

# onavirus

### Tips to Ward Off the Rust



s both an airline pilot and an active general aviation pilot, maintaining my various legal currency requirements to act as pilot in command (PIC) has historically been relatively easy. My airline simulator training and checkride events suffice to meet my Biennial Flight Review (BFR), Instrument Proficiency Check (IPC), and my 90-day multi-engine landing requirements (as did my similar training events when flying charter, corporate and fractional, in the past). But, is it enough to simply meet the minimum requirements when, otherwise, your flying frequency suddenly plummets to a fraction of what is typical for you? Will your stick and rudder skills, cockpit flows and habit patterns, and the knowledge you call upon during routine flight operations atrophy? Of course, for any pilot with even an ounce of self-awareness, the answer is a resounding, "YES!"

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Steep declines in monthly or annual flight hours are directly proportional to declines in pilot performance, aeronautical knowledge and decision-making skills. These same declines become increasingly difficult to overcome the longer minimum activity levels continue,

bringing increasing challenges when it's time to return to flying status. The world continues to grapple with the COVID-19 crisis and experience the most extreme reduction in civilian flying activities ever outside of wartime. Yet, there are still ways to practice and keep pilot rust from

developing, whether you are still mostly grounded by the effects of the pandemic or you are returning to regular flying duties after a long absence.

### Airports are Open for Business

Flight activities for business, pleasure, passenger airline, charter, etc. have recently been at all-time lows (and remain well below average still). Yet, nearly all public-use airports in the U.S. have remained open for business throughout the pandemic. Most have been labeled as "essential" for their associated communities and exempt from shutdown orders. At many airports that are federal, state, county or city owned, even the various businesses on the airport (FBOs,



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maintenance shops, self-serve fuel pumps, etc.) fall under the "essential" designation and have remained open to support said airport's operations. The point being, just because people are flying less does not mean that the country's aviation infrastructure has been scuttled. The opposite is true and is one less obstacle to remaining current and proficient in these otherwise low demand flying times.

#### **Returning to Form**

The most obvious advice for keeping your skills sharp is to just practice, and opportunities to do so have likely been at a premium lately. Time has likely not been hard to find. Your chosen aircraft has probably been available too. Air traffic will definitely continue to be a fraction of what was common for your area for some time to come. If you typically fly single pilot anyway, a solo training mission is about as socially distanced as you can get. If you fly exclusively with a Second in Command (SIC), maybe you're being exposed to at least one such person regularly anyway and could conduct training/practice flight operations with that same person, as well. Or, if your operation is reopening, you're likely to be working with your crew members and/or department personnel again soon, regardless. Appropriate distancing measures can be easily observed outside the cockpit and, as necessary, masks, gloves, and sanitation should be utilized on the flight deck.

If you own your own King Air, you only have to answer to yourself for operational expenses (fuel, etc.). If you're an employed pilot in a charter, corporate or fractional operation, practice flights require more coordination. Fortunately, such coordination can typically be done remotely and any flight department of good repute should already be endeavoring to ensure its pilots are given opportunities to remain or regain not only currency, but proficiency, in their assigned aircraft type. So, as finances and bosses allow, go fly as frequently as possible. But, take care to make your flight activities meaningful. Plan your flight as you might plan a flight lesson. Will you focus on VFR patterns and landings? That is, after all, a commonly weak area for turbine pilots who file IFR most the time and rarely fly a purely visual traffic pattern.

Empty airports certainly help to make such practice safer and more efficient than it might be in more normal times. Low air traffic also can make an afternoon of instrument approach practice far more fuel and time efficient. Pre-plan a route that takes you through one approach, into a missed approach, and neatly transitions into the next approach (be it at the same airport or at a different nearby airport). Work with Air Traffic Control (ATC) for a variety of approach setups (radar vectors, full procedures, DME arcs, en route transitions, etc.). Encourage ATC to assign you various missed approaches, as well (published procedures, alternate procedures, holds as published or ATC modified, or rapid vectors

## Lofty Literature

re you experiencing less or no flying and far more sitting around these days? Certainly, one upside of pandemic requirements for a slower paced existence is more time to catch up on your aviation reading (as much for pleasure as for study). If you cannot fly enough to fill your aviation needs or are experiencing more FBO downtime than ever, try living vicariously through some of the most interesting pilots in history.

I've been collecting and reading pilot biographies and autobiographies for years. To list them all would be impractical here. However, below are five of my favorites. I'll skip the typical old favorites like Bob Hoover's "Forever Flying," Chuck Yeager's "Yeager" and the quintessential aviation masterpiece, Earnest Gann's "Fate is the Hunter." All are great, but also already very well-known. Most of the following, on the other hand, are far less famous or even out of print. You'll probably not find them in a mainstream bookstore. But, thanks to online resources and used book sellers, nearly anything is obtainable these days via just a few mouse clicks.

- 5. "Jimmy Stewart; Bomber Pilot" by Starr Smith. Many know the Hollywood version of Jimmy Stewart; some probably even know that he was also a pilot. But, few understand just how serious he took his role as military bomber pilot or the details of how his military career took him from an enlisted private in the Army Air Corp to a general in the U.S. Air Force, across the span of more than three decades.
- 4 "Calculated Risk; The Extraordinary Life of Jimmy Doolittle Aviation Pioneer and World War II Hero" by Jonna Doolittle Hoppes. Many bios of Doolittle exist, but none intertwine his incredible accomplishments with the personal touch and the family side better than this one. Written by his own granddaughter, this look at Doolittle's life and exploits is better than most because it sheds light on his private life and what drove him to become both an aviation and an American hero.
- "Magnificent Failure; Free Fall from the Edge of Space" by Craig Ryan. Nick Piantanida was not a traditional pilot, but an aerial adventurer,

as both a record-setting balloonist and skydiver. His story is incredible in its pure audacity. As an underfunded civilian, with zero cooperation from the U.S. government, he actually managed to best the U.S. Air Force record for highest altitude ever achieve in a manned balloon. In the midst of the Cold War, his attempts to set a new free fall parachute altitude record would fade into history almost unnoticed. Learn why his records were deemed unofficial and why you've never heard of him. If you were drawn to the similar missions in recent years by Felix Baumgartner and current record holder, Alan Eustace, this story will hold your attention from bold beginning to tragic end.

- 2 "Glacier Pilot" by Beth Day. First published in 1957 and out of print since the mid-1960s, this is a true gem of an aviation biography. Bob Reeve was the founder of Reeve Aleutian Airways and essentially invented glacier flying. This story of Mr. Reeve and the other Alaskan aviation pioneers is captivating in its writing style, its completeness, and most of all in the harrowing tales it contains.
- "The Wright Brothers" by David McCullough. This is the newest book on my list (released in 2016) and became an instant favorite when I read it. Some might wonder what could possibly be left to say about the Wright Brothers. I can assure you if there had been little more to add to their story, it would not have attracted the attention of Mr. McCullough (who is probably the most gifted combination of writer, biographer, historian and storyteller of the last halfcentury). It's not often that two-time winners of the Pulitzer Prize dive into aviation writing, but McCullough did so with this book and made it a #1 New York Times Best Seller. I've read many biographies on the Wright Brothers, but none use such unfettered access to the Wright family archives to create such an eloquent, yet totally readable, weaving of personalities, technical details, history and perspective. Hands down, I think this is the best biography on the Wrights available today. KA



Use the extra downtime to refresh on aircraft systems and the use of new and modern flight planning tools. (Photo credit: Garmin)

right into a subsequent approach such as you might experience in high traffic airspace during peak operating times).

Make it a point to utilize airports vou are less familiar with. This will not only make your practice or retraining more interesting, it will also prevent you from falling back on previous knowledge of that geographic area, forcing you to think on your feet, rather than relying on old habit patterns. Fly into runways you've never visited before, fly Instrument Approach Procedures (IAPs) you've never had an opportunity to fly (or brief) before. Thus, flex the aeronautical knowledge muscle in a way that "routine" operations would be far less likely to demand of you. Do you or your company operate two or more King Air types? If so,

try to fly as many airframes and sub-types as possible. Again, this keeps you on your toes, but it also requires you to stay fresh with the nuances of each individual aircraft's avionics, systems, operating limits and checklist memory items. If you are still flying some, just much less than you were before the slowdown, or you have recently resumed flight operations, try to make those flights more than just routine. Try to extract the most learning opportunities you can



from them. Request specific departures, arrivals and approaches that will help you regain or maintain your recency of experience in those procedures. Maybe request an alternate runway to keep your crosswind skills up to speed or to fine tune your smaller runway skills (especially if you spend most of your time operating to/ from long and wide runways and wish to be prepared for that oddball flight to Smallville when such duty arises).

#### **Make the Most of Ground Time**

Such times as these can be ideal for refreshing on aircraft systems, emergency procedures, aircraft performance calculations, and the use of new and modern flight planning tools. Whether it be dusting off old training manuals or loading new applications or software into your shiny new tablet computer, now is a great time to be reviewing and learning. Chances are one (or more) of the King Airs you fly is available to visit for some socially distanced time spent plugged into ground power and practicing some lesser used functions of the avionics. Or, digging into the specifics of systems for a deeper understanding of how they operate in normal, abnormal and emergency conditions. One of the best ways to do this is at the airplane, training manual or POH in hand, where you can see and touch the systems in question (and the associated controls) as you bone up on each. Doing so can refresh long dormant knowledge,



making your transition back to normal levels of flight operations a less stressful process.

The recent advances in Electronic Flight Bags (EFBs) and tablet apps is nothing short of mind boggling in both scope and capabilities. But, most of us learned our current EFB and apps on the fly. As a result, we often use no more that 10%-20% of these devices' capabilities. Sure, you occasionally stumble upon a feature by accident and, thereafter, incorporate it into routine use. Nonetheless, really learning what you might be missing within your device is best done while sitting down with it and the operating manual and some alone time to explore its features (both common and obscure). Think of it as binge-watching your EFB for an afternoon and postponing doing the same with your favorite streaming service's hit series for a few more days!

#### **Conclusion**

If you are anything like me, too much time away from flying makes you feel anxious to return to the air. It's not just scratching that flying itch though. It is knowing that the more time I am absent from it, the more rusty I will be upon my return. The longer the time grounded, the more difficult the process of coming back up to speed will be. Conversely, staying in a good flying routine not only keeps me sharp, but makes the flying more fun and less stressful too. In times such as these, flight hours are harder to come by and reasons to fly can be outnumbered by reasons not to.

Nonetheless, by the time you read this, much of the country will be well into their "re-opening" phases and many pilots will be getting back to work after long absences or slowdowns. Re-engaging needs to be purposeful, with emphasis on taking a measured and professional approach. Much like the laws of science don't care what your opinions are, the link between recency of experience and proficiency doesn't make exceptions for pandemics. So, here's to your good health ... may you fly often, fly safe and stay virus-free.

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Matthew McDaniel is a Master & Gold Seal CFII, ATP, MEI, AGI, & IGI and Platinum CSIP. In 30 years of flying, he has logged over 19,000 hours total, over 5,500 hours of instruction-given, and over 2,500 hours in various King Airs and the BE-1900D. As owner of Progressive Aviation Services, LLC (www.progaviation.com), he has specialized in Technically Advanced Aircraft and Glass Cockpit instruction since 2001. Currently, he is also an Airbus A-320-series captain for an international airline, holds 8 turbine aircraft type ratings, and has flown nearly 90 aircraft types. Matt is one of less than 15 instructors in the world to have earned the Master CFI designation for 9 consecutive two-year terms. He can be reached at: matt@progaviation.com or (414) 339-4990.