The Mooney Flyer

The Official Online Magazine for the Mooney Community

www.TheMooneyFlyer.com

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Departments

Features

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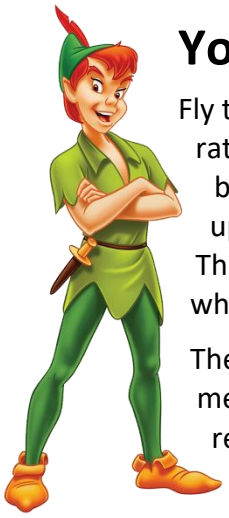
The views expressed in each author's article are their own.
The Mooney Flyer's goal is to educate, inform, and entertain Mooniacs.

From the Editor

Phil Corman



You Cannot Fly Forever with Eternal Youth

Fly today and fly a lot, for there are no promises for tomorrow. With soaring insurance rates, 100LL costs, and UL100 upon us soon, these reasons alone might cause you to cut back on the flying. But don't let that happen. There are so many things that could crop up and cause you to stop flying altogether.

The first reason can just be that you are getting along in age. I know a few Mooniacs who, in the last couple of months, have hung up their wings. With age, that happens.

The second reason is a medical issue/condition might happen. Unlike getting older, a medical issue can pop up at any moment and ground you. I know a few Mooniacs that recently have had this happen.

Other issues in your life and/or your family can cause you to stop or curtail your flying. You might lose your job, a significant financial situation might arise, or a family member's health might become poor. These events can curtail your flying.

The bottom line is to fly today, fly tomorrow and fly often while you can. Usually, the main regret in life is wishing you had done things differently. Flying a Mooney is a miraculous thing, so perform that miracle often.

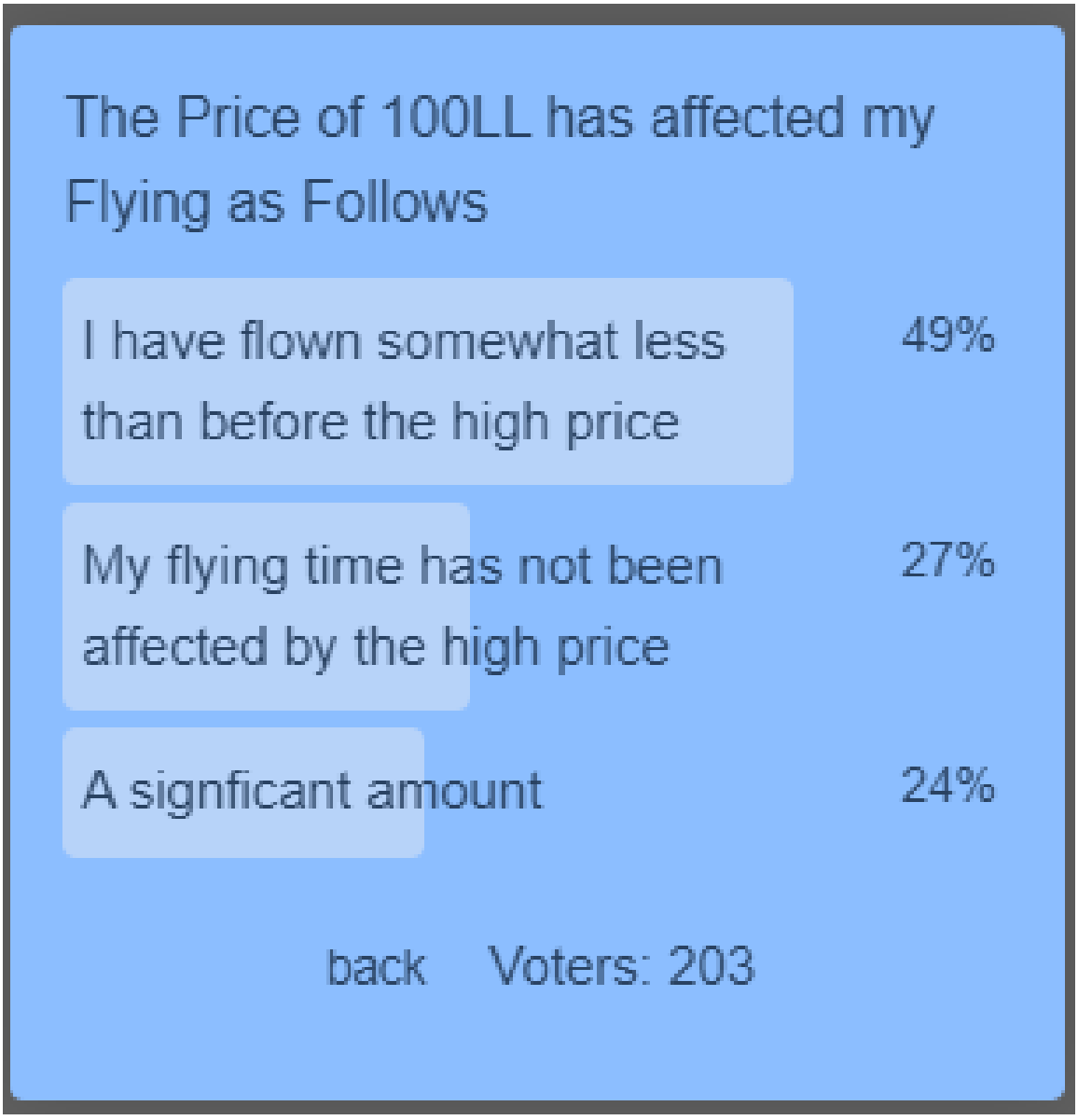
Speaking of End of Life – Your Engine May not be at the End

TBO on your engine is usually like crossing state lines in that it usually isn't an issue. Your engine does not 'up and die' at TBO. In fact, most engines are more reliable and less likely to fail than a recently overhauled engine.

What are the good signs? **If you are:**

- Checking your engine compressions and they are all within range.
- Having a regular Borescope of your engine, noting that all the valves look fine, and the cylinder walls are still honed.
- Cracking open your oil filter at every oil change and checking for various metals.
- Ordering an oil analysis at every oil change
- Keeping your CHTs in the healthy range, both hot and cool

Well, then why not continue with "old reliable" instead of a huge expense and long down time which may result in a higher probability of failure in the first 150-250 hours? Just sayin'. So, don't throw out a perfectly running engine just because you hit TBO.



Next month's poll: "I Have Spun a Mooney" **CLICK HERE** to vote.

It was a beautiful CAVU day 26 or 27 years ago when I gave my grandson Elias his first airplane ride. He was enthralled with the flight. Seated on a thick pillow and holding the wheel, he smilingly enjoyed putting my '63 "D" converted to a "C" Mooney into shallow banks. Back on the ground, he assured me that, "I am going to be a pilot!"

And did he ever keep his word. He graduated from the Kansas State University-Salina Professional Pilot Program. Then he instructed at Tulsa, Oklahoma, to build up the required number of hours to be considered for an airline position. He qualified to fly as First Officer for SkyWest. A year or so later he sent me a logbook digital printout of the U.S.A. map which showed all of his destinations, which looked to be in 40 to 45 states.

Then, a year ago, he was promoted to Captain. It was one of my life's highlights to last month be a passenger on a flight which Captain Elias flew. Inside a frame on my office wall are two photographs. One shows the young man climbing into ol' 25X for his initial flight. The other is of a much more mature man in his airline pilot uniform.

A point I'd like to make: I've kept track of all the "first-timers" in my logbook. The total so far is 52. A good many were C.A.P. cadets on orientation flights. Included are one who later graduated from the Air Force Academy and another who's flying FA-18s off a carrier.

Get 'em interested in flying early is my philosophy. This greatly improves the possibility that they'll become pilots or at least supporters of aviation during their lives.

Chester P

PRESS RELEASE

SECOND RETIREMENT COMING UP!

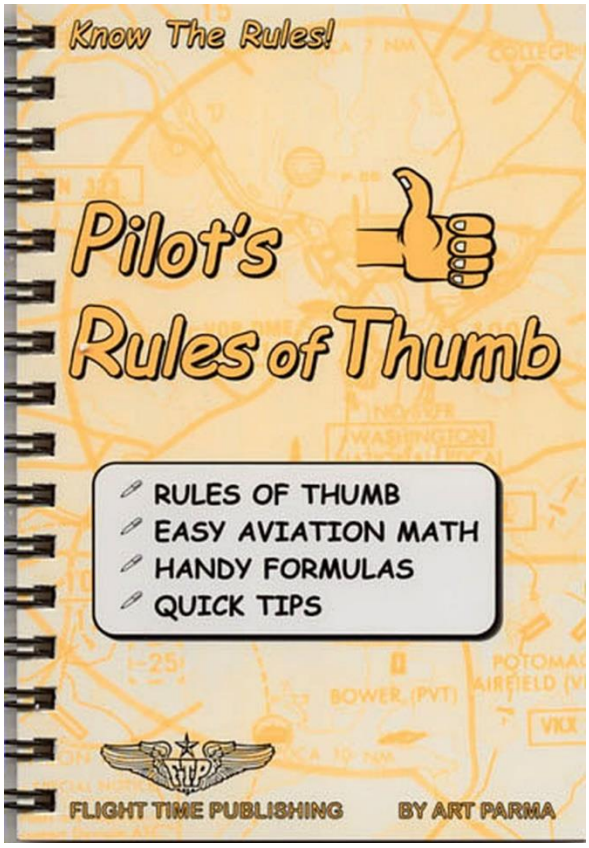
Loewen's Mooney Salvage NEEDS A NEW OWNER!

Paul Loewen has enjoyed over 50 years in the Mooney family……first in the Los Angeles area as a Mooney Service Center at Whiteman Airport in Pacoima. He moved to Lakeport in 1973 and began Lake Aero Styling & Repair (LASAR) in 1975. The rest is history, as they say!

Paul sold LASAR in 2017, and he would love to see a "Mooney person" acquire the remaining salvage business that provides Mooney parts from a collection of more than the past 50 years. Paul has enjoyed selling parts from his collection that are no longer available new from the Factory to Mooney owners world-wide.

If interested, contact Paul by home phone 707-263-0462, text 707-489-6423 or email PaulL@sonic.net.

LOEWEN'S MOONEY SALVAGE (www.loewensmooneysalvage.com)



Rules of thumb are a great way to remember things when you don't have the time to get the details from your POH, but they are not a substitute for getting the details. As they say, "The devil is in the details". Still, doing a quick check might save you and your Mooney.

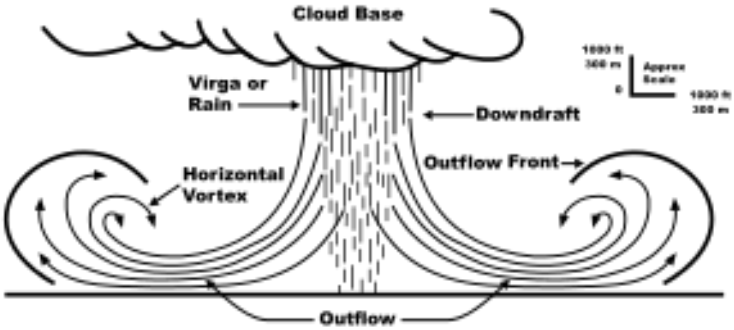
The 50/70 Rule

This one is simple but can save a lot of despair. **If you haven't reached 70% of your takeoff speed at the halfway mark of the runway, then abort the takeoff.** If the runway is particularly short, you may want to make this decision sooner. Recently at Sunriver, Oregon (S21), an amphibious airplane was taking off, but it was still on the ground 2/3 of the way down the runway. Ground witnesses could see that he was in trouble. He struggled into the air, but barely made it over the trees, which were well past the end of the runway, then stalled into the Deschutes River. The pilot died and the passenger was so shaken that he never flew again. Had the pilot aborted, he would have lived to see another day.

How to Calculate Windshear Rule

If the outflow of a microburst is 25kts, you will experience 50kts of wind shear as you pass across the microburst.

In my Eagle, I typically fly final at 70kts. This is typical for many Mooneys, so imagine what I would experience with a sudden change of 50kts.



Calculating Glideslope Descent Rates Rule

If on a 3-degree glideslope, you're flying a 90-knot approach speed, you'll need to descend at roughly 450FPM to maintain the glideslope. But how did we come up with that?

There's a pretty easy rule-of-thumb to figure that descent rate out. *Divide your ground speed by 2, then add a 0 to the end.* So, if you take 90 knots / 2, you get 45. Add a zero to the end, and you get 450 FPM. There's another way to approximate this. *You can also multiply your groundspeed by 5 and you'll get an approximate descent rate for a 3-degree glideslope.*

Calculating Civil Twilight Rule

A simple rule is that Civil Twilight ends approximately 30 minutes after sunset.

Flying Gusty Approaches

This one is very critical to a successful landing. Add ½ of the "gust factor" to your final approach speed, so if the winds are 15G35, then add ½ of 20kts – 10 kts to your typical approach speed. This will protect you from inadvertently stalling on short final.

Never Bounce a 3rd time while Landing your Mooney

Occasionally, upon touching down, you may initiate a "porpoising action". You may be too fast or maybe you touched the nose gear first. Regardless, if you bounce a second time, you should consider the landing lost and immediately initiate a "go-around". It's almost a 100% probability of having a prop strike on the 3rd bounce which will cause a lot of damage and require a new propeller and probably an engine teardown.

If you are proficient, you can add a slight bit of power after the 1st bounce, maintaining a correct nose up attitude and gently touchdown. However, only do this if you are proficient. A go-around is also a great choice after the 1st bounce.

Takeoff Roll Increases 10% for every Additional 1,000' of Density Altitude

As you know, Density Altitude goes up as MSL and/or temperature go up. So, if Density Altitude goes up 5,000', then our takeoff roll could increase 50%. That is a significant increase, and you need to factor this into your departure plans. So, a normal takeoff roll of 1,200' could take 1,800'.

True Airspeed 2% per Thousand Feet of Density Altitude Rule

At sea level and on a standard temperature day, your indicated and true airspeed are almost the same. But on a warm summer day with a higher density altitude, everything changes. We love to go into South Lake Tahoe (KTVL) which is at 6,268'MSL. On a warm day, KTVL's Density Altitude can be 10,000'. If your indicated landing speed is 70kts, then your true airspeed increase will be 2% of 10,000 or 84kts. So, you will touchdown considerably faster than 70kts.

Summary

These are simply rules of thumb and can help you to get a rough estimate of conditions and your responses. But remember that nothing is better than a detailed analysis with your POH in hand.

ADS-B Receivers – You Should Want One!

To help you compare the ADS-B Receivers, below is a short buyer's guide which includes the features that you might find important.

Features	ForeFlight Sentry Mini	ForeFlight Sentry	ForeFlight Sentry Plus	Appareo Stratus 3	Garmin GDL 50	Garmin GDL 51	Garmin GDL 52
ADS-B WEATHER	Yes	Yes	Yes	Yes	Yes		Yes
SIRIUSXM WEATHER						Yes	Yes
WAAS GPS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ADS-TRAFFIC	*Dual Band	*Dual Band	*Dual Band	*Dual Band	*Dual Band		*Dual Band
FLARM TRAFFIC (Europe)			Yes				
AHRS (Attitude)		Yes	Yes	Yes	Yes	Yes	Yes
SENSES PRESSURE ALTITUDE		Yes	Yes	Yes	Yes	Yes	Yes
FLIGHT DATA RECORDER			Yes	Yes			Yes
CO DETECTOR		Yes	Yes				
SCREEN			Yes				
G-METER			Yes				
EXT ANTENNA OPTION				Yes	Yes	Yes	Yes
BUILT-IN BATTERY		Yes	Yes	Yes	Yes	Yes	Yes
BATTERY LIFE	N/A	12 hrs.	18 hrs.	8 hrs.	8 hrs.	7 hrs.	5 hrs.
COMPATIBLE APPS	*ForeFlight*	*ForeFlight*	*ForeFlight*	*ForeFlight, Garmin Pilot, WingX, Fltplan Go, FlyQ, & Stratus Insight*	*Garmin Pilot, Garmin GPSs, ForeFlight, & Fltplan Go*	*Garmin Pilot, Garmin GPSs, & ForeFlight*	*Garmin Pilot, Garmin GPSs, ForeFlight, & Fltplan Go*
APP CONNECTION	WiFi	WiFi	WiFi	WiFi	Bluetooth	Bluetooth	Bluetooth
PRICE	$299	$499	$799	$749	$749	$699 *$200 REBATE	$1,999 *$200 REBATE

***ADS-B Dual Band means that the ADS-B receiver can see traffic that is broadcasting on either 978 or 1090 MHz.**

The Universal Access Transceiver (UAT), such as the uAvionix skyBeacon, transmits an aircraft position to ATC and aircraft on **978 MHz**. These UATs are usually installed on small GA aircraft that are not intending to fly in Class A airspace or venture outside the 50 United States of America.

An Extended Squitter (ES) Transponder, such as Garmin's GTX 330ES, GTX 335, or Appareo's Stratus ESG, transmits the aircraft's position to ATC and other aircraft via **1090 MHz**. ES allows Class A entry and travel beyond USA's borders.

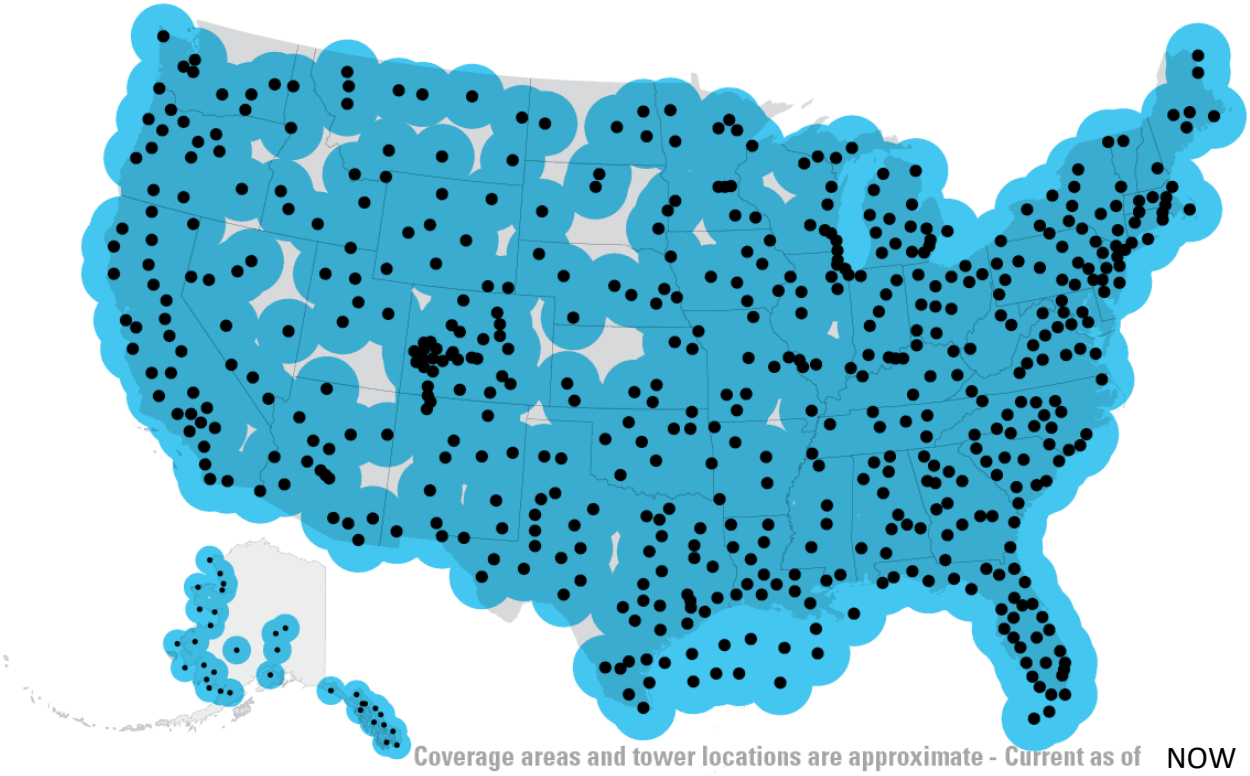
An Amazing Advancement in Aviation

Aviation has evolved and there are so many wonderful tools to help keep us safe. For instance, the iPad (iOS) / Android tablets along with their Pilot apps that receive ADS-B information from an ADS-B receiver is one of the greatest advancements in aviation since the Mooney was produced. You can see stuff that you should not fly into, such as surrounding traffic, weather,

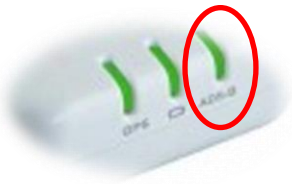
NOTAMS, Restricted Areas, active MOAs and TFRs. However, once I was flying in Utah and Salt Lake Center advised me of a Fire Fighting TFR ahead of me. That TFR was not depicted on my iPad (I use ForeFlight and a Stratus 3). A telephone briefing might alert you to a new TFR, but what if that fails? I always try to utilize Flight Following when flying VFR because Air Traffic Control can alert me to something that, for whatever reason, is not showing on my iPad, like a fresh TFR, severe weather, and parachute jumping advisories.

ADS-B Coverage

I noticed some ADS-B receiver reviewers complained of occasional lack of reception. It is possible that these pilots were at a low altitude in an area of limited coverage, shown in gray.



For ADS-B weather coverage, you need to be airborne. Sporty's airport in Batavia, OH is about 30 miles from the closest ADS-B ground station, yet pilots with a Stratus receiver, routinely pick up that station after takeoff at 200 ft. AGL. I don't doubt that because, according to the above map, Ohio has fantastic coverage. The map shows ADS-B towers as black dots. The surrounding blue areas depict the tower's service volume, assuming you are at least 1,500 feet AGL. It all depends on your distance from a transmitter. The gray areas are where you'll need to fly higher than 1,500 feet AGL to receive ADS-B information. ADS-B reception will increase as one flies higher in these gray areas. I have flown in the gray areas in Eastern and Northern Arizona/Southern Utah at 10,500' MSL and 11,500' MSL; much higher than 1,500' AGL. In those gray areas, I have lost ADS-B coverage, indicated by the ADS-B light changing from **green** to **amber**. That doesn't mean I have a defective device. It just means I'll need to be patient or fly higher. Eventually, I'll fly into an area with good coverage.



ForeFlight Sentry ADS-B Receiver Disconnect Complaints?

Before we begin the discussion, I want to explain why you might see so many negative reviews regarding the ForeFlight Sentry and Sentry Mini models disconnecting from the iPad or needing to restart to get a WiFi signal. I asked Sporty's Customer Service about this unhappy theme and learned, "Most of these issues are resolved when the firmware for the unit is updated and the latest version of Foreflight is being used."

Sadly, many people enter a negative review and then take the time to learn why it is happening. Whoops, now it's too late to retract the complaint. As with most opinions, I urge you to consider the source and then only accept it after you do some additional research.

FOREFLIGHT SENTRY MINI, $300

Specifically made for ForeFlight, the Sentry Mini is the easiest and most affordable way to fly with subscription-free weather. The Mini weighs less than 2 ounces but still delivers all the essential features for cross country flying. You'll see complete FIS-B weather data in ForeFlight, from radar and lightning to METARs and TFRs. Dual-band traffic helps you track nearby aircraft, and the built-in GPS drives moving map navigation with terrain alerts. Sentry Mini does not have an internal battery, but it can be plugged into a cigarette lighter charger or a portable battery pack for all-day performance. **Dimensions:** 2.25" x 3.25" x .6". **Weight:** 1.5 oz. **In the box:** Sentry Mini, USB-C charging cable (no Wall outlet charging plug), Suction cup mount, Carrying case, & Quick Start guide. Download the User guide Here

Sporty's Reviews, FOREFLIGHT SENTRY MINI

There were 157 reviews, giving it a **4.7**. 83% gave it 5 stars. A happy owner wrote, "The best option to add that extra layer of safety in the cockpit. Even with a base Foreflight subscription this ADS-B does exactly what is needed for safe flight. Traffic and weather displays give you the situational awareness that used to be only in the airlines."

A user wrote, "If I left my iPhone on, the Sentry and iPad lost connection. When I turned my iPhone off, the problem went away, and the Sentry had a solid connection to the iPad Mini, version 6." An overwhelmed user gave it one star and wrote, "Way too much capability for me. Way too many things to learn. I am a VFR flyer only. Primarily from point A to point B. Still trying to figure it out for my use."

FOREFLIGHT SENTRY, $500

Sentry is a compact, affordable ADS-B receiver specifically made for ForeFlight. In addition to popular features like ADS-B weather and traffic, Sentry also includes a carbon monoxide detector to warn of dangerous conditions in the cockpit. No larger than a deck of cards, Sentry packs an extensive list of features into a small size, but still offers up to 12 hours of battery life. **Dimensions:** 2.25" x 3.25" x 1.5". **Weight:** 4.2 oz. **In the box:** Sentry, Charging cable (no Wall outlet charging plug), Suction cup mount, Rugged carrying case, & Quick start guide. Download User Guide HERE.

Sporty's Reviews, FOREFLIGHT SENTRY

There were 525 reviews, giving it a **4.7**. 83% gave it 5 stars. One user wrote, "I've been flying with Sentry for several weeks, including cross-country flights into/ out of busy DFW Class Bravo airspace. Traffic, Weather, AHRS data and CO Monitor. To me, Sentry is a safety item. I'm very happy with it." One user complained that the Unit only charges with the enclosed C to C cable.

FOREFLIGHT SENTRY PLUS. $800

Sentry Plus includes all the essential features that made its predecessor the best-selling weather receiver in aviation, plus powerful upgrades to create the ultimate iPad accessory. It's everything you need for safer and more enjoyable flights. It has a first of its kind OLED display, an unmatched 18-hour battery life, and next generation flight data recorder with G-meter. Sentry Plus includes all the essential features that its predecessor had, plus powerful upgrades to create the ultimate iPad accessory. It's everything you need for safer and more enjoyable flights. **Dimensions:** 3.4" x 4.2" x 1.5". **Weight:** 7.4 oz. **In the box:** Sentry Plus, Charging cable (no Wall outlet charging plug), Suction cup mount, Rugged carrying case, & Quick start guide. Download the User Guide Here.

Sporty's Reviews, FOREFLIGHT SENTRY PLUS

👍 The Sentry is new and there were only has 4 reviews. This gives it a **3.8** out of 5. 50% gave it 5 stars. One satisfied user wrote, "I went from using an old Stratus 2 to the Sentry Plus. It feels like going from a Chevy Caviler to Porsche. Insane battery life! I've gone on three flights this week and still on the same initial charge. It might last another week's worth of flying before needing juice. I really like the screen and hope I never have to use the CO detector, but I'm glad it's there. Maybe it's placebo effect, but the weather and traffic seem to update faster on the new unit. Can't wait to fly to Oshkosh this year with it."

👎 One unhappy buyer wrote, "The screen is small and impossible to read."

APPAREO STRATUS 3, $750

Stratus 3, the latest generation weather receiver from Appareo, is your everyday cockpit companion. Just turn it on and go flying - in minutes you'll see subscription-free weather, ADS-B traffic, backup attitude, and GPS position right on your tablet. All this information at your fingertips will dramatically improve your situational awareness and help you make better in-flight decisions. Proven by millions of flight hours in everything from Piper Cubs to military fighters, Stratus is the portable avionics solution you can trust. And now it's smarter than ever. **Dimensions:** 4" x 2.25" x 1.25". **Weight:** 10 oz. **In the box:** Stratus 3 receiver, Dash mount, Charging cable, Wall outlet charging plug, & Pilot's Guide.

Pilot-friendly features:

- Auto shutoff - Stratus 3 automatically turns off after your flight, saving battery life
- Smart WiFi - use your iPad's LTE connection with non-aviation apps while connected to Stratus 3
- Improved WiFi security - hide network ID or add a password
- Open ADS-B - works with other electronic flight bag apps using GDL 90 protocol (Garmin Pilot, Fltplan Go, WingX, FlyQ)
- Receives new ADS-B products - view echo tops, lightning, icing forecast, turbulence forecast, Center Weather Advisories, and G-AIRMETs
- Supports synthetic vision traffic display - get a 3D view of nearby airplanes in ForeFlight
- Two year warranty - helpful, friendly service from our team of pilots

Sporty's Reviews, APPAREO STRATUS 3

👍 There were 216 reviews, giving it an average of **4.5**. 74% gave it 5 stars. Most reviewers echoed this sentiment: "The Stratus 3 is a great asset to any pilot who owns or plans to own an aircraft.

It provides a much needed level of safety and situational awareness, particularly for those who fly in and around busy terminal airspace." 👎 Some unhappy users complained that Stratus 3 lost connection with ForeFlight during awkward times. However, they were able to reboot and regain connectivity.

GARMIN GDL 50, $750

Garmin's GDL family of portable devices offers a variety of options for receiving weather and GPS information in flight. The compact GDL 50 ADS-B receiver lets you access the subscription-free ADS-B weather and traffic services available in the U.S. — all while providing GPS position, speed and altitude information as well as backup attitude reference. Bluetooth connection to the Garmin Pilot app on iOS or Android. aera 660, aera 796 or aera 795 series. It also works with ForeFlight and Fltplan Go. **Dimensions:** 4.9" x 1.3" x 3.4". **Weight:** 12 oz. **In the box:** GDL 50 portable receiver, Suction cup for cable management, Mounting bracket, Trial subscription to Garmin Pilot™ app, Vehicle power cable, & Documentation.

Sporty's Reviews, GARMIN GDL 50

👍 43 reviews giving it an average of **4.5**. 77% gave it 5 stars. Most reviewers echoed this sentiment: "This is a great unit. I use it with Foreflight, my guess is that it works equally well with Garmin Pilot (or even better). It is very durable, has great battery life, and works very well."

👎 A few users complained about the Bluetooth connection to the iPad.

GARMIN GDL 51 SiriusXM Receiver $700 ($500, with the $200 rebate, which is good through 31 Dec. 2022.) (Does not receive ADS-B out).

Nothing beats SiriusXM Satellite Weather for making smart in-flight decisions, and the GDL 51 makes it easier than ever to view this high quality information on your tablet or portable GPS. The compact receiver sits on your dash and streams weather, SiriusXM Radio, attitude information, and GPS data wirelessly via Bluetooth. The built-in five-hour battery means it's completely portable, and perfect as a backup too. It has Bluetooth connection to the Garmin Pilot app on iOS or Android. It also works with ForeFlight. You can connect it to these Garmin portables: aera 760/660 and 796/795. **Dimensions:** 4.9" x 1.3" x 3.4". **Weight:** 12 oz. **In the box:** GDL 51 portable receiver, Suction cup for cable management, Mounting bracket, Trial subscription to Garmin Pilot™ app, & Vehicle power cable.

Sporty's Reviews, GARMIN GDL 51 SiriusXM Receiver

👍 An average of **4.5** from 2 reviewers, awarding this product with a 5 and a 4 star. The 5 Star reviewer said, "We use the GDL51 in an older King Air. I chose it over the ADS-B unit because we make some long flights and wanted the higher resolution NEXRAD for the full US, not just the regional picture. Paired to the iPad once and it connects immediately every time. Weather data is top-quality and available at all altitudes. More weather products than ADS-B (turbulence, storm cells, icing). Good battery life. Doesn't get NOTAMs (need ADS-B for that). When used in the King Air, I needed to buy the external antenna and run it to the one point on the windshield that doesn't have embedded wires for heating. Without the antenna, reception was often poor or non-existent. When I used it in my 182, with no external antenna, signal was always excellent."

👎 The 4 Star reviewer differs on the battery life: “Battery only 4hr.”

Garmin GDL 52 SiriusXM ADS-B Receiver, $1,200. ($1,000 with the $200 rebate, which is good through 31 Dec. 2022.) Comes with a 3 month trial offer of SiriusXM Aviation Weather and Entertainment.

You can have it all with the GDL 52 from Garmin: SiriusXM satellite weather and audio, subscription-free ADS-B weather, dual band ADS-B traffic, GPS position, even backup attitude information. Flexible display options mean you can view weather and traffic information on the Garmin Pilot app on iOS or Android, plus portable GPSs like the aera 660 and 795/796. The GDL 52 even works with the FltPlan Go app and ForeFlight. **Dimensions:** 4.9" x 1.3" x 3.4". **Weight:** 12 oz. **In the box:** GDL 52 portable receiver, Suction cup for cable placement, Mounting bracket, Trial subscription to Garmin Pilot™ app, Vehicle power cable, & Documentation.

Sporty’s Reviews, Garmin GDL 52 SiriusXM ADS-B Receiver

27 reviews, giving it an average of **3.7**. 44% gave it 5 Stars. One reviewer said, “Works great. No complaints.” Another satisfied customer wrote, “The GDL 52 is great - it is easy to use, quickly pairs to my iPad, and provides reliable traffic, weather, and position data. I use Garmin Pilot and the data displays seamlessly. This box isn't cheap, but I guess you get what you pay for.”

👍

👎 One owner wrote, “Great in the air but pretty useless on the ground. It doesn't seem to be able to pick up GPS, ADS-B or SXM in a place where the Sentry picked up both ADS-B and GPS location just fine.”

Why do I see a “ghost” aircraft mirroring me in ForeFlight Mobile while I am using my Stratus portable ADS-B receiver?

If your aircraft is not equipped with an ADS-B Out system, ATC can rebroadcast your Mode-C target to nearby ADS-B Out equipped aircraft. If you receive that transmission, it can cause your own aircraft to be displayed as a nearby target, usually slightly behind your actual position and +/- 100 to 200 feet in altitude. The only way to remove the “ghost” target is to turn off the Traffic layer in ForeFlight Mobile. If you have ADS-B Out installed on your aircraft, ensure that you have the “Ownship ADS-B” option selected in ForeFlight Mobile. Click here for instructions on how to perform these tasks in ForeFlight Mobile or contact ForeFlight support for assistance.

We hope you found this article useful and if you *do not have* an ADS-B Receiver, an app and an iOS or Android device, please consider making a purchase or two. It will keep you safe and hopefully out of TFRs, especially the VIP type.
Remember, when F-16s join up with you, it’s not because they are admiring your beautiful Mooney. They are singing “Come Fly with Me”, but not in a cheerful way.

Fly Safe,
Jim

Can You be off the Ground in One Minute?

by Richard Brown

A backhand slap from ATC, amazing Russian food, and a one minute "Void if not off by" clearance. What a great evening!

How did it all start? A little over a year ago on Mooneyspace, my future friend Alex was talking about the possibility of moving from Buffalo, New York to Southern California. I sent him a message with my cell number and told him if he had any questions, to feel free to reach out. There were a few texts back and forth and about five months later, he texted that he was living here in California.

Fast forward to April 2022 and I received a text from Alex that his birthday was coming up in May. He said he had a tradition on his birthday of inviting pilot friends to fly somewhere and meet up for dinner. He was hoping to continue his tradition on the West Coast. My wife laughs at me because I am not an outgoing person but, I have no problem meeting up with pilots that I have only interacted with via text or email.

The plan was set. An evening flight down to Montgomery (KMYF) field in San Diego, dinner at The Pomegranate, and then a flight back to Fullerton. A year ago, I wouldn't have attempted the flight with the high likelihood of a marine layer, but now with my IFR rating, I was looking forward to it. We also ended up with a passenger because Alex had another friend named Sam who is VFR only and he needed a ride. We had room and were happy to provide a lift.

I left work a little early to meet my wife and Sam at the Fullerton airport (KFUL) so we could make a 5:30pm departure time. With the possibility of the marine layer moving in, I filed an IFR flight plan to KMYF. I also filed an IFR flight plan for the flight back to KFUL as there was almost a guarantee that the marine layer would be moving in that night. I thought with a 6:30pm dinner reservation, if I filed for a 9:00pm departure, that would be perfect. It wasn't, but that is for later in this story.

After the run-up was complete and everything configured for departure, I called Ground Control to copy our clearance.

Me: "Fullerton Ground, Mooney 78878, Southeast runup with Yankee, IFR to Montgomery, ready to copy IFR clearance."
Ground: "Mooney 78878, you are cleared to Montgomery via, on departure left turn heading 120, vectors to Seal Beach, Victor 64, Victor 363, DANAH, Victor 23, Mission Bay, Direct. Climb maintain 2,000, expect 5,000 one-zero minutes after departure, departure frequency 125.35, squawk 4762."

On my knee-board I had written:
C – MYF CSTP36 *(The Tower Enroute Control (TEC) routing is the Coastal Papa 36, so I had that written down)*
R – L120 vSLI V64 V363 DANAH V23 MZB D *(With a little arrow through the D)*
A – 020 050 10min
F – 125.35
T – 4762

I readback the clearance, he confirmed it was correct and asked if we were ready to taxi. I told him it would be just a minute and then dialed the original altitude of 2,000' into the GMC-507. After verifying everything was set, I called for a taxi clearance.

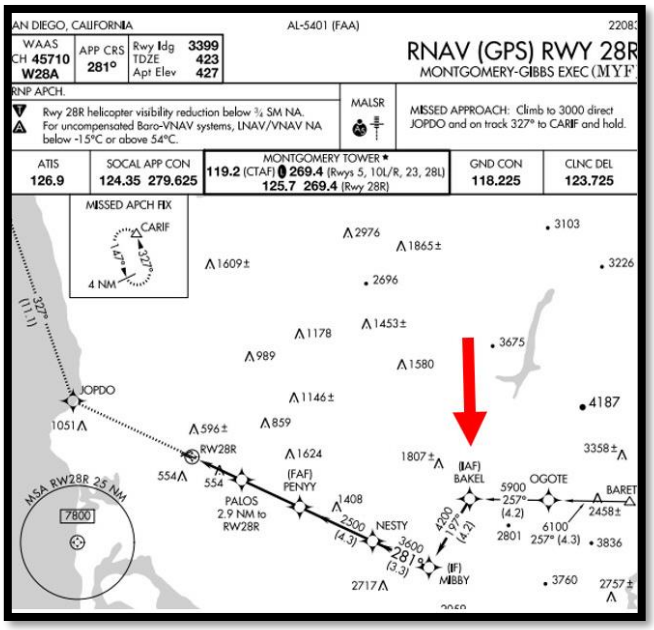
We were airborne at 5:35pm, just five minutes after our scheduled departure; not bad. I checked in with SoCal and was told, "… climb and maintain 7,000." I glanced over at Sam and said, "And that's the end of flying our cleared route." That is because, typically, ATC just assigns vectors and altitudes until you get south of John Wayne (KSNA).

We leveled off at 7,000' and once past KSNA we were given direct DANAH to join V23. We heard Alex on the radio and ATC had him stuck down at 5,000'. The flight continued uneventfully, but I was about to get a smack down by ATC.

Montgomery was still VFR and landing 23, but there are no approaches to 23, so I requested the RNAV for 28R. Even though it was VFR, I wanted to fly the approach for the practice. The controller said, "Five miles south of Oceanside (OCN), direct BAKEL." I wasn't positive of the fix he named, but I repeated back what he said and my best guess of the name of the fix. I had plenty of time before reaching the turn and planned to scan the chart for the appropriate fix. My readback must have been close enough because he moved on to his next transmission. My problem, not his, was that he was speaking 90 miles an hour on a busy frequency, and I hadn't studied the approach plate well enough.

I looked and there was a fix that was five miles south of OCN, named HURSI. Perfect, I could use that to know exactly when to make my turn. Step two, figure out where I was going "direct to" after HURSI. I scanned the chart for something that sounded like what the controller had said and then asked,

"Approach, Mooney 78878, was that fix DEGLE, Delta-Echo-Golf-Lima-Echo?" He replied, "BAKEL, it's on your plate. Look it up." Yep, a well-deserved backhand to the side of my head from ATC.



You see, BAKEL is an Initial Approach Fix for the RNAV 28R into MYF, and had I studied the plate better and familiarized myself with the names, I would have recognized it when I heard it. We were given vectors and joined the approach well past BAKEL, intercepting it 5 miles from the Final Approach Fix of PENYY. Our clearance was the RNAV 28R, circle to land 23.

I have flown circling approaches on VOR and GPS-A approaches, but this was my first straight in that would become a circling approach to a different runway. When flying the VOR into KFUL, the tower tells you to enter a left downwind. I was expecting similar instructions from Montgomery tower, but as we crossed PALOS, 2.9NM from the end of 28R, the tower hadn't given me any additional instructions. I made a right turn to join the downwind and while on the downwind, the tower controller gave us instructions on who to follow and cleared us to land.

Dinner at The Pomegranate was AMAZING! That was my first experience with Russian food, and it was excellent. Alex was a perfect host. He explained everything and the conversations were great. Before we knew it, we were well past our planned 9:00pm departure and we were still at the restaurant. The food was so good with excellent company, so we didn't mind, even though my wife and I were by far the oldest ones there and I knew it was going to be an early morning the next day when getting up for work.

Eventually we had all grabbed an Uber back to the airport, said our goodbyes. After a thorough pre-flight, knowing we would be going IMC and over water at night, we put on our life preservers, climbed in, and I started the engine.

My filed flight plan had long passed the cancellation point and MYF tower had closed an hour earlier. Down in the run-up area, I finished my run-up checklist, departure checklist, and programmed my GNC-355 with the TEC Route that had been previously accepted by ATC. I dialed up Clearance Delivery on my phone, which was connected to my headset through the audio panel.

After the controller answered, I said, "Mooney 78878, on the ground at Montgomery. I'd like to pick up an IFR clearance to Fullerton." His quick response was, "Please call me back in five minutes," and the line went dead.

I took a glance at the clock and made a note of the time to call back. By this time, Alex had taxied up behind us in his Mooney and another friend of his was behind him in a Cirrus. There was no other activity at the airport or on the frequency, so I told them I had called, but was told to call back in five minutes.

Five minutes later I called back, “Mooney 78878, calling back, looking for IFR from Montgomery to Fullerton.” This time he said, “Hold on this line,” and he was gone. We didn’t have a choice. It was overcast at 1,400’, so the only way we were getting out of there was with an IFR clearance. Ten minutes later the line came alive again.

ATC: “Mooney 78878, are you still there?”
Me: “Affirmative.”
ATC: “Sorry about that wait, are you familiar with the San Diego Papa Three routing.”
Me: “Yes” *(I already had SANP3 along with the fixes written down on my knee pad)*
ATC: “Mooney 78878, cleared to Fullerton via San Diego Papa Three. On departure fly runway heading, climb and maintain 3,000, expect 6,000 one-zero minutes after departure. Frequency 119.6, squawk 4656. Standby for readback.” He was gone again.

At this point Alex had already shut down his engine. I told my wife and Sam that ATC must be slammed, although I couldn’t imagine why he would be so busy after 10pm on a Tuesday night. Five minutes later the controller was back. I gave him the readback and he confirmed it was correct.

ATC: “Mooney 78878, are you number one?”
Me: “Affirmative, 78878.”
ATC: “Can you be off the ground in one minute? I have a Cessna that will be crossing.”
Me: “Affirmative.” *(I was glad I had already gone through all my checklists and configured everything).*
ATC: “Mooney 78878, you are released for departure, void if not off by xx:xx.” *(That void time was one minute from our current time).*

I read that back at the same time that I was advancing the throttle to take the runway. The phone line went dead, and I keyed the mic to announce on CTAF that I was taking the runway for departure. Less than a minute later, we were airborne. I switched over to his frequency and understood immediately why it had taken so long to get our clearance. I’m not sure how many planes he was working, but it was rapid fire from one to the next and took some time before there was enough of a break for me to check in.

We climbed up through the thin overcast marine layer into a pitch-black sky. Headed west toward the coast, above the clouds, the only way I knew we were out of the clouds was because I could no longer see my landing light shining on them. We might as well have been flying in a fishbowl full of black ink because there was nothing to see. ATC eventually turned us direct to the Oceanside (OCN) VOR to join V23. We could finally see lights off our right wing.

The flight down had been hazy, but the flight back was gorgeous. The moon was shining back at about our five o’clock and off our right wing. Further inland where the marine layer hadn’t settled, we could see lights on the ground. In Orange County, where the marine layer had moved inland, there were patches of light glowing up through the clouds.

At KFUL, we flew the RNAV 24, although we were never back in the clouds. Fullerton was sitting in a little pocket of cloudless sky with the marine layer on three sides. Shortly before crossing the Final Approach Fix, we were past the edge of the clouds and could see the runway, so, I called ATC and canceled IFR. It was just after 11:00pm when the wheels touched the runway.

A great evening of flying, food, and friendship, which was made possible by reaching out to a pilot on the other side of the country and just offering to answer his questions. I love flying, and I love the Mooney community.

As always, thank you for taking the time to read. If there are things you would like me to write about, (or not write about), or if you just want to say hello, drop me an email at richard@intothesky.com. If you are ever in Southern California and want to meet up, let me know.

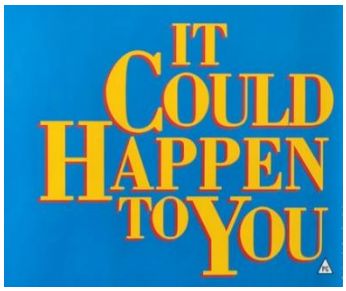
Forget One Little Checklist Item

The failure to remove a control lock is blamed for the crash that killed airshow legend Dale “Snort” Snodgrass in Idaho on July 24, 2021.

According to the final report from the National Transportation Safety Board (NTSB), the control lock was still installed when Snodgrass attempted to take off in his SIAI Marchetti from Nez Perce County Airport (KLWS) in Lewiston, Idaho. This prevented Snodgrass from lowering the nose when the aircraft pitched up aggressively after takeoff, then entered a stall-spin situation from which it was not recovered.

Snodgrass was a real-life Top Gun naval aviator, flying F-14s from carriers and later as an airshow demonstration pilot in vintage warbirds. At the time of the accident, he had an estimated 6,500 hours of flight experience, of which 20 hours were in the accident airplane. Contemporaries of Snodgrass say he was known for being a meticulous pilot who did not rush preflight inspections.

The report suggests that Snodgrass did not perform a pre-takeoff control check, because "Had the pilot completed a functional check of the controls before initiating takeoff, the presence of the lock would have been detected and the accident would have been prevented."



The fact that such an experienced pilot missed this item—which is usually one of the first things on the preflight checklist—should put the rest of us on notice. We all need to follow the checklist like our life depends on it.

Ironically, a similar accident led to the adoption of checklists as a matter of practice in aviation. In 1935, the Boeing 299—the prototype of the B-17—went down on takeoff from Wright Field (what is now Wright-Patterson Air Force Base/KFFO) in Ohio. The aircraft lifted off normally, then entered a steep climb and subsequent stall and impact, killing the crew. It was determined that the control lock on the elevator and rudder, which could be released from inside the cockpit—were still in the locked position, having been forgotten by both the pilot and copilot. After the accident, the concept of a checklist to ensure the completion of these necessary tasks was born—and we still use it today. Does the phrase "flight controls free and correct" ring a bell?

Was it his Age?

Use checklists if you have cause to worry that you'll overlook something critical. Skip the checklist—or a flow—and you're almost sure to miss something, as Dale Snodgrass certainly did. Missing stuff is not necessarily an age-related thing. Dale was 72 years old, but I think he was still very sharp. So, no, I don't think he suddenly had a senior moment!

Checklist Use

Checklist use is one of the first things a pilot candidate learns. It is not a crutch—it is a device we use to make sure that necessary items are checked in a logical fashion. If you are interrupted during the checklist process, you would be safe to repeat the previous three items.

When you look at the checklist, it is also important, as in some high-workload situations such as the pattern, that a cockpit flow followed by a verification look at the checklist may be more appropriate.

Controls . . . Check FREE and CORRECT Movement

It's dangerous when pilots skip the control check or do it in an incorrect manner. Sometimes pilots gloss over it or think that they don't have to do it. But it is dangerous when they skip it. Yet, there it is in the checklist: 'Controls . . . Check FREE and CORRECT Movement.'

It is important to check for damaged control cables or even reversed controls due to improper maintenance, as well as foreign objects or perhaps a forgotten gust lock that will prevent motion. In addition, iPad mounts, or items on the copilot's seat, can block yoke movement. A dropped water bottle on either side of the cockpit can jam the rudder pedals. Errant cables can prevent the control wheel from moving all of the way back. In addition, a large right-seat passenger can be an issue. I could go on and on, but you get the picture.

Control issues are discoverable by checking that the controls are *free*, that they move smoothly to their full limits, and that they are *correct* in their response to control inputs.

The controls must move smoothly without binding or hanging up. You might do the control check first thing upon entering the airplane, so you can address issues before engine start. Then, do it again just before entering the runway for takeoff to ensure nothing has blocked or bound up the controls during taxi.

Consider this Tip

If you are using your left hand to hold the yokes, if you extend the left thumb upward, it will point at the aileron that should be fully up.

Check Controls after Maintenance

A pilot was performing a post-maintenance test flight after a "lengthy restoration" of a Piper PA22 which had been completed by a mechanic, who accompanied him on the flight. After takeoff from the airport in Cortland, N.Y., the airplane did not respond in accordance with the pilot's control inputs, so he elected to immediately land the airplane.

The plane hit the ground off the departure end of the runway, which resulted in substantial damage to the wings and fuselage.

Post-accident examination of the airplane revealed that the aileron control cables had been rigged opposite of the proper orientation prescribed in the airplane's illustrated parts catalog.

Both the pilot and the mechanic stated that when they conducted flight control checks prior to the flight, they confirmed deflection of the ailerons, but that they each failed to confirm that the aileron deflection corresponded correctly to the input at the control yoke.

NTSB Probable Cause: The mechanic's incorrect rigging of the aileron control cables, which resulted in a reversal of aileron control inputs applied by the pilot during the takeoff. Also causal was the mechanic's inadequate post-maintenance inspection and the pilot's inadequate preflight inspection and before takeoff check, which failed to detect the misrigging.

Redundancy is Part of Aviation

When I was flying for a major airline, “flaps – set for takeoff” was twice listed as a checklist item. It was once in the taxi check and once in the before takeoff check. Later, the airline determined that “flaps – set for takeoff” was only needed once, so it was deleted from the before takeoff check.

In 1987, an MD-80 was departing from Detroit Metro airport (KDTW), full of passengers on their way to Phoenix (KPHX) and then Santa Ana (KSNA). They took off without flaps “set for takeoff”. All six crew members and 148 of its 149 passengers, along with two people on the ground were killed. The Captain, John Maus was my friend. My first flight with the airline was with John, who was a Line Check Captain. He had over 20,000 hours and everyone knew him as a "competent and capable pilot" who had a reputation for operating "by the book". It was hard for me to understand how this could happen.

Thanks to the Cockpit Voice Recorder (CVR), we learned there were distractions during the Taxi Checklist.

The NTSB concluded that the probable cause of the accident was the flight crew's failure to use the taxi checklist to ensure that the flaps and slats were extended for takeoff. Contributing to the accident was the absence of electrical power to the airplane takeoff warning system, so it failed to warn the flightcrew that the airplane was not configured properly for takeoff. The reason for the absence of electrical power could not be determined.

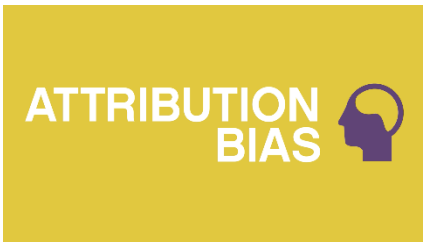
Later, the airline returned the redundancy of “flaps – set for takeoff” to the before takeoff checklist.

I learned from that accident and still feel that if any kind of redundancy can save my life, I’m using it. For that reason, I have included “Flaps and Trim – Set for takeoff” in both my After Start and Before Takeoff Checklists.

How can You Fix Deficiencies?

There are four ways to fix things, but for us, we only have power over numbers 1 and 2.

1. **We can receive additional training by using the FAA’s Wings Program to ensure we’re on the right track.**
2. **Procedurally, we can always FOLLOW THE CHECKLIST(s)**
3. More supervision, which in General Aviation is almost nonexistent.
4. Engineer the problem – a matter only available at the manufacturer level.



People constantly make attributions — judgements and assumptions about why people behave in certain ways. However, attributions do not always accurately reflect reality. Rather than operating as objective perceivers, people are prone to perceptual errors that lead to biased interpretations. **Attribution bias** is a cognitive bias that refers to the systematic errors made when people evaluate or try to find reasons for their own and others' behaviors. For instance, you're driving along the freeway and another car cuts in front of you in an erratic, haphazard way.

Biased interpretation

You might draw some conclusions about the other driver, thinking they're rude, arrogant, or aggressive. What you don't know, however, is that the driver is speeding to the nearest hospital following a serious accident and they're driving badly because they're injured. When we don't have the full picture of a situation, we use the information we do have to draw conclusions – and these are often related to people's character and are usually unfounded.

Likewise, when a pilot is involved in a crash or accident, we might think, "Gee, I would never do that. But, if I did happen to do that, it would be because I ran into some bad luck. But that guy, heck he is an idiot!" Suddenly, we pilots become experts and because we are so intelligent, we can give you a probable cause, months or years before the NTSB publishes their final report.

Conclusion

I hope YOU will consistently follow your checklist and search for redundant ways to ensure each checklist item is accomplished. Learn from others and be a great example.

Fly Safe,
Jim

Flying the Redbird TD2 – Number 3 Finally, say you?

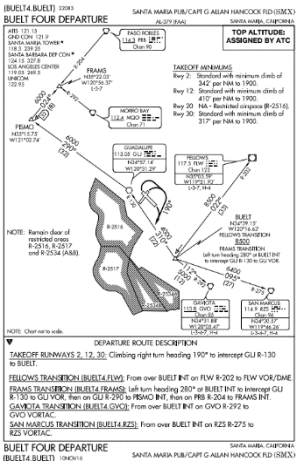
By
Jerry Proctor

This is my third article on purchasing, setting up and then flying the Redbird TD2 simulator.

I want to highlight the bottom-line up front. Use of the Redbird TD2 simulator to practice your IFR skills, and or to keep current, is an excellent and productive practice. I absolutely recommend it. You may not have to spend the $9k as I did, because presently, flight schools and even some Civil Air Patrol units have them.

I fly a minimum of two flights a month on the Bird and I want to do even more. I now seldom use my local approaches. Instead, I fly elsewhere to keep it more interesting and challenging. I get my flight ideas from several places. First, out of the blue, I make them up. Other ideas come from IFR Magazine, which often has a Sim Challenge. They are fun as there are usually unique details, making it extra interesting and a challenge to not mess it up. Also, Redbird company has a scenario and an app that provides additional ideas.

I am a member of my local Civil Air Patrol unit and I open my study for them to practice IFR before I give them an IPC. My recent annual check ride, called a Form 5, was ok, as my time in the 182 is limited. However, as soon as I put the hood on, it was smooth sailing. It is often the opposite with pilots that fly a vast majority of VFR. On a recent Redbird flight, using an idea from IFR Magazine, I flew at night out of Santa Maria, (KSMX) to Bakersfield (KBFL). Given the choice of staying in Bakersfield or flying back to Santa Maria, I would prefer to return to beautiful KSMX. It is a favorite west coast location for MAPA Safety Foundation (SF), so I have flown out of Santa Maria many times as a MAPA SF CFII.



There is not an effortless way out of or into KSMX. Thus, one often needs to use a Standard Instrument Departure or SID. Now think of that. How many times do you really have to use a SID? Some pilots might answer many times, but most will not. Using the Redbird is a fantastic way to keep that skill and procedure sharp. The Redbird is spot on, except in my Mooney, I climb and go much faster. However, the Redbird is much more sensitive, requiring concentration to keep on track. Training harder is always a good thing.

As with any IFR flight, I learned it is best to plan the flight, just like you would a real IFR flight. Do the flight plan, study the departure, approach plates and enroute plan. I did not do that well early on. I winged it and my procedures showed it. Occasionally had to hit the pause button. I have looked all over in my Mooney, and I have never found that extremely helpful button. So, I best not become accustomed to it in the Sim.

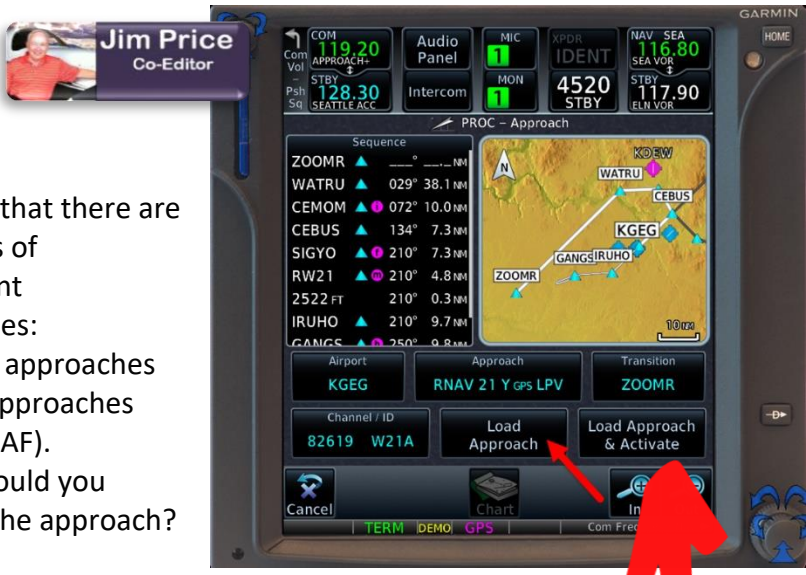
Finally, the Sim is great for missed approach practice. Pilots do not get enough of that and when you need it, you really need it. There are many special services available. You can connect your iPad to the Redbird which makes it more realistic. You get ATIS, sort of. There is also a service that allows you connect to a live person who acts as your Tower approach and center controller, proving clearance, enroute guidance, etc. This is great for the full-scale practice.

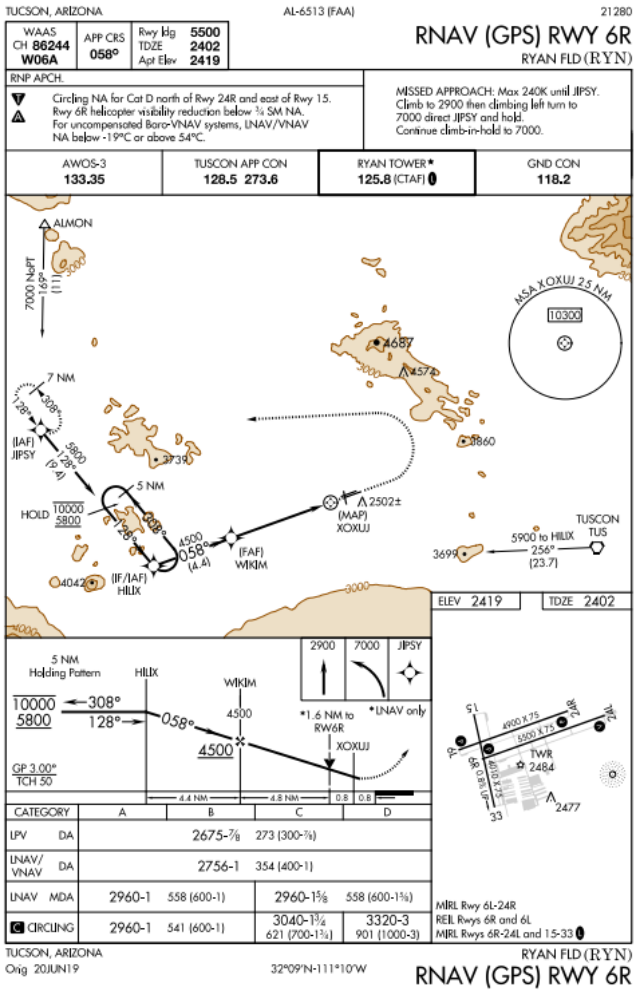
I hope this will be helpful in the future.

Be safe, JP

When Should you Activate an Instrument Approach?

That question, for some, is puzzling





Consider that there are two kinds of instrument approaches: Vectored approaches and full approaches (with an IAF). When should you activate the approach?

A) Vectored Approach: When ATC says something like, “Fly heading 130, vectors for the approach.”
B) Full Approach: When ATC clears you direct to the IAF.
C) A & B.

The correct answer is **C** because both A & B are correct.

So, what does it mean when ATC says, “Cleared for the approach?”

This means that you may now observe the altitudes applicable to the approach, leaving the assigned altitude and descending to the published altitudes on your approach plate, as applicable.

For instance, if somewhere between ALMON and JIPSY, you are cleared “Direct JIPSY, maintain 9,000”, you can **load and activate the approach,** but must remain at 9,000’.

Prior to JIPSY, when you hear, “Cleared for the approach”, you may descend to 7,000’ until JIPSY. After JIPSY, you can descent to 5,800’ until HILIX, etc.

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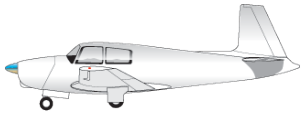
Mooney Maintenance



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Tom Rouch

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Send your questions for Tom to TheMooneyFlyer@gmail.com

How will I know for sure when I need to overhaul or replace my engine?

Tom's Answer

Good question. There are different rules depending on if you use the aircraft commercially or just for pleasure.

If used commercially, like training students or renting the plane, then you must follow the manufacturers recommendations, like 1,800 hours TBO is very common. It's very much like the rules that require an Annual Inspection. If the plane is only used for pleasure, then conditions make the rules. The most common "condition" is oil consumption per hour. Consumption must not exceed the amount needed to complete the flight planned. For example, if you are burning a quart an hour then you must calculate the minimum oil needed for operation, maximum flight time fuel on board, and subtract the amount of oil to be consumed. Each engine is different, but on the smallest engines, at least two quarts are needed to keep running. Sounds kind of silly, but I actually have had this happen to a customer. Almost flying six hours, he ran out of oil and the engine oil pressure dropped to zero.

The other main reason to overhaul is the result of a bad compression test. The general rule is 60 over 80 as the acceptable minimum compression. This can vary because each manufacturer has set limits. While having lower compressions doesn't meant that you must overhaul the engine, it is normal to replace the piston rings. However, usually most owners have a complete overhaul. Other conditions like a cracked crankcase could raise a red flag, but generally, excessive oil consumption or low compression will indicate the need for an overhaul.

13 to 1 GLIDE RATIO

PROP STOPPED

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CIRCLE NO. 18 ON READER SERVICE PAGE

FAA: No Discernible Progress On Approving G100UL Avgas

(by Paul Bertorelli, AvWeb, July 15, 2022)

Despite promising to issue a full STC for G100UL avgas in May, the FAA still hasn't announced expanded approval for the fuel and the agency has declined to answer *AVweb's* queries on when the approval process will be completed. General Aviation Modifications Inc. completed test work on G100UL and submitted the STC test package earlier this year. Recall that a limited number of engines were approved for G100UL last summer during AirVenture. The test package submitted in February would expand the number of engines under an Approved Model List to virtually all the powerplants in the GA fleet.

After the expanded STC application was submitted, the FAA ordered a Technical Advisory Board review of the certification work done by the Wichita Aircraft Certification Office. The TAB report wasn't released by the FAA, but GAMI's George Braly told us it appears not to call for additional testing but asks GAMI to provide so-called issue papers to explain detonation testing protocol, engine endurance testing, materials compatibility, hot weather operations and use of an independent fuel specification not recognized by ASTM. Braly said with the exception of an independent fuel specification, all of these areas were addressed in depth during the STC program under FAA-approved testing methods.

Although the 100LL avgas is refined to meet the industry standard ASTM D910, the FAA's own guidance says an independent specification for fuels and oils is specifically allowed, Braly said. Further, language in the 2018 FAA Reauthorization Bill clearly allows fuels to be approved under STC.

Braly said the TAB also recommended that the GAMI project incorporate "lessons learned" in the FAA's aborted Piston Aviation Fuels Initiative, which terminated in 2018 after concluding that the two fuels it had examined—one from Swift Fuels and one from Shell—weren't suitable as drop-in replacements for 100LL. Shell has since stopped public work on a replacement fuel

and Swift exited PAFI. PAFI's findings, although supported with government funds, were not made public and thus weren't available to GAMI during its fuel trials.

GAMI began work on G100UL in 2009 and was almost five years into the project when the FAA announced PAFI in 2014. The agency invited GAMI to join the PAFI program but the company declined because the program didn't allow changes to fuel blends to meet test requirements during the program and because the FAA refused to credit GAMI for test work it had done in the four years prior to PAFI's establishment.

When we asked the FAA about the TAB's recommendation for issue papers on FAA-approved testing already done, the FAA declined to provide any details. "We do not comment on ongoing certification projects. The FAA has approved unleaded fuel for use in some aircraft. The agency continues to work with the general aviation industry and fuel suppliers to develop and test additional unleaded fuel options," an FAA spokesperson said.

GARMIN PILOT™ APP ADDS GRAPHICAL WEIGHT AND BALANCE

The latest version for Apple® mobile devices (v.11) features a detailed graphical layout of the aircraft's seating, cargo stations, fuel and more, based upon the weight and balance profile of your aircraft configuration. Passenger weights may be quickly added using customizable presets. In addition, frequent passengers and cargo items, such as luggage, may be stored in favorites.

Weight and balance syncs with your active flight plan to ensure calculations for VFR/IFR fuel reserves are planned and accounted for, supports the exporting of load sheets and more. The new graphical weight and balance is part of the Garmin Pilot Premium add-on subscription that can be downloaded from the App Store®.

On July 18th, 2022 the FAA decommissioned The Regulatory Guidance Library (RGL):

Special Airworthiness Information Bulletins (SAIB). The SAIB documents will change their naming convention from AIR-YY-## to YYYY-##

After this date, SAIB documents will only be available on the newly developed Dynamic Regulatory System (DRS). We have included a PDF instructional guide on how to locate SAIB information in DRS. Additionally, please use the DRS Help & Training page and the "DRS Feedback" button for any questions or issues you may encounter.

Users may subscribe to receive notifications about published SAIBs by navigating to the *FAA GovDelivery Service* and selecting any applicable categories. Any notification subscriptions you already have will continue without any needed action.

You can search the Dynamic Regulatory System (DRS) by clicking HERE SAIB Search Guide for DRS.pdf

INHOFE ANNOUNCES RETIREMENT

U.S. Sen. James Inhofe (R-Oklahoma), a tireless GA advocate, has announced he will retire at the end of 2022 after a long tenure of public service, including more than a quarter century in the U.S. Senate. CLICK HERE for more information.

SPORTY'S UPDATED FLIGHT GEAR BATTERY PACK ADDS FEATURES, CUTS SIZE

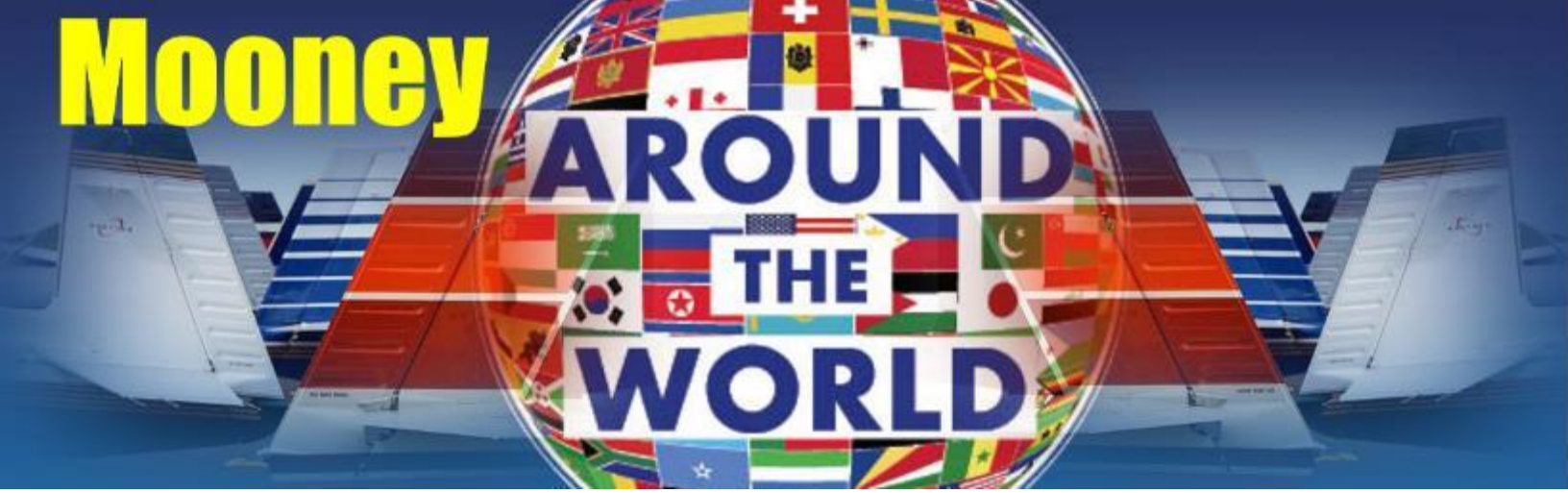
The Flight Gear Battery Pack is 20% smaller than the preceding generation and still just half an inch thick, but it still packs 20,000 mAh of power. That's enough to charge an iPad multiple times

It will charge with a micro-USB cable (common on thousands of devices, including many Android smartphones), a USB-C cable (found on Sentry and Stratus ADS-B receivers as well as MacBooks), or a Lightning cable (which works with iPads and iPhones). That means you'll almost always have the right cable to keep this battery pack charged, because you already own one.

This battery pack has even more of those than the previous version, and one of them is a Power Delivery port:

- One 3 amp USB-A port
- Two 2.4 amp USB-A port
- One 3 amp USB-C port (supports PD charging)

The Flight Gear battery pack is available now for the same price as the one it replaces ($79.99).



Florida Mooney Lunch Group	*Contact Dave at daveanruth@aol.com or (352) 343-3196, before coming to the restaurant, to have an accurate count. Events begin at 11:30* Aug 13: Okeechobee (**KOBE**) Sep: Vero Beach (KVRB)
MOONEY SAFETY.COM	**2022 Events** Sep 16-18: Oshkosh, WI (OSH) Oct 21-23: Redding, PA Sign Up at https://www.mooneysafety.com/ppp-registration/
MOONEYSUMMIT	**Learn more at** https://www.mooneysummit.com/
Australian Mooney Pilots Association	September 9-12: Spring Fly-In to Merimbula – More details later **Learn more at** https://www.mooney.org.au/
EMPOA	**Learn more at** https://www.empoa.eu/index.php/en/
Other Mooney Events	

TMF PRODUCT REVIEW

Roll-Up Organizer

A new roll-up organizer from Flight Gear is a simple but surprisingly helpful tool to combat this disorganization. It includes four sections, with a combination of organization features specifically made for different items.

- Two mesh zippered pockets are sized for cigarette lighter plugs or small adapters
- Six elastic straps keep your charging cables secure and tangle-free
- Two larger pockets with elastic tops offer quick access to wall charging plugs
- A full-length, zippered mesh pocket is perfectly sized for backup battery packs

This goes for $19.95 and is invaluable for any Mooney trip. CLICK HERE to order.

Parts for Sale

Item for Sale

Call Tom 303-332-9822

New Hartzell Propeller Hub HC-C2Y (K, R)-1 Serial CH41782B
This hub will comply with AD2006-18-15 and superseded by AD2009-22-03
This AD affects many IO-360 aircraft.
Current Hartzell price is $4,275.

Price $3,999

This Cowling was removed from a M20E and replaced with a M20J (201) cowling. The cowling is located at Fullerton Airport (KFUL) and is in excellent condition. Offers accepted.

Contact: Bernard Lee – leebern@msn.com (562-865-2547)

P/N 310309-501
P/N 310309-502

These fairings are new and priced @ $280.00 each or $525.00 for both. Priced elsewhere @ $362.69 each.

Contact: Bernard Lee – leebern@msn.com (562-865-2547)

Bushing P/N 914007-003 - 2- Bushings in the original package @ $35.00 each. Priced elsewhere @ $45.00 each.

Bushing P/N 914007-005
1-Bushing in the original package @ $59.00
1-Bushing loose @ $50.00
Priced elsewhere @ $69.00 each

Contact: Bernard Lee – leebern@msn.com (562-865-2547)

Access Covers P/N 3000-901 (2-available) - 1-without nuts attached.
Make offer. Contact: Bernard Lee – leebern@msn.com (562-865-2547)

Lightspeed Zulu 2 Headset with case. It was used only once by my grandson on one of my flights. Like new.

Asking $450.
(Original price was $850)

Contact:
Wayne Castner
salwayc@q.com
623-203-3234


Rusty Pilot or Old Pro
INSTRUMENT PROFICIENCY CHECK
Study Guide
J D Price, CFII, MEI, ATP
FLIGHT REVIEW
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