gov/aircraft/air_certification/air_certification_rules/aircraft_operating_rules/AC61142)

Advisory Circular 91-37B, *Truth in Leasing*
[bit.ly/AC9137B](https://www.faa.gov/aircraft/air_certification/air_certification_rules/aircraft_operating_rules/AC9137B)

Advisory Circular 120-12A, *Private Carriage Versus Common Carriage of Persons or Property*
[bit.ly/AC12012A](https://www.faa.gov/aircraft/air_certification/air_certification_rules/aircraft_operating_rules/AC12012A)

FAA Safe Air Charter Webpage
[faa.gov/charter](https://www.faa.gov/charter)



EYES IN THE SKY



Enhancing ADS-B Services with the Pilot Reporting Tool

by Elizabeth Keenan

(Image courtesy of ForeFlight)

As a pilot, you are a trusted, collaborative steward of the National Airspace System (NAS) and safety is at the forefront. However, even the most diligent pilot can only see so much. Fortunately, Automatic Dependent Surveillance-Broadcast (ADS-B) provides real-time precision and shared situational awareness to pilots and air traffic controllers — expanding our knowledge of the NAS to more than meets the human eye.

Please report any ADS-B functionality issues to [faa.gov/go/adsbreport](https://www.faa.gov/go/adsbreport).

One way to aid your fellow pilots and keep the flying community safe is to report any ADS-B system issues you may encounter. If you've chosen to equip with ADS-B In, you already know that the Traffic Information Service-Broadcast (TIS-B) and Flight Information Service-Broadcast (FIS-B) provide a new level of safety and efficiency by delivering traffic position reports and weather

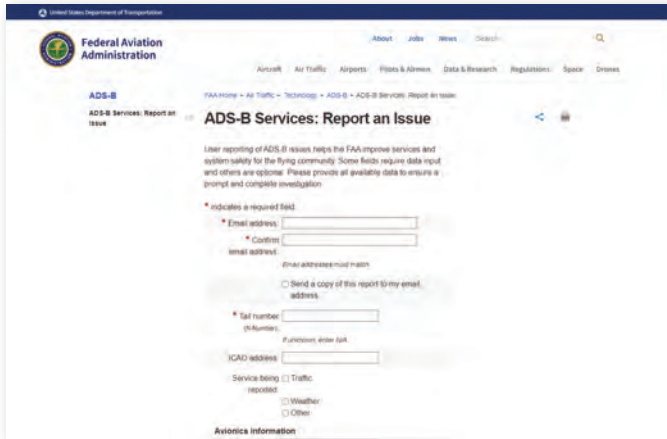
information in the cockpit. As more aircraft continue to equip with ADS-B In avionics, the efficacy of the ADS-B system is dependent on pilot issue reports. "The ADS-B system is so integrated," stated Glenn Meier, FAA Surveillance and Broadcast Services (SBS) engineering project lead. "It's used by air traffic and pilots, but we don't have test equipment in the cockpit, so we are dependent on pilot reports to serve as a second set of eyes and identify issues we cannot see on the ground."



An ADS-B receiver allows you to add capabilities like weather in the the cockpit to older aircraft without extensive modification.

What Is the ADS-B “Report an Issue” Form, and How Does It Work?

The ADS-B issue reporting form (faa.gov/go/adsbreport) is an online tool used to convey any ADS-B functionality issues to the FAA. It was developed as a way for pilots to serve as advocates for the ADS-B system. “The issues submitted via the reporting form may not otherwise be visible without these reports,” said Meier. “Each report is valuable to us and provides an opportunity to further enhance the ADS-B system.”



The ADS-B Report an Issue form is a way for pilots to share feedback with the FAA.

While only four fields are required to submit an ADS-B issue report, pilots are encouraged to include additional details to enable a deeper analysis into the issue and a more thorough resolution. Information such as avionics manufacturer/model, location of the issue, and departure or destination site may also be included. An open “description” field enables pilots to detail specifics about the encountered issue so the researching team can narrow down on scope.

Once a form is submitted, it is routed to the appropriate FAA systems engineer, ADS-B subject matter expert, and/or other FAA personnel, depending on the issue. If more details are needed, pilots will be contacted using the email address provided within the form, and then the parties will communicate directly by email. Each ADS-B issue report

submission is individualized and thoroughly researched until a resolution is obtained.

For example, where pilots have reported unseen TIS-B targets, or “ghost” targets, which are visible on displays but not out the window, FAA engineers have analyzed the locations of these reports and when possible, implemented system updates to reduce this rate of occurrence.

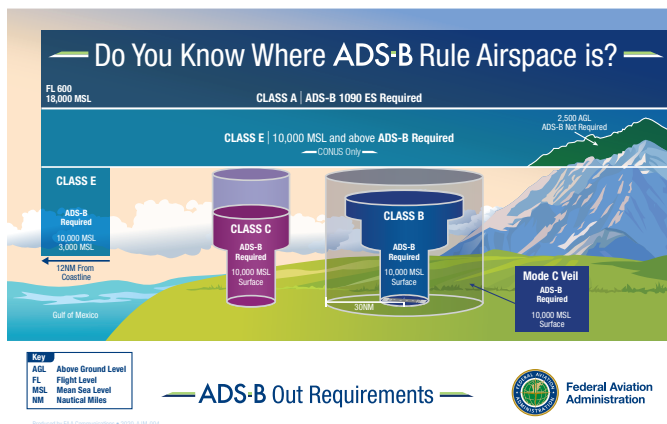
The ADS-B issue reporting tool will help the FAA continue to improve the ADS-B service, which provides unprecedented levels of situational awareness to pilots.

For reported FIS-B issues, investigations of submissions have led to many outcomes including: education about how weather reporting products work, identification of avionics issues, and, in some cases, awareness of erroneously functioning equipment — analysis of one report uncovered a loose antenna that impacted system functionality.

“This is a tool for all pilots — regardless of experience — created as an opportunity for the FAA to learn more about how the ADS-B system is performing, so we can ensure it is optimized for the flying community,” said Jamal Wilson, a management and program analyst with the FAA’s SBS group and recreational pilot. “As pilots, safety is our core tenet. These reports are just another way for us to help keep our skies safe.”

“When I started flying 23 years ago, all I had was a radio and transponder,” said Matt McCann, an engineer with SBS and pilot instructor. “I had to look out the window to see other aircraft. Now, with ADS-B In, I can see everything right in my cockpit, and I never saw that many airplanes before ADS-B In,” he added. “The ADS-B issue reporting tool will help the FAA continue to improve the ADS-B service, which provides unprecedented levels of situational awareness to pilots.”

Elizabeth Keenan is a communications specialist for the FAA’s Surveillance and Broadcast Services group. She frequents the Doylestown Airport to observe takeoffs and landings with her two young daughters who proudly dole out high fives to the general aviation pilots.



LEARN MORE

FAA’s ADS-B Webpage
faa.gov/go/equipadsb

Advisory Circular 90-114B, *ADS-B Operations*
bit.ly/ADSBOpsAC



Supply and DPE Demand

How Preparation Can Aid Checkride Success and Maximize Designated Pilot Examiner Availability

by *Tim Pence*

These days, it's hard not to notice the abundance of "Help Wanted" signs whenever you're out at a store or restaurant. More often than not, employees within those establishments are attempting to do more with less. In these situations, efficient utilization of a limited resource is paramount to success. The same holds true with the process of preparing for, scheduling, and conducting a practical test or "checkride." Let's take a look at what can be done to ensure you, or your student/applicant, are able to complete the entire practical test on the day of a checkride.

Verify to Qualify

I am reminded of an experience relayed to me by a designated pilot examiner (DPE) regarding a checkride that was scheduled a month in advance, long before the applicant was ready to take the test. While it is important to project forward and to have a general sense of expectations, students learn tasks at different intervals. Predicting readiness for an exam is not an exact science.

Designated Pilot Examiner (DPE): an individual appointed under 14 CFR section 183.23 to conduct pilot certificate tests on behalf of the FAA.

That said, a week out from the scheduled checkride, the designee reached out to the instructor and applicant and inquired as to the status of the training and the online Integrated Airmen Certificate and/or Rating Application (IACRA). Unfortunately, this application would not be ready until the night before the checkride. The applicant flew about 35 minutes to where the designee was based to conduct the checkride, and it took about an hour to qualify the applicant. The student, in this case, struggled to find the necessary endorsements, flight hours, etc., in order to



demonstrate qualifications for the certificate and rating they were seeking. Despite the designee's best effort to keep the mood light, the applicant was too nervous and worked up from trying to find the necessary entries that the designee decided to postpone the checkride and reschedule. This designee did so in the better interest of the applicant while not collecting a fee. The designee knew that starting a checkride while worked up would most likely cause the applicant to fail unnecessarily. Unfortunately, this also robbed other qualified applicants that were ready to go for their checkride from obtaining a slot that day.

Preparation is Key

Being ready for your checkride requires a lot of energy and hard work; completing extensive training, laying out thousands of dollars toward your goal, and placing maximum effort into studying. Your flight instructor must also determine that you are ready and may have already set you up with another instructor as a "discount double check" or stage check. After all that, you might feel like you're ready to go, but are you? The last thing anyone wants on checkride day is to have to track your instructor down to get a last-minute endorsement. This brings us to the main point of this article: preparation.

Making Your List, and Checking it Twice

There are many articles, applications, test prep books, etc., that provide checklists for the documents that you will need to take with you for the checkride. Look no further than Page A-11 within the current private pilot Airman Certification Standards (ACS) appendix section, or Page 23 within the current Flight Instructor practical test standards (PTS). These pages contain the "practical test checklist." Keep in mind that the designee must qualify the applicant and the aircraft that is to be utilized prior to initiating the

checkride. Let's take a deeper look at some of these items and offer a few tips to help you get ready.

Pilot Logbook: Each certificate or rating has aeronautical experience requirements that are either met by 14 CFR part 61 specific to the certificate or rating, or by completing an FAA-approved course under 14 CFR part 141.

- In either case, there are specific solo, cross-country, or instrument flight time requirements. Sit down with your flight instructor and notate/tab each of these requirements and where they are met in your logbook.
- Review all cross-country flights that are utilized to meet the above requirements to ensure that they are applicable.
- Ensure that you have totaled the completed pages of your logbook (assuming anyone is using paper logbooks now), that your logbook is legible, and that the hours match section 3 of the Airman Certificate and/or Rating Application (Form 8710-1).

Endorsement Record:

- Ensure that you have the proper endorsements to act as pilot in command on the checkride, because you will be the pilot in command.
- Ensure that you and your instructor have reviewed the most current version of Advisory Circular 61-65, *Certification: Pilots and Flight and Ground Instructors*, for sample endorsements.

Aircraft Logbooks: Before the test may begin, the designee must determine that the aircraft is in an airworthy condition and is suitable for the test. While this is separate from testing on the airworthiness requirements task, it is nonetheless required prior to the test proceeding.

- Review the aircraft logbooks in advance and ensure that each required inspection and airworthiness directive has been documented.
- Tab the aircraft logbooks to bring quick attention to the appropriate entries.
- Remember the AVIATE acronym for airworthiness (or your favorite memory aid).

A – Annual Inspection

V – VOR test (every 30 days)

1 – 100 hour inspection (if operated for hire/flight training)

A – Altimeter and static air system test (every 24 months)

T – Transponder test (every 24 months)

E – ELT test (every 12 months or after half listed life of battery or 1 hour of continuous use)



Equipment:

- If there are task(s) with reference to instruments as part of the checkride, be sure to have your view-limiting device with you and in the aircraft.
- Have your copy of the Pilot Operating Handbook or Aircraft Flight Manual with you.
- Have immediate accessibility to the applicable parts of the Code of Federal Regulations and the Aeronautical Information Manual.
- If there is a cross-county flight plan as part of the scenario, please have the planning and calculations completed in advance. The designee may still have you show how the calculations were completed; however, if the planning is done the day of the checkride early enough, your instructor will be able to review it.
- If utilizing an electronic flight bag, make sure the device is fully-charged and the aeronautical data is current.

Recommending Instructor or Pilot School Manager:

The role of the pilot school and recommending instructor is to help decrease the stress of the applicant on the day of the checkride.

- Have you reviewed and qualified your applicant?
- Have you answered any last-minute questions?
- Have you ensured that the scheduled aircraft has a little flexibility in case the oral portion runs long?
- As the student-turned-applicant looks at you, are you exuding confidence in their ability to pass this checkride?

- Are you available in case your student needs last-minute assistance (e.g., amending an endorsement, correcting IACRA entry, etc.)

Designated Pilot Examiner:

- Request to review IACRA/Form 8710-1 in advance by one or two days for possible corrections.
- Request that the aircraft documents necessary to demonstrate airworthiness are prepared and reviewed in advance by the candidate, and, if the situation allows, be scanned and sent in advance. (This cannot substitute for a final review; however, it can certainly speed things up.)
- Consider sending an email with directions on how to ensure qualifications to each applicant and their instructor prior to the day of the checkride.

The general aviation flight training community maintains a symbiotic relationship among the student/applicant, flight instructor, flight school, designated pilot examiner (DPE), and the FAA. As part of a broader mission to promote National Airspace System safety, each participant takes an active role in ensuring that training, testing, and oversight is held to the highest standard.

Addressing Supply and DPE Demand

With that in mind, the FAA is listening to the aviation community and has recently stepped-up efforts to add DPEs and ensure better utilization of the designee workforce. Using a data-driven approach, the FAA reviewed areas of concern across the country to determine where additional designees are most needed and has begun the selection process to bring on additional help.

A good way to further improve efficiency within the DPE workforce is to take heed of the tips mentioned earlier and avoid requesting a checkride before knowing both the applicant and aircraft are eligible. Being better prepared will reduce a major stressor on the designee system and will help place the applicants at ease knowing there should be no surprises come checkride day. ▶

Tim Pence is an aviation safety inspector with the FAA's Regulatory Support Division and a subject matter expert for the Delegation Program Branch. He holds an airline transport pilot certificate and is a Gold Seal Flight Instructor.

LEARN MORE

FAA's "Become a DPE" Webpage
bit.ly/BecomeDPE

FAA's Designee Locator Search Webpage
designee.faa.gov/#/designeeLocator



TAKE A LOOK; IT'S IN A BOOK

If you are a child of the 80s or 90s, you may remember the titular phrase above from the opening of “Reading Rainbow,” the edutainment TV show that promoted literacy to kids. Reading opened up the world to kids from any background, and thanks to public libraries, often at basically no cost. Thanks to my mother’s career as a librarian, I spent quite a bit of time in public libraries checking out various books.

The sheer amount of knowledge that was a short stroll away in even a small library was staggering. But therein lies the problem. How do you find what you’re looking for? In the library, you would start with the card catalog. For the younger folks who may not have ever seen one, it was a series of cabinets with a card for each book organized by subject using a classification system. This is usually either the Dewey Decimal or the Library of Congress system in the U.S. Once you learned the system, you could skip the card and just wander through whatever section interests you to browse the available stock.

The internet changed many things, but one of the biggest was the immediate access to so much information on a wide variety

of subjects. Instead of getting in your car and going to the library, you can simply sit down at your computer or even just pull out your phone. But we still have the same problem, how do you find what you’re looking for?

New Media, Same Problem

With the arrival of the internet, a new card catalog and Dewey Decimal system were needed. We now have modern search engines like Google and Bing to help us find the knowledge we seek. But this creates a new challenge. In the old days, if you found a nonfiction book in the library, there was a pretty good chance the information was mostly credible. The processes of editing, review, production, and selection for a library created an essentially trustworthy body of knowledge, albeit one that required large amounts of time, effort, and money to function.

The internet reverses this trend, brings far more knowledge to everyone, and allows information that may have been incorrectly weeded out to reach people. In aviation, the flip side is that it also enables hangar lore that would have rightly been weeded out to gain prominence. So we have reversed the prior situation as we now have a highly searchable “library” of unknown quality. So how do we sort our sources?

It is In a Book

In academic research, they always say go to the primary sources, the original documents. From there, you can start to

build out your understanding. So what are the “original documents” when learning to fly? The FAA has a host of handbooks and manuals that would qualify. Both the *Airplane Flying Handbook* and the *Pilot’s Handbook of Aeronautical Knowledge* (PHAK) cover various subjects and can form a solid foundation for future learning. Even better, they are freely available online. Interested in weather and how it impacts aviation? It’s in the *Aviation Weather Handbook*. Concerned about flying at night? It’s in the *Airplane Flying Handbook* (chapter 11). Want to brush up on air traffic control procedures? Check out the *Aeronautical Information Manual*. Worried about getting laser eye surgery? It’s in the Aeromedical Safety brochures. There are even specific manuals for helicopter, balloon, and glider operations.

With this online reference library, you can go *twice as high* and begin building your own library. When you have free time, stroll through the virtual library and dig into any subject that interests you. You may not become a subject matter expert, but you will get the foundation you need to have better conversations with your instructors and fellow pilots. Each look at each book will better equip you for the aviation adventure that lies ahead.

LEARN MORE

Aviation Handbooks and Manuals
bit.ly/43H2Ygx

Aeronautical Information Manual
bit.ly/AlMweb

Aeromedical Safety Brochures
bit.ly/PilotSafety





FLYING FOR FUN; BUT ARE YOU SURE?

I often see drones for resale online along with other abandoned hobby items like model trains or kayaks. Many people look at a small drone and see a toy, no different than a remote-control car. This misconception could lead to unsafe flying and unintentional violations of FAA regulations. While flying a drone might seem like a hobby, everyone who flies one is a pilot and the drone is your aircraft.

In most cases, drones weighing under 55 pounds are governed by part 107 of the FAA regulations (see bit.ly/3Dqyu7S). There is an exception (49 USC 44809) to this rule for recreational flyers operating their drone under very limited and defined circumstances (see bit.ly/3K9GFJL). All drone pilots must pass an aeronautical knowledge exam or a recreational safety test before they take flight. Which one should you take? Let's have a look!

Pilots who will fly a drone for purely recreational purposes are considered recreational flyers when they follow the requirements of 44809. This is a limited statutory exception, or "carve out," that provides a basic set of requirements for recreational flyers. The law requires that all rec flyers take The Recreational UAS Safety Test (TRUST) and provide proof of passage if asked by law enforcement or FAA personnel. The TRUST is a free, online knowledge test designed to ensure that all rec flyers know the rules before flying their drones. The list of FAA-approved TRUST administrators is available at bit.ly/UAS-TRUST.

If you plan on operating your drone for any other reason than for fun, you must fly under part 107. Part 107 requires drone pilots to pass an

initial aeronautical knowledge test: "Unmanned Aircraft General – Small (UAG)." This test is administered at FAA-approved Knowledge Testing Centers or can be taken online for traditional aircraft pilots who have current pilot certificates. More information about part 107 can be found at faa.gov/uas/commercial_operators.

Note: Compensation is not the only factor when deciding if part 107 applies to the flight. Purpose matters! Remember, if the flight is for any purpose other than recreation, it's governed by part 107.

When figuring out which of these tests you should take, you must consider carefully how you plan on operating your drone. It might be a little trickier than you think to determine if you are operating as a recreational flyer under the "carve out," or as a commercial flyer, under part 107. A few scenarios might help clarify.

It's easy to understand that someone who is hired to fly a drone is a commercial operator. For instance, if a major railroad corporation hires a drone pilot to conduct infrastructure inspections of the railway, this person is clearly a commercial drone operator. What about an insurance agent who occasionally uses his drone to survey roof damage from storms? It may surprise you, but the insurance agent is also a commercial operator, and must operate under part 107. But what about operations conducted off the clock or flown for free? Aren't these operations recreational? It depends on the operation. If you use your drone for anything other than *recreational purposes*, part 107 rules apply, regardless of the time or location of your operation.



Imagine your neighbor asks you to take images of their house for the purpose of selling their home or inspecting their gutters. You're not going to charge them for it; they're your neighbors! Is that a recreational purpose? While drone photography isn't your business, and your neighbor isn't paying you, this isn't a recreational flight. This is because the purpose of the flight isn't purely for your enjoyment. You'll need a part 107 remote pilot certificate to do that.

Before you decide which category of drone pilot you are, you need to think carefully about all the ways you will be using your drone. Remember that goodwill and non-profit operations fall under part 107. This includes operations like volunteering to use your drone to survey coastlines on behalf of a non-profit organization. So, if you're ever not sure which rules apply to your flight, fly under part 107. For more information on what type of operator you are, visit faa.gov/uas.

REBEKAH WATERS

LET YOUR SERVICE TIME SERVE YOU

Last issue, I wrote about two paths to becoming a GA mechanic — attending an aircraft maintenance technical school (AMTS) or working as a mechanic helper to receive on-the-job training (OJT) for civil aircraft experience. Well, there is one other way you may gain OJT: through military service. If you served your country and gained experience with military aviation maintenance, the FAA may grant you credit for experience toward the airframe and/or powerplant ratings.

The Department of Defense (DOD) collaborated with the FAA to establish the Joint Service Aviation Maintenance Technician Certification Council (JSAMTCC). (I guess the more government agencies involved, the longer the acronyms get!) The JSAMTCC delivers civil aviation training courses to military personnel through a partnership with the Community College of the Air Force (CCAF). The JSAMTCC also evaluates aviation-related specialties for

all U.S. military branches of service (BOS). If you have been issued a JSAMTCC certificate of eligibility (COE) from the military, this meets the FAA's experience requirements of 14 CFR section 65.77 and you do not need to obtain additional FAA approval to begin testing for a mechanic certificate (i.e., an FAA signature in Section V of FAA Form 8610-2 is not required).

Other OJT credit that the FAA might grant will depend on your military specialty. To figure out which military specialty will be granted credit, you will need your BOS and Military Occupational Specialty (MOS), Air Force Specialty Code (AFSC), or Naval Enlistment Code (NEC). Go to [drs.faa.gov](https://www.faa.gov/drs) and check FAA Order 8900.1, Volume 5, Chapter 5, Section 2, Figure 5-135 for a full list of these specialties. Your BOS will document and file your training experience record for you.

If you are an active-duty military member, you can apply for an

airframe and/or powerplant rating at your local FAA FSDO. An FAA aviation safety inspector (ASI) will interview you to evaluate your experience. Make sure to bring all documentation of your training and qualifications and a letter from your executive officer, maintenance officer, or classification officer certifying: your length of military service; the amount of time you worked in each MOS, NEC, or AFSC; the make and model of aircraft and/or engine on which you acquired the practical experience; and where you obtained the experience.

It's important to note that you will not be allowed to test just because you served in the military. Also, you can only count the time you spent working in the specialty, not the time you spent training for it.

You will still need 30 months of practical experience to test for both airframe and powerplant certification, or 18 months to get one or the other. Keep in mind, this needs to be months of experience, not just months in the military. The more documentary experience you can provide, the better! Once you have received credit for your military experience and meet the OJT requirements, there are commercially available A&P refresher courses and prep courses that can help prepare you to pass the airman knowledge written, oral, and practical tests. If you served your country by repairing and maintaining military aircraft, get credit for it! For more information, go to bit.ly/3BFE7hF.

Rebekah Waters is an FAA Safety Briefing associate editor. She is a technical writer-editor in the FAA's Flight Standards Service.



(Air Force Photo by Airman 1st Class Andrew Britten)

The military offers excellent aviation maintenance training that can qualify you for a civilian AMT certificate.

INSPIRING THE NEXT GENERATION OF HELICOPTER PILOTS AND MECHANICS

It's been a few years since FAA aerospace engineer Monica Merritt got that letter from a student she tutored at a local Fort Worth, Texas, school. It still brings a smile.



Monica Merritt

She and three other women from the then FAA Rotorcraft Directorate tutored high school students during their lunch breaks. She asked one student what he wanted to do after he graduated, and he responded that he planned to work at his family's bakery. He told

her that he wanted to go to college, but that dream seemed impossible.

Merritt took an interest in this student and told him that if he wanted to go to college, he would need to work hard. She also gave him a book about how to achieve his college dreams. Four years later, he wrote her a letter that read: "I wanted to let you know that because of you, I went to college and graduated."

"I made a difference," said Merritt, who manages the flight test section for the FAA's Central Certification Branch. "It's a nice feeling."



Across the helicopter community, pilots, mechanics, engineers, and others visit schools, tutor students, attend college job fairs, and serve as flight instructors, all in an effort to inspire young people to consider aviation careers. Demand is high nationwide for aerospace industry workers, particularly within the rotorcraft community.

You don't have to tell that to Ross Landes, deputy director for the FAA's 580-employee Compliance and Airworthiness Division. The division oversees the continued operational safety and the certification and validation of aircraft and aircraft parts manufactured in and outside the United States. Landes has several vacancies that he needs to fill — most of them engineering and pilot positions — for a variety of aircraft.

"To maintain excellence for our stakeholders, we have to make investments in safety and compliance findings," said Landes, adding that this includes hiring a dedicated workforce.

Like the FAA, major manufacturers, such as Sikorsky, a Lockheed Martin Company, encourage their employees to volunteer at science fairs and serve as judges. A few years ago, the Connecticut-based company landed a helicopter at a local high school for a STEM competition.

"Students toured inside the helicopter and talked to pilots and engineers," said Chris Lowenstein, a Lockheed Martin fellow at Sikorsky.

Emanuele "Manny" Figlia, an adviser to the U.S. Helicopter Safety Team, has been a flight instructor for about 35 years. "I speak to young people whenever I get the chance," said Figlia, a former Airbus Helicopters safety director who now

works for GrandView Aviation. "I offer my time freely. It's my passion."

Merritt said that she tries to emphasize the importance of STEM to young people because she believes that the United States needs to excel in these areas to remain competitive.

She and FAA helicopter test pilot Ryan Nelson visited a few schools last spring. She recalls being the only woman and Latina in her aerospace engineering classes at



Emanuele "Manny" Figlia

Arizona State

University, so she also makes it a point to speak to young Latinas.

"When I was younger and in school, people encouraged me, helped me, and gave me confidence," Merritt said. "You need to pay it forward. You never know how some encouragement might affect people."

Interested in an aerospace career? Check out the FAA's pilot and mechanic portal pages at faa.gov/pilots and faa.gov/mechanics. You can also check out the FAA job page at faa.gov/jobs which highlights some of the many exciting career opportunities at the FAA and how to apply. Finally, if you are in the aviation workforce and want to pay it forward, check out the FAA's Aviation and Space Education program page at faa.gov/education for ways you can help shape the future of flight.



Check out our GA Safety Facebook page at [Facebook.com/groups/GASafety](https://www.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 (FAASafetyTeam), and post relevant GA content that makes the National Airspace System safer.

Art Appreciation

Thank you for the great article ["The Art of Airplane Introductions" bit.ly/3D8tWD3] in the July/August 2023 edition of FAA safety by Tom Hoffman. Although I provide preflight instructions and safety instructions to my passengers, your article provided additional details and insights into the subtle art of airplane introductions. This topic may seem basic and often overlooked by some, but I felt that it was an excellent refresher, and offered additional insights into the subtle art of making your passengers comfortable, and even more educated. It even caused me to research a couple of items that I hadn't thought of before. Once again, thank you for the excellent article, and for the always informative publication.

- Terence

Hi Terence. Thanks so much for your feedback! Our mission is to improve GA safety by helping our readers better understand safety and regulatory issues and we're thrilled to hear that this article inspired you to do

some additional research to improve your own operations.

Flying with Friends

I enjoyed the article "Of Lobster, Lawnmowers, and Loved Ones" [bit.ly/3XTkU6E]. One tip I recall reading about a few years back from a military pilot is that if someone starts to become a bit quiet, ask them how they're doing on a scale of 1-10. If they're anything less than a 7 or 8, take that as a sign to smooth out the flight or consider taking a break.

If you ask someone if they're feeling ok, chances are they'll say "sure" or "fine" so as not to be annoying or feel embarrassed about needing to slow down or land. Asking them to rate how they're feeling on an objective scale removes some of this stigma, and allows the pilot to assess the best course of action for their care. I've started using this and found that it works quite well.

- Chris

Hi Chris. Thank you for reading and reaching out to share that brilliant advice! That simple variation to gauge a passenger's well-being provides better insight on how they're really feeling versus a modest "OK" response. Keep the tips coming!



From our GA Safety Facebook Group

Trust Your Gut

Another top contributor and student pilot shared his experience on deciding not to fly in conditions below his

minimums because it "didn't feel right," but questioned whether or not he made the right call. The group commended his risk management perspective and supported his choice to stay on the ground, declaring the time to question your decision is when you are starting to have second thoughts about a flight — nobody ever got in trouble for deciding not to fly.

The support here is amazing! Thank you everyone, from CFIs to airline pilots to students and even a former professor. I started posting on social media (tiktok, instagram) to share my journey and make friends/connections in aviation. As for my flight, 8G15 is just a normal flight for me as there's always significant winds when I fly. I simply did not want to go up despite conditions being within my personal limits. Last summer, I decided to fly on a day where I felt very stressed and anxious, which led to me making mistakes in flight. As people mentioned here, if you don't feel comfortable going up for any reason, whether conditions are good or not, then that's a good call. Again, thank you everyone for the support, personal anecdotes, and advice. I've learned a lot from this thread!



For more stories and news, check out our new blog "Cleared for Takeoff" at medium.com/FAA.

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.

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LEARNING TO FLY

*There's no sensation to compare with this
Suspended animation, a state of bliss
Can't keep my mind from the circling skies
Tongue-tied and twisted just an earth-
bound misfit, I*

Pink Floyd's epic song "Learning to Fly" couldn't have been released at a better time. I had just started my first few flying lessons when this entrancing tune made its way onto the *Billboard Hot 100* chart in 1987. The band's guitarist and vocalist, David Gilmour, wrote most of the song, inspired no doubt by his foray into flying lessons in between studio sessions. While there are multiple interpretations of the song's meaning (the prevailing notion that this was a nod to their first album without former band co-founder Roger Waters), I had a more literal take on it. To me, it was more simply an ode to the awe and beauty of flight, which inspired me to fly. And that motivation was important, given that my search for a good flight school was, well ... anything but awesome.

My path to pilothood was riddled with challenges. First, there were airport proximity issues, with most of the flight schools in my area an hour or more drive away. This was compounded by my need to rely on family members to drive me to and from the airport until I was able to drive. You can probably imagine the difficulty of having lessons on back-to-back days. In addition to the logistical issues, I also had a heck of a time finding both a school and an instructor I felt comfortable with. My family didn't have any aviation background or experience so I was really on my own at age 16 to figure it out. And being in the pre-internet Stone Age era required quite a bit of legwork to do

the necessary research. Unfortunately, but quite predictably, I wound up bouncing around flight schools and instructors for a good chunk of my early training. I was a fish out of water and needed some help.

I finally got a tip from one of my high school shop teachers about a flight school he recommended and one I had not yet considered. The school was a stark change from everything I had encountered up to that point. Professional staff that made me feel welcome, an assortment of airplanes that were clean (inside and out), dedicated briefing areas, and a comfortable lounge with plenty of space to break out my sectionals and E6B to plan my flights. My initial flight instructor with the new school was great too, until I realized he was on track to get hired by a regional airline. But before I even had a chance to mumble "here we go again," he introduced me to another instructor. At this point, though, I was starting to have doubts about continuing. I was probably somewhere north of 20 hours with no solo in sight. I was, as David Gilmour stated, "A soul in tension that's learning to fly. Condition grounded, but determined to try."

My new instructor picked up on this and got to work. With his help, along with the cassette player in my mom's Hyundai Excel during some painfully long drives to the airport, I was soloing before I knew it. It was the shot of inspiration I needed to keep going. In the end, it took more



logbook pages than I would have liked to use, but I stuck with it and got my private pilot certificate.

In my interactions with fellow pilots over the years, I've heard similar stories about the challenges they encountered during their early flight training. Unfortunately, many don't always make it through. An AOPA study from 2011 found that 60% of those who earned a student pilot certificate never earned a higher pilot certificate.

These days, I make it a point to try and provide guidance to anyone I know who is pursuing a pilot certificate. The process can be overwhelming, even with all the resources now available. There's also a host of reasons why a student might get hung up or discouraged during flight training, and feel like they're on the "dark side of the moon." Sharing some expert insight can go a long way towards helping a new pilot stay on track and earn their wings. I encourage you to do the same, or send them over to the FAA's pilot portal at faa.gov/pilots.

ALLAN KASH

Aviation Safety Inspector, FAA Training and Certification Group

Allan Kash was always interested in aviation, but not every path to the skies is an easy journey. Watching the “Sky Kings” western on TV was one of his favorite pastimes while growing up in the suburbs of Baltimore. At age 14, he got his first airplane ride at nearby Essex Sky Park — the spark to be a pilot. However, life had other plans. Alan was still in school and had no money, so the plan had to wait.

After high school, Kash started college classes while working as a grocery store clerk. He worked hard and moved up to store manager. Then at 25, he opened his own retail grocery and liquor store. Kash finally had the chance to earn his private pilot certificate at 28. He did a lot of flying and expanded his business to three stores. He did part-time corporate flying and became a flight instructor teaching single and multiengine students, racking up more than 5,400 hours of dual instruction time.

Years later, Kash was ready for change and returned to school, earning a bachelor’s degree in aviation science at the University of Maryland Eastern Shore. He aimed to work for the FAA to improve general aviation (GA) policy for all. Starting on Sept. 11, 2011, Kash got his opportunity when he answered the call to serve as an aviation safety inspector in FAA Flight Standard Service’s Training and Certification Group.



“Our team improves GA safety by developing and implementing effective data-driven policies and procedures concerning the training and certification of pilots, ground instructors, flight instructors, and remote pilots, as well as developing policies for the certification of pilot schools,” Kash explains. “We develop FIRC [Flight Instructor Refresher Course] policies and manage the program.”

Safety is the force that drives the group to ensure that airmen receive practical, up-to-date training and that all training and certification standards align with their present and future needs.

Kash leads the rulemaking team to remove the expiration date from flight instructor certificates. The group also worked on the new rule regarding medical requirements for pilots conducting commercial balloon operations, which also amended the BasicMed rule. That amendment now allows thousands of pilots operating under BasicMed to act as safety pilots.

With our airspace becoming more complex, Kash has some advice for flight instructors.

“FAA regulations, policies, and aviation safety-related publications are continually changing, and part of the flight instructor’s job is to keep up-to-date to ensure that what we teach is current and accurate,” he notes. “Also, from the first day of a student’s training, mentor safety and emphasize risk management skills.”



Allan Kash

Kash recommends that aspiring pilots conduct research online and develop a plan.

“Learn the training requirements and then decide on part 61 or part 141 training. Speak to other pilots about flight training. Interview and then choose the best flight instructor and flight school for you.”

Kash also suggests asking potential flight instructors why they are instructing and gauging their enthusiasm about training.

“Consider how well the aircraft and their facilities are maintained. And know how much training experience the flight instructor has — including if they are a ‘gold seal’ instructor.”

With that, remember: “Out of the clear blue of the western sky comes Sky King!” But before you embark on your pilot journey, be sure to ask yourself if you have the time and commitment at this point to be successful. Your determination and grit will take you safely to the skies.

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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