

The Mooney Flyer

The Official Online Magazine for the Mooney Community
www.TheMooneyFlyer.com

April 2024



Editors

Phil Corman | Jim Price

Contributors

Jerry Proctor | Tom Rouch | Richard Brown | Parvez Dara | Terry Carraway

Departments

Editor on the Loose – *Nobody Asked; just our Humble Opinion*

Mooney Mail – *Feedback from our Flyer readers.*

Ask the Top Gun – *Tom Rouch answers your questions*

Product Review – Study Guides by Jim Price

Upcoming Fly-Ins – *Fly somewhere and have fun!*

Have You Heard? – *This month's Relevant GA news & links*

Mooney CFIs – *The most comprehensive listing in the USA*

Features

[Airspace & Staying Out of Trouble](#) by Jim Price

[The Pilot's WINDOW of DISCOURSE](#) by Parvez Dara

[Hey Toto, I Don't Think we are in VFR](#) Anymore by Phil Corman

[I Just Needed 3:51 to get to 1,000](#) by Richard Brown

[A Fool's guide to flying South America](#) by Don Peterson

[How Safe Are Your Safety Belts?](#) By Terry Carraway

[To Go or Not to Go](#) by Jerry Proctor

[Circling Approaches](#) by Tom Huff & Mario Jemenez



If you love **The Mooney Flyer** and want to keep it healthy, just click on the "Donate" button.



Subscribe and we will email you we publish a new issue.



Find all the back issues (starting in 2012) or use our powerful search engine to find a past article.



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



Mooney Flyer Fly-in to KPRB, June 28-29

We are hoping to make this the largest Mooney event of the year. [CLICK HERE](#) for more information.

[CLICK HERE](#) to Register (It's FREE). Here's some new information:

- Save \$1.20/gal on 100LL by getting Self-Serve prices from the truck
- Rent a car from Enterprise by calling ACI Jet at (805) 596-0212, They will have your car delivered to the airport. You can also call Enterprise directly at 2111 Golden Hill Rd, Paso Robles, CA 93446 (805) 239-0628. Or, you can download the TORU App which is akin to AirBnB for car rentals.

➤ Hotels:

- Hampton Inn: \$309 / Two Queens & \$319/ a King
- Courtyard: \$209+
- Adelaide: \$255/night plus taxes
- La Quinta: 279.00 (Fri) 309.00 (Sat)

Many others are finding their own hotels in Paso Robles or elsewhere and/or using AirBnB or VRBO.

Special Offer: The first 50 signups will get dinner at Cool Hand Luke, for FREE.

Special Offer: The person who has referred the most signups will get 2 FREE passes to Sensorio

Please Donate to The Mooney Flyer (Click Here)

This is our last month of our Donation Drive. Thanks for participating.

Welcome to Our New Author – Don Peterson

My father was in the USAF during WW2 but was busted out of flight training due to going AWOL to ask my mom to marry him. Being a scoundrel runs in our family. I began flying lessons in 1978; license in March of 1979.

I bought my Mooney in late 1979 with 79 total hours in my logbook, including instruction. I've logged over 4,000 hours in the Mooney (didn't bother logging everything). Since ownership, I just installed the Mooney's fourth engine.

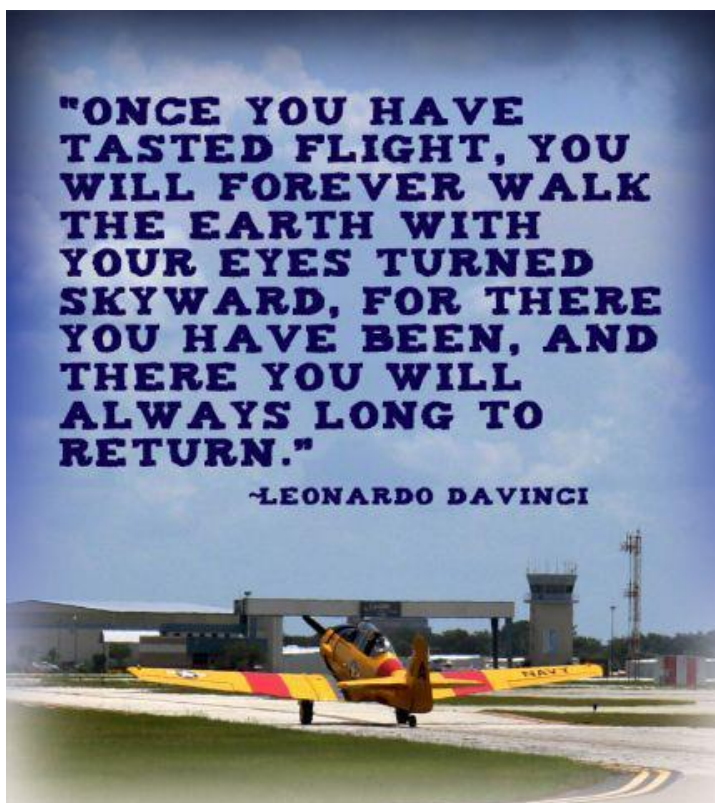
CSEL – SES, C-Glider, IFR, CFI/CFII. A&P and IA.

I have restored two Stampe SV4C biplanes, my wife's favorite plane. She taught me to fly a tailwheel. Her mother was one of the first 28 WAFs during WW2, and her dad was an acceptance test pilot during the war.

Aircraft owned: Mooney M20E, Cessna 170B, which came with wife, RIP, Luscombe 8A, Starduster Too, Zlin 50L, Stampe SV4C (2), and PA18 Amphib.

I served eight years on the US Advanced World Aerobatic Team and competed in four world championships; Germany, Slovenia, Sweden, and Poland. One European championship was in Sweden. I competed in half dozen or more Coupe d'Anjou aerobatic competitions in Angers, France. This was an event solely for the Stampe SV4. I won three years in a row, 1998, 1999, and 2000. The French were not pleased.

Currently living in Manizales, Colombia, nestled in the Tres Cordilleras of the Colombian Andes.



The Mooney Roundup Fly-In Event in Paso Robles, KPRB, on **June 28-29**



Our last Paso Robles fly-in had 54 Mooneys, more than 125 attendees and included a FREE Tri-Tip BBQ.



This year we plan to blow out this event with the following activities:

Friday Evening: A Wine & Beer event in our hangar for everyone to meet & greet old and new friends. Plus, a short but entertaining presentation by The Mooney Flyer team. In addition, this event is FREE

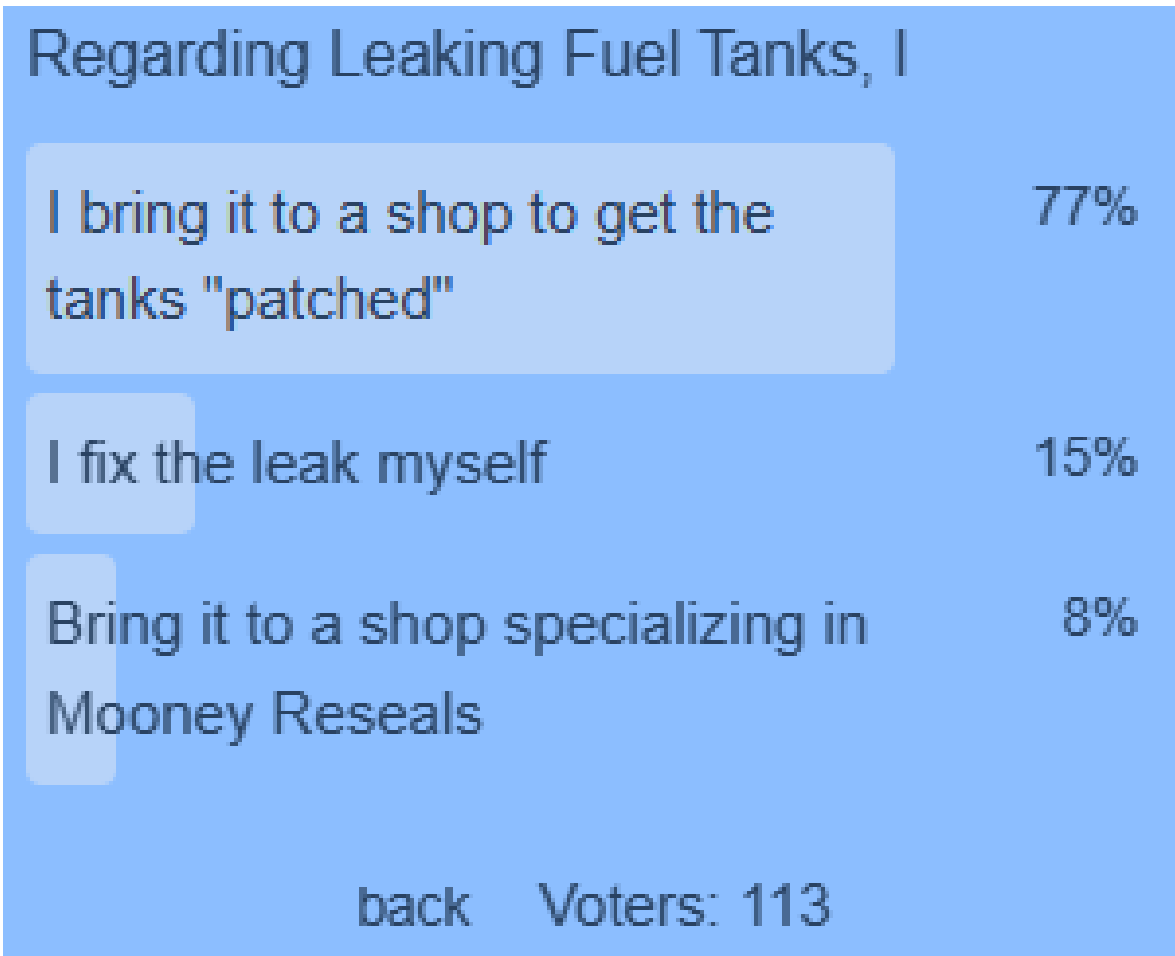
Saturday Morning: Hang out on the ramp and greet the Saturday morning arrivals while you admire each other's Mooneys.

Saturday Mid-Day: Lunch and a few more presentations including our very popular Mooney Destinations presentation, given in the perspective of the pilot's and passenger. The pilot talks about the airport, the FBO, etc. and the Passenger talks about hotels, restaurants, shopping and things to do. There is something for everyone. The other presentation will be a special guest and you don't want to miss it.

Saturday Afternoon: Free time. You can visit the [Estrella Warbird Museum](#) (on the airfield) and/or we will arrange for Wine Tasting at 3 wineries.

Saturday Evening: Dinner at [Cool Hand Luke's](#), Followed by an AMAZING visit to [Sensorio](#), a one of a kind place.





Next month's poll: "My Level of Concern Over Mooney Parts Availability"

[CLICK HERE](#) to vote



Need a Mooney CFI?

to find one

CLICK
HERE



You can also go to <https://themooneyflyer.com/> and click on CFIs – (located in the top menu).

You can also click on the CFIs icon, found in the website's right column menu.



CFIs can list their name and contact information on our website. To modify your current CFI listing, send an email to TheMooneyFlyer@gmail.com

Be sure to include your home base and state.





mail

Letters to the

EDITOR

TheMooneyFlyer@gmail.com



*A SUPERIOR AIRPLANE
DESERVES SUPERIOR SERVICE & SUPPORT*



HOME OF THE MOONEY PREDATOR

Don Maxwell Aviation Services, Inc.

Maxwell Avionics

Repair station for 91.411 and
91.413 IFR Certifications

Custom Mooney Paint

Custom Interiors

Monroy Long Range Tank STC

Mooney Warranty Work
Lycoming Service Center
Continental Motors TCM Link FBO Services

AMSAFE AAIR certified

All Inspections and Annuals

Pre-Purchase Inspections

Major & Minor Repairs

Fuel Tank Repairs

Modifications

All glass replacement

Corrosion X Treatments

Washing, waxing & detailing

American Airlines on the field

Car rental on field

Wireless internet for customers

Pick-up & delivery of your Mooney

For an exclusive Mooney Service Center

903.643.9902

or visit www.donmaxwell.com

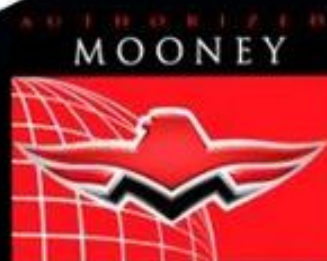
Northeast Texas

East Texas Regional Airport - KGGG

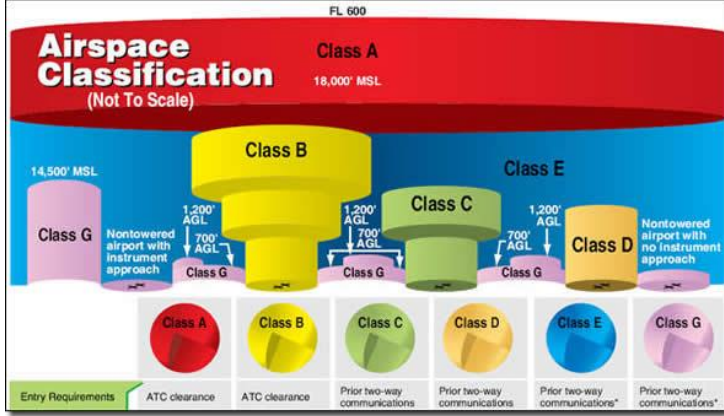
390 Central Road -- Longview, Texas 75603

www.donmaxwell.com

Find us on 

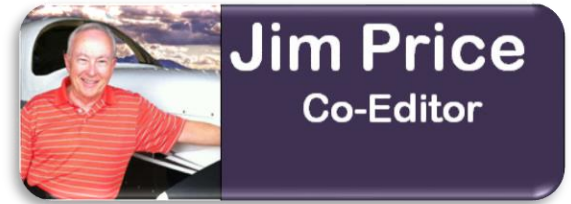


SERVICE CENTER



er 4

April 2024



Airspace and Staying Out of Trouble

Every day, pilots in the United States violate airspace and hear those depressing words, “Call (the controller’s telephone number) when you land.” This notification is known as The Brasher Warning, and is given to let the pilot know he or she has goofed up and when he or she gets a call from the FAA, they will remember when and where they goofed up. It’s named after Jack Brasher, who was a former chief pilot of an airline and Major General in the Arizona Air National Guard. Jack was training a new Republic Airlines first officer in



Maj Gen Jack Brasher

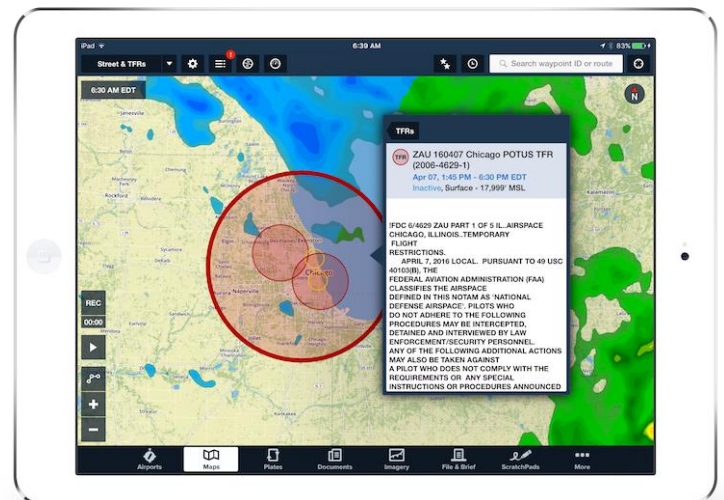
1985. (Republic was purchased by Northwest Airlines in 1986). He received a notification from the FAA stating that several months ago, he and the first officer had violated an assigned altitude by 700 feet and he was now being violated. Jack went to court against the FAA and the court ruled that the FAA needed to make some type of notification soon after the violation so pilots could remember the incident.

The FAA issues the Brasher Notification to pilots when there is a possibility of procedural non-compliance. The goal is to gather information in a matter-of-fact way and learn from deviations to enhance safety.

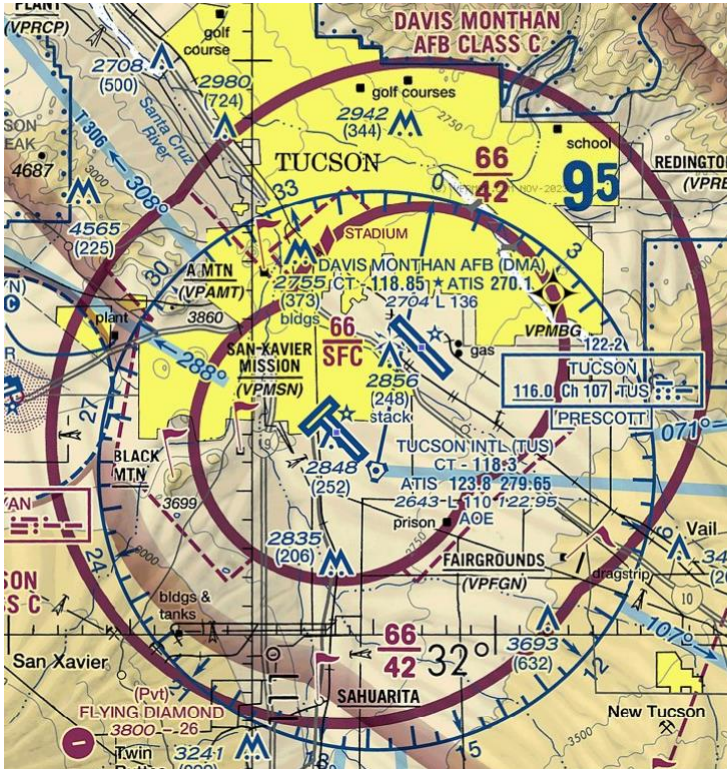
After a Brasher warning, the violation usually evolves into an FAA designated CFI giving that pilot some training. In Arizona, there are on average, 10 to 20 airspace violations each month. Most pilots who violate airspace seem to be oblivious to the fact that they had lost situational awareness. If they had been monitoring their position in

relation to airspace with an ADS-B IN receiver, an iPad, and an app like ForeFlight or Garmin Pilot, one would think that they would be able to avoid flying into an active Temporary Flight Restriction (TFR), Restricted area Prohibited Area, Class B, C or D airspace. Let’s review the different airspaces. We can have fewer *Homer Simpson* pilots and develop the most knowledgeable *Mooney* pilots on the planet.

D’oh!



Class C Airspace Quiz



1. You want to enter Tucson’s Class C airspace and after calling the appropriate approach control frequency, the Controller replies, “Aircraft calling Tucson approach, standby.” Are you cleared to enter Tucson’s Class C airspace?

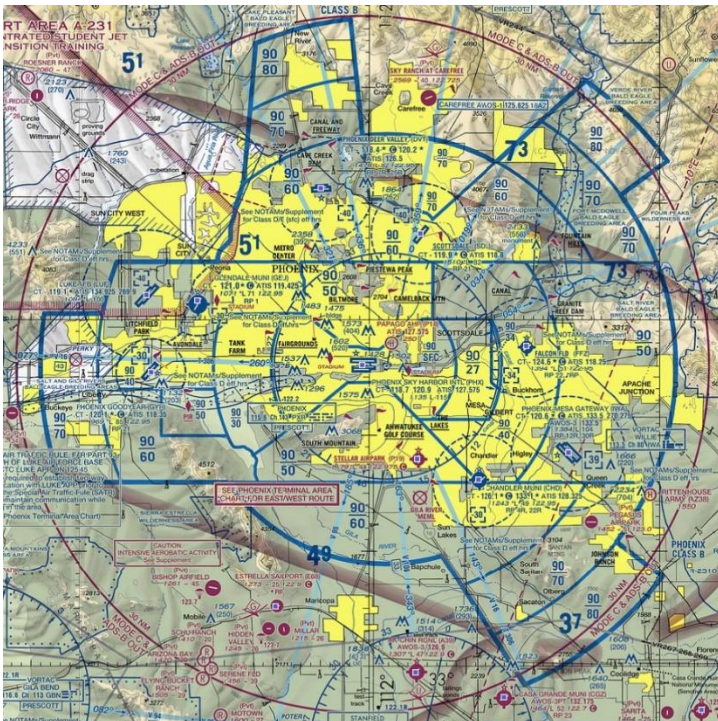
- a. Yes
- b. No

The answer is No. To Enter Class C VFR:

- You need to establish contact with ATC and the controller needs to acknowledge you with your call sign.
- “Mooney 7462Q, standby,” is an acknowledgement. Note: The words, “Cleared to enter Class C airspace” are not required.
- “Aircraft calling Tucson approach, standby,” is **NOT** an acknowledgement!

Note: Mode C and ADS-B Out is required in and above Class C airspace.

Class B Airspace Quiz



2. You want to enter Phoenix’s Class B airspace and after calling the appropriate approach control frequency, the Controller replies, “Cleared into class B.” Are you cleared to enter Phoenix’s Class B airspace?

- a. Yes
- b. No

The answer is Yes. When VFR, to enter Class B: You must hear the controller say, “Cleared into class Bravo.”

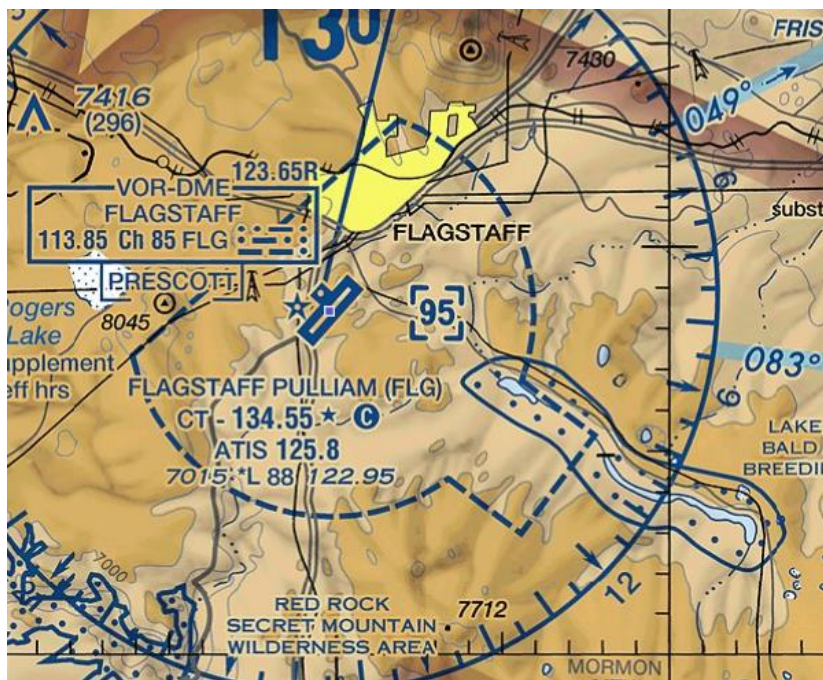
3. You are approaching the 30 nm Class B veil and you do not have ADS-B Out installed in your aircraft. Can you enter the veil even if you don’t plan to enter Class B airspace?

- a. Yes
- b. No

The answer is No. A Mode C TRANSPONDER & ADS-B OUT IS REQUIRED:

- In Class A airspace
- Within 30 nm of the Class B primary airport (The CLASS B VEIL)
- In and above Class C
- When operating above 10,000 MSL, (excluding the airspace below 2,500 AGL).

Class D Airspace Quiz



4. You want to either transition Flagstaff’s Class D or land at Flagstaff. You call, “Flagstaff Tower, Mooney 724 Victor, 10 miles southeast, landing. The controller replies, “Mooney 724 Victor, standby.”

Can you proceed and enter the Class D airspace?

Yes

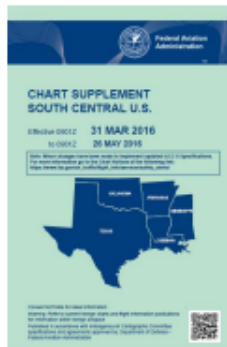
No

The answer is Yes. Two-way communication with ATC must be established. If the tower controller responds to your call, “Mooney 724 Victor standby,” you’ve established two-way communication.

If the controller responds with “Aircraft calling tower, standby,” a two-way communication has NOT been established.

Note: A transponder is NOT required to enter Class D airspace if the airport is not located

within the 30 nm Class B veil. When the tower is closed, Class D airspace becomes Class E or class G. Check the Chart Supplement.



CLNC DEL 123.725 For clnc del when twr clsd call SOCAL Apch 800-448-3724
 (R) SOCAL DEP CON 119.6

AIRSPACE: CLASS D svc 1400-0500Z± other times CLASS G.

VOR TEST FACILITY (VOT) 109.0

RADIO AIDS TO NAVIGATION: NOTAM FILE SAN.

NOTE: A class G reversion occurs if, after the tower closes, the airport ceases to provide an official weather report.

Class E Reversion

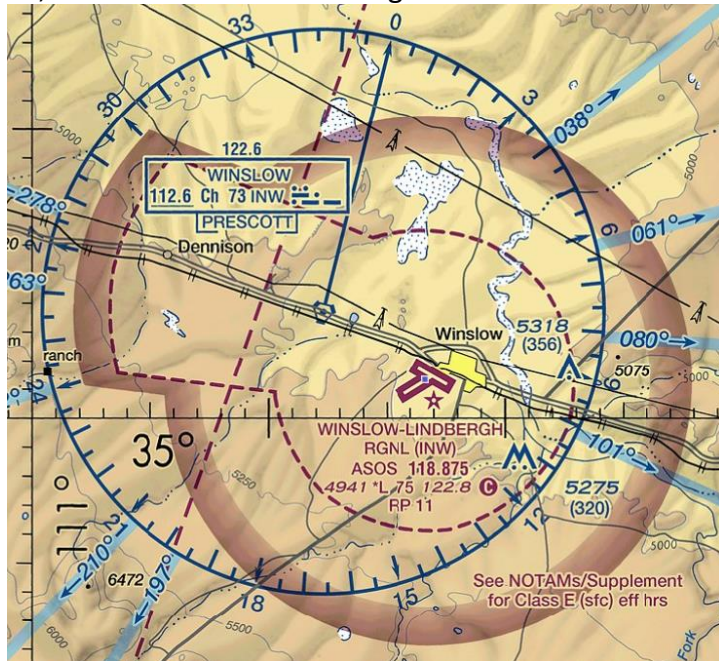
Class D airspace requires a visibility of 3 statute miles and a cloud clearance of 500’ below, 1,000’ above and 2,000’ horizontal. Reverting to Class E would not change the visibility or cloud clearance required.

Class G Reversion

During daytime, a Class G reversion will mean a change in visibility and cloud clearance requirements which are 1 mile visibility and remaining clear of clouds. However, at night, the Class G visibility and cloud clearance required is the same as Class D and Class E.

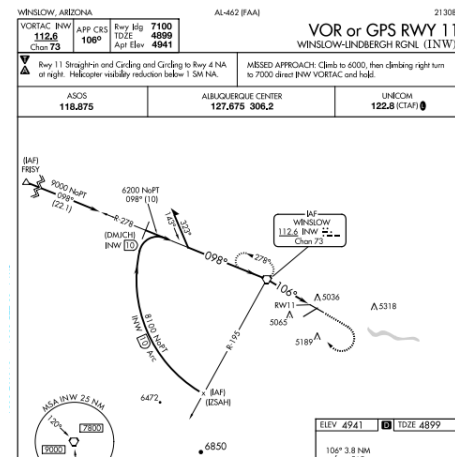
Class E Airspace at some Uncontrolled Airports

Class E starts at 700 feet AGL, when it's depicted by a magenta-tinted vignette, and continues to 18,000 feet MSL. The hard edge is the extent of Class E where it abuts Class G airspace.



At some, but not all uncontrolled airports with an instrument approach, Class E that is depicted by a magenta segmented line starts at the ground. This protects aircraft that are arriving via an IFR approach.

If you currently do not have a moving map display with an ADS-B IN receiver, resolve to do so NOW. The airspaces we fly in are extremely complex and



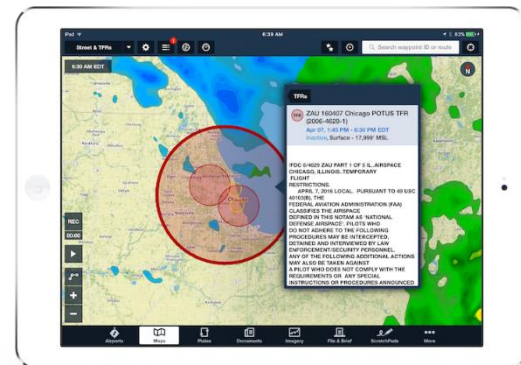
require constant attention.

TFRs: VIP, Fire Fighting and Sporting Events

There are two basic types of VIP TFRs:

1. Presidential, reserved for use in association with Presidential movement,
2. Vice-Presidential, used for Vice Presidential movement or movement by other lower-ranking government officials.

TFRs can be a surprise because they are generally not made available to the public until two or three days before the event. VIP TFRs are normally set up as one or more rings of airspace, surrounding the VIP, which become active for a specific amount of time. The normal arrangement is to have one ring covering the VIP's arrival and departure location(s) and another covering the area where the VIP will be between arrival and departure. While these rings are stationary, there are occasions where "rolling" TFRs are created to accommodate a moving event, such as one involving a train or bus.





Adding to the element of aviation surprises are the ever-popular Firefighting and Sporting Event TFRs.

If you do not have a moving map and an ADS-B IN receiver, TFRs can lead to a counseling session with an FAA CFI.

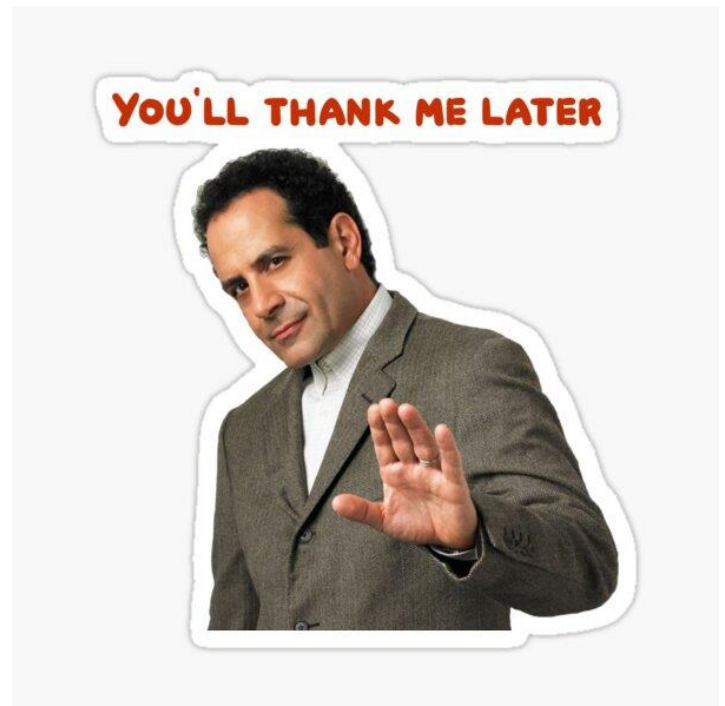


Most, but not all pilots try to learn from their mistakes. I knew a Mooney pilot who violated a Presidential TFR while flying in California from Long Beach to Fullerton. At Fullerton, he was met by law enforcement and then lovingly surrounded by the Secret Service. He was not allowed to leave the cockpit for several hours. You would think that his error and horrible experience would be so indelibly etched in his brain, that he would find a way to never let it happen again. However, a few months later, he violated another VIP TFR. This time he was not intercepted by a flight of F-16s, nor was he surrounded by the Secret Service upon landing. After his second trip up, he did not have a third VIP TFR violation.



Reflect on the past and things that you have learned. Resolve to be a great pilot.

Fly Safe, Jim

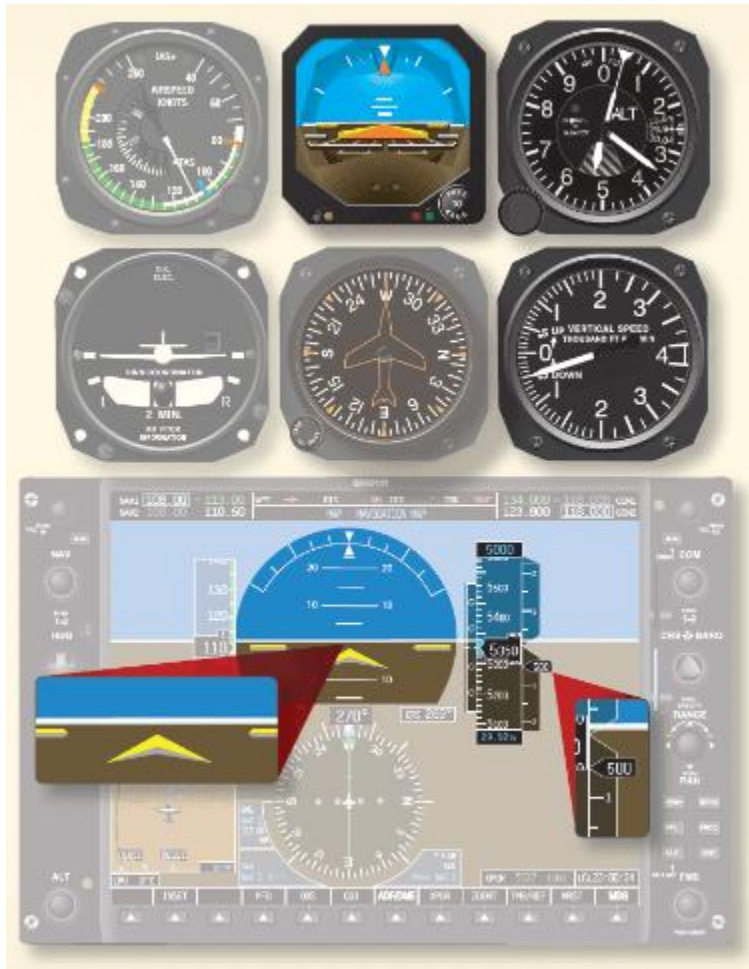


Hey Toto, I Don't Think we are in VFR Anymore



Phil Corman

Co-Editor



One of the deadliest encounters is the inadvertent flight from VFR into IMC, (Instrument Meteorological Conditions). These encounters frequently result in fatalities.

Clearly this is an emergency and you should treat it that way.

Also, if you are IFR certified, you are probably thinking that this article does not apply to you. However, the NTSB data indicates that IFR rated pilots also have a difficult time surviving inadvertent flight into IMC while VFR.

The First Step:

The first step includes three things; Aviate, Aviate, Aviate. You're thinking that this is obvious, but in an emergency, you need to force yourself to do this.

The Second Step:

The second thing to do is to transfer all of your attention from looking outside the cockpit to looking at your instruments.

Remember to watch your instruments exclusively and don't peek outside the cockpit or take your eyes off the instruments. Your internal balance system will fail you every time. Rely on your instruments.

When I was getting my Instrument training, my instructor had me peek outside the cockpit while flying in IMC. It was disorienting, especially in a cloud. But when maintaining my focus on the instruments, I was fine.

If you simply entered a cloud, then now is a good time to make a standard rate 180° turn back out of the cloud. If you entered icing, the same maneuver is also useful. It is a little trickier to figure out another way out of the ice, such as climbing above it, or descending below it. Returning to the no icing environment is safer.

Flying at night, where there are few or no city lights, it essentially becomes IMC.

Step 3: Autopilot

If you have an autopilot, now would be a good time to engage it. Even just a wing leveler could save you and your passengers.

Step 4: Declare an Emergency

Contact ATC on 121.5MHz and set your transponder to 7700. I always like to do VFR Flight Following because if I ever encounter an emergency, I am already talking to a controller. It's one step closer to help. Declare an Emergency immediately. Hesitation to declare an emergency is a real problem. Many pilots delay declaring an emergency until the most serious of



situations, because there's a perception of heightened pressure or paperwork awaiting you on the ground. This is life threatening. The FAA defines an emergency as "a distress or an urgency situation." According to the Air Traffic Control guide, "a pilot who encounters a distress condition should declare an emergency by beginning the initial communication with the word 'Mayday,' preferably repeated

three times. For an Urgency condition, the word 'Pan-Pan' should be used in the same manner."

There are other benefits of declaring an emergency. According to FAR 91.3, "In an in-flight emergency requiring immediate action, the pilot in command may deviate from any rule of this part to the extent



required to meet that emergency." Speed restrictions? Gone. Airspace procedures? Gone. IFR clearance limits? Gone.

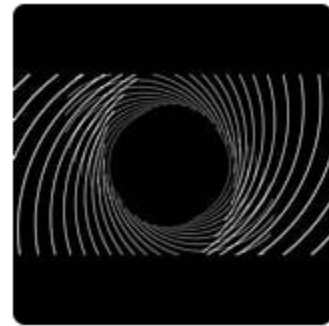
Controllers then provide you with priority service. The first priority for controllers is to separate you and other aircraft from terrain and traffic. Next, you'll be the primary focus as an emergency aircraft. If the emergency is critical and you're on a congested frequency, ATC may have you switch over to a secondary frequency dedicated just to you. Controllers are careful in doing this because they try to avoid making communications mid-flight while you're busy managing the aircraft. When the situation is critical and the frequency is busy, getting you onto a special frequency is one tool they can use.

Another strategy ATC can use is adding a second controller to your sector. While one controller handles normal traffic flow, the second controller may focus solely on you. According to the ATC Facility we spoke with, they will do this the majority of the time if staffing allows. This is a great resource to you as a pilot.

Ongoing Flight

Flying in IMC, especially in a cloud, is a little tougher since sometimes you are in, then out of the cloud. This can be disorienting. Rely on your Artificial Horizon, your Airspeed, and your Turn Coordinator. As you know, you should NOT rely on a single instrument. Why? Because if it is failing or has failed, you are hosed. Your Artificial Horizon and Turn Coordinator will assist you in keeping your wings level. Your Artificial Horizon and Airspeed will let you know if you are climbing or descending, and so on. Night flying also can present IMC conditions.

A visual illusion known as "**black hole effect**" is another inherent risk of night visual approaches. Black hole conditions exist on dark nights (usually with no moon or starlight), when there are no ground lights between your aircraft and the runway threshold.



Summary

Whether you are VFR-only or IFR-certified, inadvertent flight into IMC usually results in a crash in less than two minutes. Furthermore, it usually includes fatalities.

What to do? Condition yourself to transfer to your instruments fully 100%.

It might be useful to go up with a CFI who can drop the foggles on you without warning.



Plan Now to Become a Safer Pilot in 2024

Attend a Mooney Pilot Proficiency Program. Visit [MooneySafety.com](https://www.mooneysafety.com) to learn more.

You can register at <https://www.mooneysafety.com/ppp-registration/>

You can also email [Lela Hughes, lelahughes49@gmail.com](mailto:lelahughes49@gmail.com) or call [830-315-8008](tel:830-315-8008).

Ocala, FL, January 26 – 28

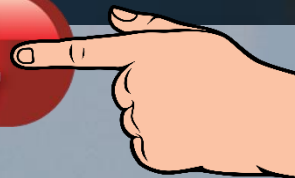
Santa Maria, CA April 5 – 7

Owensboro, KY June 21 – 23

Burlington, VT September 6 – 8

Dallas Ft Worth, TX Oct 18 - 20

**Click Here
To Register**



I Just Needed 3:51 to get to 1,000

By Richard Brown

Time is an interesting thing. Although it passes at the same rate, second by second, minute by minute, hour by hour; the perception of time changes constantly. When I was a kid, it seemed like almost everything took an eternity. Waiting for a friend to get home to go play. Waiting for a birthday



or Christmas to arrive. Waiting for class to end so I could go outside and play. Then, there were other times when it flew by, like when Saturday morning cartoons came on, before the days of cable TV, it seemed like they were over as soon as they started.



I've mentioned before that I had always dreamed of flying. When the Air Force, facing a surplus of 2,500 pilots in 1994, decided to almost eliminate all AFROTC pilot slots completely, I dropped out of AFROTC and thought that the dream was dead. A wonderful wife and some incredible blessings brought that dream to reality in 2016 and on

October 15th of that year [I passed my Private Pilot Check Ride.](#)

At the time, 1,000 hours seemed like an eternity away. But, like anything else that seems overwhelming, I just took it one step at a time. When I sent my family the picture of me passing 1,000 hours, one of my sisters texted back, "That's an incredible accomplishment!" I replied, "Thanks! Like eating an elephant, one bite at a time. Just more fun."

When I landed in Pagosa Springs, I was at 996.15 hours, I needed 3:51 to cross the line. Normally that would be a given flying home, but the forecast was for tailwinds and there was a slight chance I would come in under the required number. Yes, I could pull back on the power and fly slower, but that seemed like cheating, and perhaps blasphemy, in a Mooney.

I did cross the line of 1,000 hours, but it didn't come easy and would require some sound decisions learned over the previous 996 hours.

My son had flown into Durango from Idaho Falls and because I hadn't booked the return flight early enough, the only flight left was a 6:00 am departure. Under normal road conditions, it is a one-hour drive from our place. It was going to be an early start to the day.

The alarm went off at 3:00 am and everyone rolled out of bed. We were on our way by 3:20am and it was a good thing we had an early start. It was snowing heavily. We were the only car on the road. There were no plows yet, and two inches of snow had already accumulated. If you have never driven in heavy snow in the dark, it is mesmerizing the way it comes toward you in the headlights. The only way to see where you are on the road is to follow the reflectors along the side. We muddled along at about 25-30 mph for about the first 30 miles of the trip, until we came to a section where a plow had been working.

Finally, we got past the falling snow and could maintain a more respectable 40 mph, but the trip there took an hour and forty minutes. We said our goodbyes and started home. Thankfully, the plows had worked the highway all the way back, and at 6:30 am my wife and I went back to bed. I needed more sleep. Never fly when you are tired.

When I woke up at 8:30 am, it was still snowing lightly. The forecast the day before had said the snow would end by mid-morning. I got on my computer and checked again. There were no changes. In theory we should be able to depart by midday.

After getting the house ready for our departure, I drove over to the airport to clean off the plane. I had wiped snow off it every evening since our arrival, so an ice layer wouldn't form overnight. I arrived to find about 2-3" of snow on the plane. With a slight nudge, sheets of snow slid off the wings like a small avalanche breaking free. I left the engine heater plugged in and went back to the house. The skies were looking great; broken to overcast, but high enough to fly.



We drove back to the airport, loaded up the plane, grabbed the crew car to take our car back to the house, and it started snowing again. I commented to my wife that we had missed the window to depart, and now would have to wait again. Back at the FBO, we settled into the couches, looking out the windows as the snow fell. After about 20 minutes, the sky started getting lighter, the sun was fighting to break through, and then, as quickly as it began, it was over. You could see for miles to the south.

I knew from the forecast and the current conditions along the route that if we could get out of Pagosa, past the mountains we would be able to work our way around any other scattered snow showers as flew west. A Cirrus had been playing the same waiting game and we departed right after him. Normally, we follow the valley to the southwest, past Chimney Rock. As we lifted off I could see snow flurries reducing visibility in the valley. To the south I could see at least 30 miles under the layer. On the fly (literally), I decided to proceed south before heading west. Flying past the mouth of the valley, I could see the landscape fading away into the snow. Make a plan, but be willing to change it when situations change.



We stayed at 8,500' to keep below the broken layer, dropping down to 7,000' as we passed Ship Rock. I kept glancing up at the holes in the clouds. There were places big enough to climb through, but I couldn't tell if we would be in the clear once on top. There were glimpses of bigger clouds up ahead.



Once we were over the [Chinle Valley](#), the skies cleared up and I climbed to 10,500', but it was short lived. Off in the distance there were some buildups that I wouldn't be able to top, so we started back down again. I usually fly north of Flagstaff and Mt Humphreys, but the dark clouds combined with the FIS-B radar picture pointed us to the south side of Flagstaff. Again, this was a deviation from the plan to go around weather that wasn't supposed to be there, according to the briefing forecast.



The deviation required another change, as I looked at the elevations of the terrain ahead. On the more northern route, 8,500' is plenty of terrain clearance. South of Flagstaff it would be less than 1,000' of ground clearance, or being in danger of flying into the side of Mormon Mountain at 8,768' or Hutch Mountain at 8,532'. If the clouds ahead didn't break up enough, we would have to divert even further south and I would be looking for a fuel stop before we got home.

As we got closer to what I had chosen as my decision point, we came out from under some clouds and up ahead it thinned out into some random puffies with plenty of space in between. This was perfect. Back up to a comfortable 10,500' we climbed and did a slow slalom through the gaps in the clouds; passing Sedona, and then once again pointing the plane west. To our right were snow showers drifting down from the clouds, painting a beautiful portrait with the red rocks jutting up from green hills, reaching toward the clouds above.



The combination of multiple altitude changes along with course deviations was more than enough to push me over the 3:51 mark needed for 1,000 hours total time.

Just before beginning our descent, as we flew through the Banning Pass, I held up a piece of yellow paper from my knee board that I had written "1,000 Hours" on with a sharpie and took a selfie with my wife. I think she has been there for probably 700+ of those hours.



Just as with Saturday morning cartoons as a kid, it seemed like 1,000 hours would never get here. Looking back, I can't believe it has already come and gone. Here's to another 1,000 hours and the adventures that will come along the way.

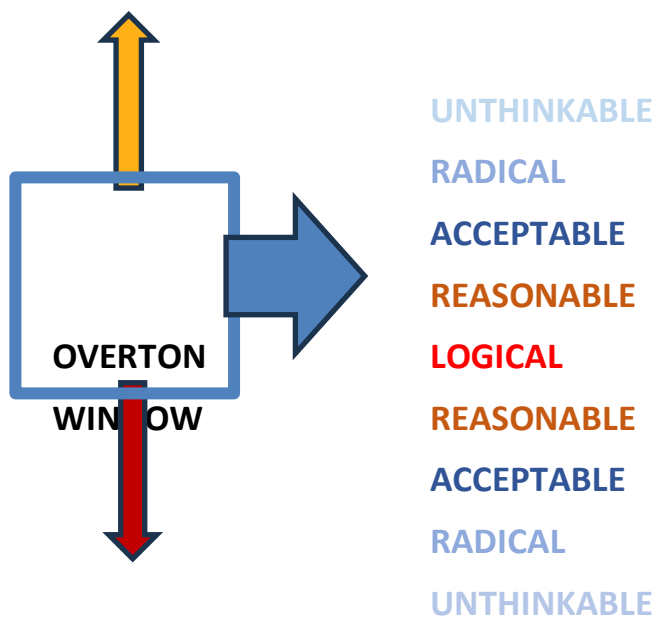


As always, thank you for taking the time to read. If there are things you would like me to write about (or not write about), or if you just want to say hello, drop me an email at richard@intothesky.com. If you're ever in Southern California and want to meet up let me know.

The Pilot's WINDOW of DISCOURSE

By Parvez Dara, MD ATP, MCFII, MEI, Gold Seal, BPPP Instructor

This window of discourse got me thinking about our understanding as it relates to aviation and specifically to flying. A brief encounter with the window suggests that thoughts, understanding, and reasoning go through a continuous phase transition leading to a frameshift of our comprehension of the worldview and our place in it. There is a wilderness of possibility inside of us, that invokes curiosity and hopefully some humility within. Thus, begins the journey through our Overton Window with the ensuing examples below.



The Vascular Surgeon

Several years ago, a vascular surgeon friend of mine juiced up on adrenaline, was spending many hours in the operating room day and night and wanted to go up for a flight. I accommodated his desire, and we flew in my Mooney M20M for a 100nm hamburger. Upon our return, we saw a beautiful sight of multicolored balloons in the air against the blue sky. The tiny white patches of clouds in that backdrop were spectacular to my view. After landing, I asked him how he found his introductory flight? His answer was interesting. He said, "Is that all there is to it?" I asked him. "What more are you looking for?" "Oh, you know some loops and rolls and better speed." Hmm, I thought, this dude better stick to driving his Corvette. His Overton Window was stuck and shaded. Thrill seeking is fraught with hazards within any occupation. Perhaps he needed an outlet from the stressors in his professional life, but aviation was probably not the correct one.

The Simulator

Before I was certified as an instructor, I was invited into a Falcon 20 simulator for a virtual flight. I hastily agreed. After all the preliminaries and in full command of the cockpit, my instructor, and I, took off on a short sim flight from Teterboro, NJ to Norfolk, VA at 15,000 feet. So, there I was, hand-flying this simulator. Soon my arms were sore from the tension of keeping the heading and the altitude within the 100-foot tolerance, and we were barely over the southern tip of New Jersey. I was riding the artificially created scattered cloudy sky like a dolphin. After a while, the instructor took pity on my condition and simply showed me the wonders of a trimmed aircraft in level flight, and all the tension disappeared! My Window had transitioned to a new reality. Thus began my journey in educating others.

The 360s

The other day, flying in the right seat of an M20J, I asked the pilot to do 360° left and right turns using 45° of bank. It was difficult for him. I then showed him the manual trim and its magic of controlling the yoke with a thumb and forefinger while the aircraft merrily and without changing its pitch kept flying without much intervention. His moment of “Aha” had arrived and I could see the tension disappear and the smile at the corners slowly filling in the gap of his understanding. “This is so neat!” he exclaimed. Indeed, it is. I have done countless such demonstrations, and each pilot is rewarded with a sense of happiness to be one with the aircraft. Thanks to a patient instructor in a simulator a long time ago.

By the Numbers

Another Window that, after two hours of flight in a Mooney TN, had remained unmoving and stuck at “acceptable,” based on old information for its owner and operator, suddenly shifted to “logical and reasonable.” Although I did not quite see it then, it was obvious later. I had the pilot climb 1,000 feet and simultaneously do a 360-turn arriving at the designated heading at the right altitude. He started the procedure by pulling on the yoke and zooming up 200 feet with a 25 MP and 2500 RPM. The chase was on. It reminded me of the ILS approaches that many Instrument-rated pilots do, “chasing needles” when they fly, oblivious of the “Flight by the Numbers.” Getting back to our pilot who made a butchery of the turns while his feet remained planted on the floorboards and his hands teased the yoke mercilessly, making the aircraft groan and moan. With each passing dip and rise, the breakfast with milk was probably a milkshake in my stomach. After he was done, seemingly satisfied in his performance, he asked, “What else?” I looked at him and said, “That was pretty good, but what parameters were you using to do the procedure?” He looked with a frozen expression on his face back at me as if I had grown a Medusa’s head. I explained the basics to him and asked him to try again. He was a quick study and performed much better. I could see the smile on his face, his Overton Window had moved.

You might ask, what did I tell him? Simple really. I asked him how many minutes does it take to do a 360 standard-rate-turn? He said, “Why, two minutes, of course!”

I asked, “If you climbed at a rate of 500-foot per minute, how long would it take to gain 1,000 feet?” His face lit up! The muddy shores had just received a fresh-water wave.

Most often, asking questions and then experiencing, releases the hidden and minimally used abilities to bubble up and reveal themselves. It creates a state of comprehension and a moment of great

comfort to realize, that the aircraft is built to fly and does a darn good job of it without too many inputs.

The Power Jockey

He was in his forties when we flew together in his Mooney Ovation M20R. I could tell he was a good pilot. His skills were excellent, and his anticipation was admirable. The aircraft was like a glove on his hand. He could command his aircraft to do most anything you asked him to execute. But he had the habit of jamming power at the approach end of the runway and with a shove on the throttle and a quick pull on the yoke to take-off. On the other side of the flight, he also used the “chop and drop” method of landing. I wrestled with the thought of whether it would be good to undertake this, since he had been doing it for most of his flying life. The better part of valor was to keep my opinion to myself. However, he asked me if I could show him my technique for an ILS approach. Hmm, I thought this might be the chance I needed. So, as luck would have it, I asked if I could do a short round robin departing the airport, returning to the same airport and fly the entire maneuver. He was okay with it. We landed and I took over the controls from the right seat and went about the Pre-take-off checklist with him. After lining up on the runway, I slowly and deliberately advanced the throttle marking the airspeed, Oil pressure, Speeds. Upon reaching 5 knots before the rotation speed, I merely tugged on the manual trim slightly and the aircraft, as it was want to, rose without hesitation. Upon returning for the ILS approach, I called out the power settings of 16 inches of MP with the RPM at 2,400. I put the gear down one dot above the glide slope and let the drag bring the aircraft down at its 550 foot-per-minute descent rate. I did not touch the flaps. Upon reaching our agreed to, 500-foot ceiling, I put the flaps down and without touching the power until the runway was made. Luckily for me, I glided the aircraft to a smooth landing. After we got out of the aircraft and onto a seat in the restaurant, he said, “I liked the way you did that. I’d like to fly another time with you so I can master that technique.” “Sure,” I said, “it would be my pleasure!”



The A&Ps holler at you for flying LOP and if the valves fail, or the compression is low or any myriad of engine issues arise, they always point to LOP as the cause. I have been on the receiving end of that many times, even from the folks who make engines. “Fly ROP, the engine was made that way,” they claim. There is a huge discourse regarding this issue in various channels of communication. My claim

is simple and to me it makes sense. Lean of Peak seems to keep the engine cool, the combustion is more complete with less carbon monoxide byproduct. There is less carbon on the plugs and the valves, less gasoline is utilized, with the only caveat of losing a few knots of speed. Unfortunately, this discussion will bring the two camps into blows if I continue with this part of the discourse. There is merit in both. The Mooney Aircraft are Speed Demons. That is true. I have flown mine that way to prove it to myself and other pilots. But in my mind, ROP leads to higher intra-cylinder pressures (ICPs), and higher heat production. ROP uses extra fuel, hence more unburned gasses and metals.

Given the minor imperfection in the state of metallurgy and the myriads of moving parts soaked in that heat, over time, the engine might not handle this fiery-hot onslaught for too long, leading to deformation. Conversely, as you go WOT and LOP, the CHTs come down due to more complete



combustion of the fuel, (hence lower ICPs), and the fuel flow (FF) is reduced proportionately, producing a ka-Ching, moment in your pocketbook. LOP reverses all the excess mentioned above, but as mentioned, it diminishes that "I have the need for speed" moment. You can lose up to 5 knots or more of TAS. That is a bummer. To that I say, "To each his/her own!" In either the NA M20R with a Continental IO550 engine or the M20M with a Lycoming TSIO540 engine, both can be flown LOP if the TIT and the CHT are in accordance with the POH data. The TN was made for Speed and heat. So careful management of the CHTs is mandatory for longevity of the engine as in all other Mooney Aircraft.

Although a caveat here is that Lycoming engines love to fly ROP, they have robust valves with sodium in their veins and a camshaft high up near the valves. The Continental engines prefer the LOP version of flight. They have solid valves with brute force running in their circulation and the camshaft is near the cranky one, so they tell me.

This LOP/ROP window remains open for transitions, back and forth, for all who care to delve into this subject deeply, and that is always a good thing. Such is the nature of this complication of complexities with a "chaos of forms" as Hermann Hesse stated, that defines this subject with arguers standing firm at their posts on both sides. The debate continues.

Our job as Instructors is to open the windows of knowledge and bring the harbor of comfort and of their personal understanding to the pilot at the fore.



Fly safe. Fly long, and as Spock would say, "Live Long and Prosper!"



Thunderbird Aircraft Sales

Specializing in pre-owned Mooney Sales and Brokerage

Hello Mooney Flyer Gang,

My name is Richard Simile, I am the President of **Thunderbird Aircraft Sales**. We Specialize in the Sale and Brokerage of late Model Mooney Aircraft. If you are considering the purchase of a newer Mooney, or thinking about selling your current Mooney, we hope you will consider using **Thunderbird Aircraft Sales**.

Our objective is to always provide a very pleasant transactional experience for both the Seller, and the Buyer. We have two offices. One in Auburn, AL and one in Chandler AZ. Please give us a call or email. We look forward to the possibility of serving you. Thank you.

richard@thunderbirdaircraft.com or [602-884-2111](tel:602-884-2111)
www.thunderbirdaircraft.com



MOONEY
WE LOVE TO FLY. FAST.

CIRCLING APPROACHES – “Ya’ll be careful out there; they be dragons in those waters.”

Authors Tom Huff & Mario Jimenez, WYVERN Flight Leader Coaches

The very first question that should pop up into our head is “Why are we circling in the first place”? Next one is, “What are our other options?” Followed shortly by even more questions: “How truly important is it that we accomplish this now? What’s the risk versus reward? Are there advantages to waiting?”

Let us not forget that the circling approach maneuver is designed as a last resort, non-precision approach, one that by dwindling numbers and its inherent design, forces the pilot(s) into a seldom used and high-risk evolution – often migrating us to an unexpected, seldom visited zip-code of the threat/error management neighborhood.



Anybody in their right mind will not volunteer to execute a circling approach when other options are available. Practicing/demonstrating a circle to land at an airport that one likely never will utilize is well – nonsensical at best.

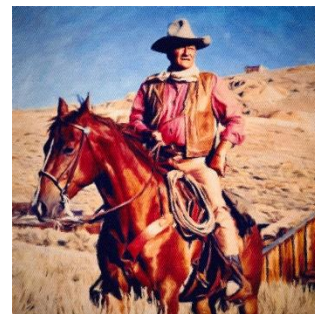
Let us revisit the design of these Circle-to-Land approaches. The approach is designed with a mindset/expectation that the visual circling maneuver portion of the approach will be executed exactly as depicted on the chart. Note that a circling approach is essentially a visual approach and gives the pilot(s) various options beyond what is depicted on the chart. The HAA (height above airport) is one that by design is biased on operational necessities along with the assumptions of four very salient and important cornerstones.

1. A perfectly good airplane with everything operating as expected.
2. A high degree of pilot proficiency, competence as well as currency, that is currency in Circling Approaches specifically.
3. A known degree of familiarity with the airfield and surrounding terrain.
4. An acceptable meteorological combination of ceiling, visibility, and wind.

Two additional notes of caution:

- A) ICAO minima for circling approaches is much higher than that stipulated in the FAR’s.
 - a. Consider higher weather minima, (especially visibility and wind), than what is published as a proactive mitigation.
- B) A circling approach is a high-risk, low frequency event that MUST be pre-briefed.

There is no rushing through this scenario – no “John Wayne” procedural inventions or last-minute inspirations.



As a succinct review, please ponder the accompanying attachments

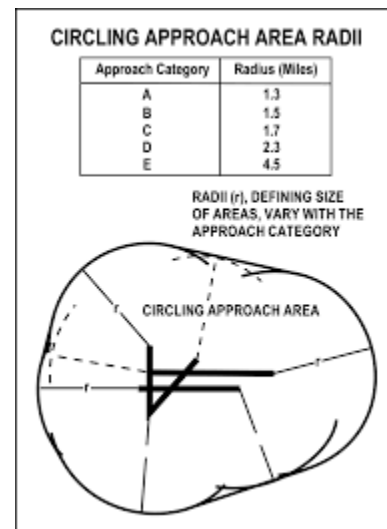
For purposes of our discussion, let’s break down this seldom flown evolution into three phases:

- Mission Planning and Pre-Approach Briefing,
- Execution of Approach, and . . .
- *If necessary, a Missed Approach.*

Mission Planning (prior to flight) and Pre-Approach Briefing (once airborne)

- The more we front load – the better off we will be when the call comes to perform and deliver. Many of these options should be reviewed ahead of time, allowing us to familiarize ourselves with the expected tasks, options, parameters, and obligations.
- While we do not want to rush or curtail the briefing, we do want it fresh on our minds. We also benefit from the latest weather updates. Perhaps just prior to the start of descent could be the optimum time – certainly completed no later than commencement of approach.
- If we find ourselves rushing or cutting corners to complete the briefing, we most likely need to ask for vectors or holding to consider all the factors.
- How truly important is this current approach to mission success?
- When was the last time you performed this exact approach?
- Any NOTAMS applicable? Any aircraft problems?
- What is the expected fuel burn?
- What, if any, are the additional guidance and expectations for NIGHT circling approaches?
 - A proactive policy may very well be to not do any night circling approaches
- Weather updates?
 - Especially critical are visibility (orientation/depth perception), wind direction and velocities gusts.
- There is a possibility of contamination such as icing/snow so it might be a good idea to review aircraft limitations on the subject. For example, some aircraft limit flaps and gear in icing until on approach or forbid the use of speed brakes.
- Particular attention to True Airspeed vs Turn Radius. (Higher TAS = different category aircraft = higher MDA) – also a higher TAS does yield a larger turn radius, even in the same aircraft approach category.

OLD STANDARD CIRCLING MINIMUMS					
APPROACH CATEGORY and CIRCLING RADIUS (NM)					
Circling MDA in feet MSL	CAT A	CAT B	CAT C	CAT D	CAT E
All Altitudes	1.3	1.5	1.7	2.3	4.5
NEW EXPANDED CIRCLING MINIMUMS					
1000 or less	1.3	1.7	2.7	3.6	4.5
1001 – 3000	1.3	1.8	2.8	3.7	4.6
3001 – 5000	1.3	1.8	2.9	3.8	4.8
5001 – 7000	1.3	1.9	3.0	4.0	5.0
7001 – 9000	1.4	2.0	3.2	4.2	5.3
9001 and above	1.4	2.1	3.3	4.4	5.5



- Specific discussion to neighboring terrain features such as buildings, towers, hills, trees. Where are the protected lateral radii?

CATEGORY	5.2 NM		4 NM		1.1 NM	
	A	B	C			
LPV DA	1490-3/4 250 (300-3/4)					
LNAV/VNAV DA	1640-1 1/8 400 (400-1 1/8)					
LNAV MDA	1640-1 400 (400-1)		1640-1 1/8 400 (400-1 1/8)			
CIRCLING	1700-1 457 (500-1)	1760-1 517 (600-1)	1760-1 1/2 517 (600-1 1/2)			

- What techniques will be utilized to comply with those obstacle radii? Outside of assessed radii the MDA is no longer valid – you depart MDA on the downwind or base leg – you’re on your own as far as obstacle clearance.

- Recall that we must remain at or above MDA until we are in a normal position to perform a normal rate of descent to landing. How is this determined without vertical guidance?
- What is the calculated landing distance?
- What is the runway lighting? VASI? PAPI? (Only accurate within 10 degrees of runway heading).
- You choose to fly a Circle-to Land approach to a runway without a VASI or PAPI – you are greatly increasing your vertical flight error path (possibility/probability). This is easily compounded in aircraft equipped with older avionics packages with limited screen presentations/displays.
 - What is available to you and what is not?
- You'll need to fly visually, and also monitor the instrument data.
- Which way is the procedure turn – left or right?
- Does the airport have an operable FAA tower or is it an uncontrolled field environment?
 - Non-towered airports greatly raise the possibility of traffic conflicts.
- What specific indicated airspeed will be flown/adhered to during the circling maneuver? What speed on final approach? Will the vertical speed necessary comply with required descent criteria?
- At what AGL altitude will the aircraft be in a “stable/configured” condition? (No later than). Be fully configured and on speed prior to receiving landing clearance.
 - FAA parameters are NLT 500' AGL for “stabilized criteria”
- What specific runway lighting do we expect to see?
- What are the criteria for a Missed Approach Command?
- Is the Missed Approach altitude at or above the MDA?
- Are there any applicable second segment climb requirements?
- What specific lateral track will be flown in the event of a missed approach?
 - e.g., turn toward the landing runway first then execute the missed approach procedure for the approach runway.
- How will this differ if you are past the M.A.P. when you execute the go-around?
- “Chair fly” techniques to circle at a non-towered airport. For example, what happens if you are too high and unable to execute your originally envisioned circling plan... what is your backup circling maneuver?

Execution of Approach

- Mentally stay ahead of aircraft if loss of situational awareness occurs – ANNOUNCE IT – speak up – secrets will not be to your benefit.
- Work your hardest at maintaining an accurate lateral track. Remember higher airspeeds = Larger turn radius.
Final approach speed: Add ½ the wind gust.
- A common technique used in past times – (days of ADF's) is to correlate the **GS to VSI** – to fly an approximation of a 3-degree glideslope – this will work well up to about 10 kts of headwind. The rule of thumb is $VSI = \frac{1}{2} GS \text{ times } 10$.
 - GS = 80 VSI= 400 FPM
 - GS =100 VSI= 500 FPM
 - GS= 120 VSI= 600 FPM

- Another valuable technique is that once you are within 45 degrees of final rollout, request tower to “turn up” the runway lights. Once you see the change in illumination, you have another confirmation that you are where you’re supposed to be.
- Strive to be wings level and on the correct rollout heading with an acceptable rate of descent as close to 500 feet AGL. While this is the normal FAA requirement, some circle to land approach profiles will place the aircraft slightly below 500 feet at MDA.

Missed Approach

- When in doubt, go around – no question about it!
- Much better to sing, “*Glad we did rather than sure wish we had.*”
- Prioritize getting away from the dirt and stay within the obstacle radii as you establish yourself on a published portion of the missed approach.
- Are you executing the correct Missed Approach Procedure? Know where you are going before you get there.
 - Confirm that the Missed Approach Altitude is at or above the Minimum Vectoring/Sector Altitude

ADDITIONAL REFERENCES:

<https://www.wyvernlimited.com/wp-content/uploads/2023/09/WYVERN-GD-Circling-Approach-rev1-2023.09.22.pdf>

<https://aviationweek.com/business-aviation/safety-ops-regulation/circling-approaches-good-riddance-part-1>

<https://aviationweek.com/business-aviation/safety-ops-regulation/circling-approaches-good-riddance-part-2>

<https://www.boldmethod.com/learn-to-fly/navigation/when-can-you-go-below-mins-instrument-approach/>

<https://skybrary.aero/bookshelf/terps-review-circle-land-tactics>

Author’s note: This discussion is presented strictly as a training tool and is completely advisory in nature. The concepts, ideas, and suggestions are just that, no directive or enforceable facets should be interpreted. As always, [FAR 91.3](#) applies.

TO GO, or NOT TO GO! That is the question!

Jerry Proctor



Recently, I read an article about a procedure to make a go or no-go decision. It was not a bad article. Over my now 50 years of having a pilot's license, I can vaguely recall a few procedures and processes that are designed to assist a pilot to make that all important decision, To fly or not to fly.

Many of these processes are supposedly easy to remember via an acronym. Easy for whom, may I ask? For example, I can remember the acronym, IMSAFE just fine. However, when asked to describe what each letter means, well um, I am not very good at that. I never was, so I can't blame it on age.

So, off to check with Ms. Google. In summary, IMSAFE is as follows: This is from a CAP (Civil Air Patrol) source. **I** stands for Illness. Are you a sick puppy today? If so, then don't fly. Seems obvious to me. **M** stands for medication. Are you doped up, drowsy and or really doing something heavy? It has happened that some pilots were zooming before they turned the key. **S** stands for stress. It seems some stress can be good and a lot, not so good. Where is my stress meter for that? I have a new Garmin watch that tells me when I am stressed. That stresses me out all by itself! **A** stands for alcohol. Now I certainly remember this one. I was taught to never drink any closer than 50 feet from an airplane, or was that smoking? **F** is for fatigue. The older I get, that F-thing happens more often. **E**, well some call E for emotion, others say E is for environment. I say, consider both. Do I use IMSAFE? Yes, I actually do. Well, sort of anyway.

The article I just read was written by a gentleman that is a pilot for a "Federal Agency" and he helped develop a flight assessment tool, called "FRAT". He said one would examine the SAME conditions. (Self, Aircraft, Mission, Environment) and then get a FRAT score. He never wrote what the FRAT letters stood for nor how to score and tally the go, no go criteria. Well, I am glad it works for him and his agency. FRAT stands for Flight Risk Assessment Tool, and it is like a worksheet where you grade your ability to fly.

There is a DOT article that I looked up. DOT/FAA AM 96110 document. It was developed in 1996. It helps with assessment and developing personal minimums. The document is 17 pages long and it has lots of small print. It has four or so pages of graded decision criteria, and there are a LOT of them. I think the point here is, by the time you get halfway through this rather complex series of criteria, you say to heck with it and go drink a beer. I bet no aviation accidents happen when a pilot uses this procedure, because they will all decide to NOT fly.

Well, the list goes on, such as PAVE and certainly many others. The point is all these assessment tools have value and you should make sure you use one. However, THIS article is not about whatever the heck tool you use. Rather, once you make your decision to NOT to go, DO NOT CHANGE YOUR MIND! Live with your decision and any repercussions. Temptation is out there to try to ease you back into the air. NOPE! Resist and don't let temptation win. You decided not to fly. Do so another day, and you may be more likely to fly another day vs. having changed your mind and be in a situation wishing you were on the ground.

A Fool's Guide to Flying South America

By: Don Peterson

"Do you suppose other pilots don't fly small planes to South America because it's hard?" posed my older sister, the oberführer. After a moment's surprise, I replied, "It has never occurred to me to avoid doing anything simply because it was hard." To be fair to her question, we had just flown a particularly frustrating stretch through Brazil, and our travel blog revealed my frustrations. Flying has always been my way to go places I've never been, see sights I've never seen, and do things I've never experienced. These goals find challenges along the way.

Airplane owners and pilots have differing dreams, limits, and fears. This discussion is for those of you interested in flying your private plane to South America, where languages, customs, regulations, and hazards are not what you're used to.

I earned my pilot's certificate in 1979 and bought my 1964 Mooney a few months later. He's still with me, 45 years later, flying behind his fourth engine in our time together. I never flew as a commercial pilot, but the plane took me to clients that would otherwise have been difficult to reach. Our products were used by plants that always smelled bad and occasionally blew up, so I tended to park my Mooney out in the boonies. Similarly, my father lived the last thirty years of his life on Nevis, a Caribbean Island, and I took my first flight to visit him with 150 total hours in my log. This would become a regular trip. I flew aerobatic competitions in seven different countries, and still enjoyed the friends made along that road. My first flight to South America was in 2012, when I jail-broke my nine near-old grandson out of second grade, and off we went for three months of alternative education. Had I not chosen flying, I would still be broke, but with fewer happy-wrinkles to show for it.

My wife, Maria, and I just reached the half-way point in our plan to circumnavigate South America, with the Mooney now hangared in Mercedes, Uruguay (UY), and us recovering at home in Colombia. In March, we will return and complete another segment of the tour. Our route to Mercedes was a duplication of the trip with my grandson in 2012, but the second half will be new to me; filling in a patchwork map hopefully including Chile, Peru, Ecuador, Colombia, Paraguay, and Bolivia.

For my fellow fools out there, this guide could help you avoid some of the difficulties while taking you places that will inspire, teach, and reward.

Ready, fire, aim:

My first South American trip, with my grandson, began with installing long range tanks, a modern GPS Navigator, and looking for a destination. Google Earth led me to Mercedes, UY, where I spotted crossing grass runways on the outskirts of the smallish city. Grass is good. Likely no tower. No tower, no bureaucrats. This would be our target.

You can find the how-to for the Bahamas and Caribbean in the AOPA flight guide, so here are the lessons from Grenada onward.

Pre-trip planning:

I recommend doing the least amount of pre-trip planning possible. Some is necessary, but much of your trip will be driven by weather, winds, changing information, availability of fuel, ambiguous regulations, and enroute experiences. Trying to stick to a firm plan will just spoil the fun.



This guide will offer suggestions for good routes and necessary tools. Take the time to gain an overall familiarity with each of the countries and airports you might visit. Some are much easier than others. Pick your season to suit your tastes. Flying through the Caribbean from December through February will be more expensive than other dates, and that's if you can find rooms. You might think hurricane season is a poor risk, but that's when hotels and prices are most favorable, and you'll have enough notice to steer clear if a storm pops up. You can outrun a hurricane. I prefer the "shoulder seasons" of October – early December, and March – May.

My first trip to the Southern Continent was in April, and almost exclusively, we had delightful weather. The return trip was the following December – January and the conditions were very amiable. The recent 2023 trip started in early October, and again, the only serious weather was in the US. Although you may face IMC conditions, you'll also be in a lot of uncontrolled airspace giving you options of how to deal with it. My preference is to fly VFR as much as possible, but always ready to call up ATC if needed. Often VFR flights include instructions to remain in contact, although this is not always possible in some areas. Flight plans are generally required, even for VFR, so you'll already be in the system if you need an impromptu instrument clearance. The vast majority of enroute controllers speak at least a test-passing English, but accents can make it tough. Tower controllers at non-international airports are not required to have competency in English, but often do. You can find frequencies to try until someone answers and gives you a clearance. Flying in the Islands and South America has a whole lot of "don't ask, don't tell", but you will need to follow the rules into and out of airports. Never surrender responsibility for your flight. In Brazil, and possibly elsewhere, flight plans are to inform your arrival airport, and do NOT include search and rescue.

I bought a covered 4-person raft several years ago. We carry four life vests and portable radio on-board. The over-ocean portions are not that long, but I'd rather float than swim. The standard kit includes large plastic zip-lock baggies full of non-perishable food, plus a couple of gallons of water. We carry large zip-lock baggies to allow in-flight containment of disposable liquids.

I use a modern Garmin GTN system, loaded with Jeppesen data. The Jepp info is more complete for South America, and it populates into ForeFlight as well. Having good data and terrain info reduces the terror factor. It's comforting to know where you are, and what's underneath.

Must have:

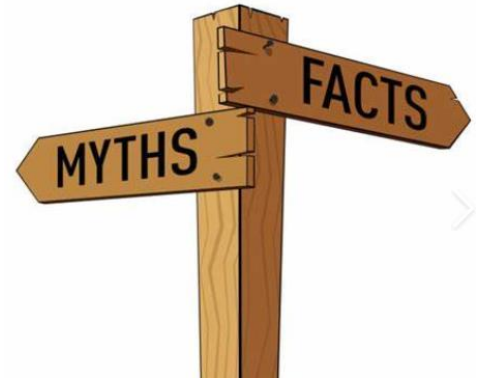
US Customs and Immigration sticker(s) for your plane. The number on the sticker is required to file your eAPIS for departure from the US, and Customs will want to see a current sticker upon your return. You normally buy these stickers online one at a time, but you can buy the current and next year at the same time, beginning in November of each year. This is helpful if you are departing at the end of one year and returning the next. If you leave in October, you'll probably end up having to pay for the reentry sticker when you return to the US.

Passport(s) and visas, as required. Brazil eliminated the necessity of a Visa for US tourists but have recently reinstated it. They have introduced an on-line request and issuance process, which will make the Brazilian Visa a non-issue, if it is working.

None of the normally visited Islands require a visa for a US Passport holder, although Granada does require one if like my wife, your Passport was issued by Colombia. If any in your party carry a passport from other than the US, check carefully.

Radio station license. I've never been asked, but other countries continue to require this.

Insurance is officially required. I have been asked for this, and they want to see that you have liability coverage that includes the country you are in. They have always accepted such statements as “South America except Venezuela.” My current coverage is “Western Hemisphere excluding Africa.” Be prepared for South American insurance coverage to be sticker-shocking. The Bahamas and Caribbean used to be included in my standard coverage, but this time the standard policy stated “USA, Canada, Mexico, and Bahamas” only, with anything farther south needing an add-on. My annual premium came in at \$5,000; roughly 4X the previous years. Furthermore, I was able to find only one insurer that would book the insurance. Whether that was due to my intended route, advanced age, or dubious reputation is unknown.



All the documents required in the US should be on hand, i.e. pilot and medical certificates, registration, airworthiness certificate, operating limitations, plus the radio license. You MAY be asked to produce your current Airworthiness Inspection sign-off, so I carry a copy of the last Annual. Officially, the US is responsible for mechanical compliance of your N-reg aircraft and the validity of your personal documents, but you’re in their country and it’s not wise to respond, “I don’t have to show you that.” Go with the flow. You do not have the right to be an idiot.



General Declaration Forms. We used to buy thick pads of NCR (no carbon required) forms used to satisfy inbound and outbound officials from one country to the next. I couldn’t find a source this time, so I simply copied a form into my Word Processor, and pre-filled in the repetitive fields, such as name, N-reg, crew, etc. Upon arrival, or departure, I add in the date, where we came from, are going, and sign the quantity requested. I’ve been asked for as many as six at some places, but more often it will be one to three for arrival and again for departure. We consumed at least fifty from the US down to Uruguay. There must be massive buildings scattered around the world holding an incomprehensible quantity of these never-revisited forms, plus of course, the occasional Ark of the Covenant.

I recommend a cockpit cover. Hangars are not that common, but rain showers are. I include a portable tool kit, battery + 110V powered air pump, oil filter, and enough quarts of oil to top up my engine. Study up on electric plug and voltage variations and bring adapters. I have had to repair flats, so either carry a spare tube or a repair kit. My last flat was on the nosewheel, so maybe two tubes is a good idea. There is nothing like having a low tire and your extension cord won’t stick into the socket. The flight time from northern Nevada to Uruguay was 50 hours.

Take US dollars, mostly but not entirely \$100 bills. There was a time that only US dollars were accepted for fuel purchases. The same route this year showed a preference for credit cards. Times are changing, but take at least \$3,000 in cash for the south-bound trip. If you are required to pay in US dollars cash, they will not have change. Carry enough smaller bills to keep a \$420 refill from becoming \$500. You may not need it, but if you do...

Myths:

South American countries are all dangerous. If you read the papers in the US, this is what you might think. If you read the newspapers in any South America or European country, you’d probably never

want to visit the US. If you use the same standards of care that you use in the US, you'll be fine. It never hurts to scan the daily news in case there's been a semi-revolution, such as January 6, an earthquake, volcano eruption, or flood. Perhaps the targeted country just won the World Cup, in which case they will be partying for a very long time.

Everything that crawls, slithers, or flies is lethally poisonous and likely to kill you. OK, this one is sort of truth, but nothing like Australia. Unless your plan includes a lengthy trek within the Amazona, you're highly unlikely to encounter any of the dangerous creatures. Our hummingbirds are a little aggressive, but some of them will gladly eat from your hand.

All public employees are corrupt and will shake you down. This can be accurate, but relatively rare and isolated. We find that each country has its own culture in this arena, and some are more prone to "local problem solving" than others. Don't assume anything, and mostly you'll encounter a very slow bureaucracy rather than anything malevolent. Be patient, smile, and learn some Spanish. Become efficient with the Translation program on your phone.

Realities

It is difficult to find the same quantity and breadth of information that we are accustomed to in the US. Although there are commonalities, each country has its own mix and methods to access info.

Foreflight often works down here, but the info can be formatted differently.

Countries will each have their own rules about flying over, and landing, with a foreign aircraft. Brazil requires the "AVANAC" process. Argentina makes mention of "except for tourist flights" in their regs, but I've not yet found the specifics for my use. They are very aviation friendly and had no problems previously. In Uruguay, we called the General of the Airforce, explained our wish to leave the N-reg Mooney in the country a while. He said, "Enjoy your stay." I've hired a Handler for Peru. Chile is also aviation friendly. Colombia has a system for Tourist flying that isn't too bothersome. In all cases, be sure you land at an airport of entry. Short version: If you're just passing through, "welcome to our country, and have a nice day."

Most countries have an "AIS or AIP", Aviation Information System. They will be in Spanish or Portuguese but may offer the alternative of English. The English version may not be linked to everything you want to see. Modern translation programs deal with this acceptably well. Fortunately, the fraternity of pilots will often produce a friendly and helpful person to provide the secret answers.

Routes:

The controlling factor is your range. My Mooney has 90 gallons and can fly nine hours with a big reserve at 150 KTAS. That gives me options. Your mileage will probably vary. Following estimates assume 150 KTAS, no wind.

- Florida to Providenciales (Provo), 4 ½ hours.
- Provo to Nevis (or St. Martin), 4+ hours
- Nevis to Grenada, 1 ½ hours
- Grenada to Cayenne, 4 - 5 hours
Note, the direct route to Cayenne is all ocean. My first trip found substantial headwinds headed southeast from Grenada, and thunderstorms required circling offshore until an opening appeared. Stormscope helped. Nearly 7 hours total for that leg. Most recent trip, 5 hours total.
- Cayenne to Belem BR, 3 ½ hours (airport of entry)
- Cayenne to Macapa BR, 2 ½ hours (alternate airport of entry.)
- Belem to Brasilia BR, 6 hours
Don't land at the Brasilia big airport. There are better options.
- Macapa to Palmas, 4 ½ hours
- Palmas to Brasilia, 2 ½ hours
- Brasilia to Foz do Iguacu BR, 4 ½ hours
- Iguacu to Artigas UY, 2 hours (airport of entry)
- Artigas to Mercedes UY, 1 ½ hours



Grenada is the jumping off point to the Southern continent and is GA friendly. There are lots of hotels and everyone speaks English. It is not expensive in the off months. Don't bother booking a hotel ahead unless you're in the high season. The FBO will usually have a pilot discount deal with a nice place on the beach. For most of the Caribbean I was able to use Foreflight to plan and file flight plans. You

won't always receive confirmation that the plan was accepted, but they usually acknowledge them when I call the tower. The islands are so used to small planes that you can usually file the necessary flight plan just by calling or visiting the tower, and off you go. **Do not assume this applies in South America.**

First, decide if you have the range to fly from Grenada to French Guiana. There are airports in Guyana and Suriname, but reviews are rare and spotty. You could make your starting point Trinidad, which might save you a few minutes enroute, but their reputation is not encouraging. My preferred route from Grenada is parallel to the shore, but beyond gliding range, although possibly useful for a mechanical urgency. A direct route Grenada – Cayenne will have you briefly crossing a boundary belonging to Suriname. In exchange for speaking with them for 45 seconds, you will receive a bill in the mail for \$140, or more. By making a slight diversion farther from shore, you can avoid this experience. GPS is good for this kind of thing.

If you cannot sanely plan the Grenada – Cayenne flight, you might be able to plan Grenada – Georgetown (Guyana) – Cayenne. Each leg is about 2 ½ hours, putting most planes well within the fuel comfort zone, and only short legs over-ocean. However, all stops in South America will cost you time, fees, and regulatory frustrations. This route will also put you into Surinam's billing zone. To be blunt, if you're unable to just stay calm and roll with it, South America won't be fun for you. If you can't count on Grenada – French Guiana, I would telephone Guyana to confirm AVGAS availability before committing to this trip.

Flying over oceans reduces the weather obstacles a great deal. Once you cross the shore you can expect more clouds, rain, and turbulence. Even slightly offshore, usually within gliding range, your ride and navigation improve substantially.

French Guiana:

Cayenne, French Guiana is officially a member of the European Union. It is a Department of France, and the French affection for complicated but effective bureaucracy is on hand. You will be met on the ramp by someone in a car, assisted to the various offices, and on your way to a hotel in short order. The departure is only slightly more complicated, as I prefer to fuel just before departure. No one will speak much English, but as the procedures are well established, grunts and finger-pointing keep it all moving along. Credit Cards are accepted. There is one hotel close to the airport, and numerous alternatives within the city of Cayenne itself. The one near the airport is not so different than other airport hotels, whereas the inner-city alternatives are more rustic and culturally diverse. Both are OK. If you stay in the city, don't be afraid to wander about. It's tropical but tends to tourists well. The airport hotel occasionally hosts a party late into the night. French Guiana's prime activity seems to be rocket launches. Many nations use their facilities, as it is near the equator, and thus able to help launches achieve orbital speeds.

If the thought of flying into the heart of South America is just too much of a step, consider making F-Guiana your turnaround point. I've never spent more than one night flying through, but there are probably enough unusual local choices for a few nights, plus nice beaches. Setting your feet on the Southern continent will prep you for your next time down, reducing the sweat and tremors. Officially,



you must have a Yellow Fever vaccination to visit French Guiana. I've never been asked for proof, so I guess the fear of catching it is considered enough enforcement.

Entry to Brazil:

This is where your tolerance for pain will be tested.

<https://www.gov.br/anac/en/topics/air-services/overflight-landing-clearance>

<https://sistemas.anac.gov.br/AVANAC/en-us/SolicitacaoVoo/Cadastrar/O>

<https://aisweb.decea.mil.br/>

Brazil has the second largest GA fleet in the world, after the US. Note that Blue-ringed airports are public, with towers. The magenta-ringed airports are private, without towers. However, "private" often means privately-owned, but open to the public, with prior permission. Contact info can be found in the Jepp data in Foreflight. Many are excellent small airports with fuel, hangars, and friendly people.

During our first trip, I used only blue-towered airports. For the most recent trip I used the blue-towered only for entry and exit to Brazil. You still must have an approved flight plan, but the private airports are what we know and are accustomed to.

In 2012, I arrived at Belem without an "AVANAC" form. My bad. This form is required and is Brazil's way of accepting a foreign-Reg aircraft into the country for a limited time, and with your guarantee to depart again and promise not to sell it in the meantime. It gets stamped upon your arrival and departure. It took three days for the clerks to organize an AVANAC for us in 2012, but my grandson and I used the time to visit the Piranha Petting Zoo and tour the city. The online application during our recent trip required more than three days, plus the blessed intervention of a Brazilian GA pilot that I befriended online. My conclusion is that the AVANAC online-application system only works once inside Brazil, and not when out of the country. The form is, of course, required to enter the country in a GA plane. You are supposed to have an approved AVANAC at least 24 hours before arrival at your Airport of Entry.

Based upon our first experience at the semi-large Belem airport, for the 2023 trip, we tried to enter the country at the much smaller Macapa airport, north of Belem. Both were frustrating processes, but Macapa is smaller so running from office to office took less time. The Belem staff was friendlier, and will reduce your trip toward Brasilia or other inner-Brazil stops.

Here, we must introduce you to "Handlers." They are Increasingly present but mostly optional in the Islands. These are becoming unofficially required in Brazil. Handlers are usually multi-national firms that attend to business jets, titans of industry, and government dignitaries in their clandestine travels around the world. For a fixed sum, often between \$1,000 and \$2,000 or more, they will flag your jet into parking, help you unload your passengers and baggage, fuel the plane, provide transportation to



Our savior in Macapa. A Brazilian Airforce helicopter pilot. Tried for more than an hour to get the Brazilian Flight Planning App to work. No joy. Finally called someone. That turned out to be the necessary step throughout all of Brasil.

your hotel or high-level meeting, restock the jet's kitchen and booze, attend to the paperwork for Customs and Immigration for arrival, entry, reloading, and departure of the plane and its passengers. We might assume a portion of the fee is used to motivate the various holders of the official stamps and seals that must be affixed to the stack of required but seemingly pointless documents.

Frankly, my small Mooney, and your similar GA aircraft is an annoyance for them and the stamp-owners. The work by Customs and Immigration is the same for our tiny airplanes as for the BizJets, but a \$2,000 fee just doesn't fit into our tourist-adventurer budget. Expect near outrage by the empowered Officials as they realize they are not getting an envelope later in the afternoon of your arrival or departure.

Upon arrival, first find the Federal Police. You will give them one to six General Declarations *previously signed and stamped at Cayenne*. It is best to have six available. Our Federal Policeman was having a bad day and gave us a long lecture in Portuguese, about how everyone uses handlers for this process. The first experience in Belem was friendlier.

Customs (*Receita Federal*) is a two-stop process, one for your bags, and the second for your airplane and approval of your AVANAC. At Macapa we found a pleasant fellow who led us through the Xray machines and bag search.

Departure from Brazil:

My new Brazilian friend shared the wisdom that corruption and incompetency diminish the farther south one flies in Brazil. This proved to be accurate. You WILL want to spend at least two full days at Foz do Iguacu. One for the Cataracts, the other for the bird zoo. The entire staff at the Foz do Iguacu airport are professional, pleasant, and competent. Arrive early on your day of departure. They will probably assign a person to lead you from department to department, paying fees, signing off your AVANAC, and chaperoning you through Customs, etc. I recommend finding the airport manager as early in the process as you can and ask for help filing your flight plan. Depending upon your preferences, you can continue your trip to Uruguay or Argentina, or walk on the wild side into Paraguay. I recommend Uruguay.



Flight plans and info

AIS: <https://aisweb.decea.mil.br/> This is available in both Portuguese and English, but the English version does not contain all of the important, information. Study before your trip starts.

South American countries use the ICAO form, just like the USA. However, in Brazil, you are required to use a unique program loaded into your smart phone or laptop called "FPL BR." It can be found via an online Ap search. At first it looks like standard ICAO fare, however, behind several familiar data fields you will be taken to an unfamiliar area where undescribed entries are required to avoid having the plan rejected. I have been unable to find instructions for this flight plan entry system.

No one, including the tower manager at Macapa, was able to make it work. We finally snagged a fit young military helicopter pilot who thought he knew how to do it but failed. Eventually, he called the ATC responsible for accepting or rejecting the flight plan applications and negotiated a solution.

From our arrival at the airport that morning to the time we received a departure clearance, was over three hours! I had learned to expect this during our trip in 2012, but the automated flight plans made early departures even less likely. This experience was repeated at every stop in Brazil.

At Palmas we were invited to use a “Private” airport. A very pleasant young pilot offered to help us file our flight plan the next morning. He failed. He called ATC who told him that they would only speak with the Pilot (me), and that I must speak Portuguese, then hung up. A second call got the same controller, but he had calmed down, and they negotiated a flight plan.

Departing Foz do Iguacu airport required the same 3+ hours, with the flight plan problem solved only by having the airport manager call a secret phone number and negotiating on our behalf.

My new Brazilian friend was a great help during all this, but the only thing that explains these experiences is that ATC and the Handlers have a “deal,” and if a small airplane pilot doesn’t get hooked up with “the deal,” they torture you until you surrender and pay, or beg to just leave Brazil and never return. My Brazilian friend has a history in Brazilian federal government but had to admit that he was not sufficiently high up to effect any change.

In a future publication, I hope to offer alternatives for touring South America without going through Brazil, but we might hope some sort of reform is found. Be patient and be persistent.

Uruguay:

If Brazil represents alienating arrogance and artificial hurdles to tourist flying, Uruguay is at the opposite extreme. It is friendly, helpful, and quick. As with all such international flying, just pick an official “airport of entry” and you’re good to go. Coming from the north, we chose Artigas. We wanted to adopt the entire staff, and take them home with us. They were very friendly.

If you decide to tackle this eastern route through Uruguay, I strongly recommend Mercedes (SUME) as a good stop-over. Cantore Agricultura is based at the grass runway airport, and can assist with fuel, oil, and repairs. Stay at the San Isidro Resort and Golf Club.

Flight info and Plans:

AIP: <https://dinacia.gub.uy/ais/aip-uruguay>

Both Spanish and English are offered. Review this before your trip starts. Flight plans are required, but easy to phone in. Possible on-line entry, now, including via Foreflight.

What to do:

Visit Montevideo, and Colonia: Both have a great deal of history and are tourist friendly. Mercedes: Walk la Rambla, visit the city plaza-principal, and in season, you can attend the high-speed motorboat races on the Rio Negro.

You are better off taking a bus from Mercedes to Montevideo or Colonia, as it will take the same amount of time to fly, and by comparison, it is free. There are GA airports in the two large cities and might make some sense if your next stop was Buenos Aires. Your plane will be safe and well cared for at Mercedes airport.

Argentina:

There are two ways to get there. Ferry to the Buenos Aires harbor or fly to San Fernando airport in north Buenos Aires. The airport is friendly, charges aren’t bad, and fuel is reasonable. It is an Airport of Entry (AOE), so if you are continuing onward into Argentina, this is where you might start. There are other AoEs in Argentina if you aren’t interested in visiting Buenos Aires, but if that’s the case, you

skipped the chapter covering “must do’s during your life.” We recommend at least one week in Buenos Aires. The Jacaranda trees bloom in early to mid-November.

If you aren’t planning on going beyond Buenos Aires, I recommend you leave your plane in Mercedes or either of the two GA airports in Uruguay noted above. Colonia and Montevideo offer regular ferry service to Buenos Aires. It is not expensive and only takes a couple of hours, including loading and unloading/customs.

Next?

This is a developing story. Our plan is to return to Uruguay in March 2024 to tour the vineyards of Argentina, Bariloche, and surrounding Patagonia, plus the mountains, islands, and fjords of southern and central Chile.

The following trip in November and December is targeted at the southern tip of South America, including Ushuaia, and visiting a string of historic airports used by Antoine de Saint-Exupéry as he helped developed the Aeroposta Argentina beginning in 1929.

The final segment is intended for March – April 2025, from Uruguay to Chile, Peru, Ecuador, and Colombia. After good shower and clean clothes, we’ll continue northward through Central America and Mexico to our hangar in Nevada.

You can follow our on-going posts and photos on Facebook at “A small airplane tour of South America.”

Reflections:

Many of us have our bucket lists. I originally intended to do the north Atlantic flight, and Europe, but gradually lost interest. I’ve been all over Europe, and it’s easy to do. South America is less easy and has a great many more places worth visiting that cannot be reached via tour buses, trains, or taxis. That’s where life is still brewing up interesting mischief.



How Safe Are Your Safety Belts?

By Terry Carraway

As pilots, we are very good about fastening our safety belts before engine start and leaving them on until the engine stops turning. We are also good at making sure our passengers are safely buckled up. Safety belts save lives in sudden stops as well as preventing injuries when you hit turbulence.

BUT have you ever really considered if your safety belts are safe? There are several issues that may give you a false sense of security, such as lack of shoulder belts, age/condition, and even Airworthiness Directives.

Shoulder Harnesses

To be blunt, if you don't have shoulder harnesses in your airplane, you should install them ASAP. We know that in our Mooneys, we sit a bit closer to the panel than many other light aircraft. In the case of a sudden stop, you are going to get a very up-close look as your head and face impact that panel. And while the crash may have been survivable, if you are unconscious, you will not be getting yourself out of the wreckage and away from any potential fire. Many aircraft that don't have shoulder straps installed have the mounts already installed from the factory. If your Mooney does not, Alpha Aviation, a Mooney Flyer advertiser, has a "minor change" kit to install them.

<https://alphaaviation.com/mooney-m20/>

Inertial reel harnesses are more comfortable in normal wear. These are ones like your car, that allow normal movement, but react to high-speed movement and latch and act like a manual harness. They do add a somewhat bulky box for the reel. I don't notice it at all on the pilot side of my Mooney, as it is behind me with my normal seat position. However, for the passenger side, I bumped into it and knocked off the cover. It is also in the way when people are getting into and out of the back seats. You may want to consider adding an inertial reel to just the pilot side. Alpha Aviation has inertial reel harness sets for the front seat of Mooneys. They are only \$100 more than the non-inertial reel harnesses.

Age/Condition

How old are your seat belts? What is the condition of the webbing and the metal parts? The belts are TSO'd parts and are marked with information such as manufacture date. Those tags must be present and legible for the parts to be legal, just like many of the other parts on our planes. I recently bought an aerobatic airplane, and when I checked the belts, the tags were illegible and on one harness, the tag had worn and ripped off. Therefore, not airworthy.

When I bought my 1986 M20K in 2022, I checked the tags, and they were legible, but the harnesses were manufactured in 1986. An inspection of them showed that the upper parts of the shoulder straps were sun faded. The belt webbing is susceptible to damage from UV. You cannot see the damage to the webbing itself, but if you see the color is faded, that is a clear indication of UV exposure and that the webbing may have been compromised. If you need your belts to restrain your body, the webbing may rip and provide less protection. The webbing is also susceptible to damage from chemicals. Never use any chemical agents to clean the webbing and don't store volatile chemicals near them. The

webbing and stitching are also subject to wear from use. The webbing becomes fuzzy as the fibers are abraded and broken and this reduces the strength of the unit.

How old is too old? It depends. Since most of the damage is due to UV, a hangered or covered plane will have less damage to the webbing. I have a background doing SCCA road racing, and on my race car, the belts are required to be replaced every five years, no matter what. I have also recently found out, because of my aerobatic airplane, that the parachute industry is going to a maximum age of 20 years (15 years in Europe) before they are no longer legal. Many parachute riggers will not even attempt to pack a parachute that is over 20 years old. So, for our airplane belts, 5 – 20 years is a reasonable range, with the exact number based on how your airplane is stored.

If your belts are old or damaged, you can either replace them or have them re-webbed. Alpha Aviation sells regular belts for front and rear, as well as inertial reel systems for the front seats. I suggest getting the push button releases. I have unlatched my lift buckle belt once or twice when reaching down between the seats. The other option is to have your belts re-webbed. They can replace the webbing and use your existing metal hardware. I just had my rear belts re-webbed by Aviation Safety Products in Blairsville, GA (<https://aircraftseatbelts.com/>). I got their contact info from Wag Aero, which no longer does re-webbing. They are nice people to talk to on the phone and do good work quickly. Normal turnaround is 7 – 10 days. Both my orders were 7-days and they offered expedited service for a fee. Seatbelt re-web is \$79 and static shoulder strap is \$88. They will also re-web inertial reels.

There are also metal parts to check for wear and tear and even corrosion. Several parts on my aerobatic harnesses needed replacement. Aviation Safety was able to take care of replacing the parts.

Airworthiness Directives

How many of you or your shops check for ADs on seatbelts? Yeah, not many. It turns out both of my airplanes have ADs on the seat belt buckles and they needed to be replaced. For the Mooney, the applicable AD is 89-09-02. Yes, my plane went through more than 30 annuals without anyone noticing this AD.

“Applicability: Safety-belts which incorporate the black "Ultem" plastic latch-cover with the 90-degree type pull-release mechanism”

And it goes on to list 42 different part numbers. Aviation Safety was able to supply replacement buckles for my Mooney harnesses, but not for the aerobatic secondary belts. I am talking to Alpha Aviation about making totally new belts for that airplane.

So how safe are your safety belts? I know that mine are as safe as possible. At least they are NOW.



Alpha Industries Inertial Reel harness



Illegible belt tag



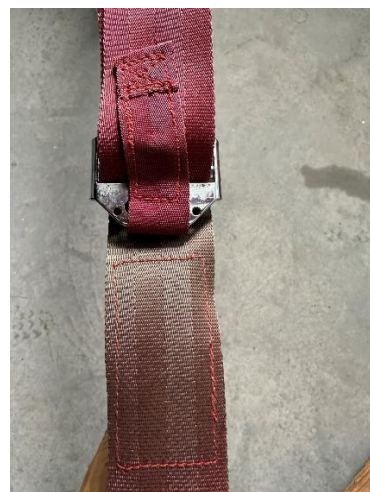
Re-webbed belt with new tag



Original buckles red tagged due to AD



Corroded belt hardware



Sun damage to webbing

Let the Games Begin Update 2 by Terry Carraway

My major avionics upgrade project continues, but the long middle stage does not show dramatic progress. It all just looks like a lot of wires.

The work, through this part, is putting back all the wiring for all the various parts to talk to each other. But as of the last visit, all the wires are starting to look like harnesses with connectors and the wires being bundled.

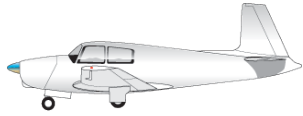
The project is a bit behind schedule due to a major avionics conference and the tech being out sick a couple of times, but only by a couple of weeks. The original quote was 8 – 10 weeks and it started on January 15. The projected completion would have been March 11 to 25. Add in about 10 days of the tech being ill and a week for the conference, it would be April 10 to meet the quoted time of actual work, and that date could be met.

I did make one change to the setup. I have decided to change the right-side panel from a dock for an AERA 760 to a 7" G3X display. The downside is that I lose that fully independent unit with its own power and AHARS. However, on the upside, I get a full PFD/MFD for the right seat with baro altitude and magnetic heading. Plus, I can put up a full screen of engine data on it. Also, the G3X is limited to the number of RS232 connections it can have and my planned setup had maxed out the six available on the 10" G3X and I would not have been able to control the com radios from the G3X. Adding the 7" display adds another six inputs. The two G3X units "talk" over a different connection and can share the RS232 connections.

The second G3X is not as expensive as listed on the Garmin page. The price they quote is for a complete unit for a single installation. As a second display, you only need the display; no AHARS and other boxes. You can see this pricing on the Garmin page if you price a 10" with 7" versus the two separately. There is about a \$4,000 difference.

My avionics shop had found some really slick annunciators to replace the stock panel. However, then we priced them. \$900 for each light is a bit steep, but when I mentioned this on Mooney Space, a helpful person gave me contact info for a person at the company that makes the annunciator panels and he is making a custom "lens" for the annunciator. I will keep the Gear indicators, high/low volts, Alt Air and Start Power. But the low fuel and vac lights will be repurposed to Speed Brake, Pitot Heat, and Prop Heat at a MUCH lower price.





Mooney Maintenance

Visit our Website for all kinds of maintenance resources

The cover of 'The Mooney Flyer' magazine features two Mooney aircraft flying over a red Mooney logo. The text 'The Mooney Flyer' is at the top, and 'Magazine for the Mooney Community' is at the bottom.

[Click here](#)

A cartoon character of a mechanic in blue overalls and a cap, holding a large wrench over his shoulder.

[Click here](#)

Download Mooney's 100 Hour Inspection Guide

The Mooney logo, a stylized red and white wing shape.

Search Mooney's new website for Service Bulletins (SBs) and Service Instructions applicable to your Mooney

[Click here](#)



[CLICK HERE](#) for the FAA's Airworthiness Directives (ADs) for all Mooneys.



Alpha aviation

1.800.653.5112
cs@alphaaviation.com • 9am-5pm M-F CT

2 & 3 POINT SAFETY RESTRAINTS
Replacement, Minor Change,
PMA, OEM, and STC



AMSAFE
THE CHOICE OF AIRLINES WORLDWIDE!

10% OFF SUN N' FUN 2024 APRIL 9-14
CODE: SNF24MF
Good April 9th to 14th • Not valid on clearance items

HYDRAULIC AIRCRAFT JACKS
OVER 12,000 SOLD SINCE 1995!
3- and 8-ton Capacity,
24" to 93",
Clears Gear Doors



WWW.ALPHA AVIATION.com



Ask the Top Gun

TG



Tom Rouch

Founder of Top Gun Aviation, Stockton, California



Send your questions for Tom to TheMooneyFlyer@gmail.com



Thanks for all you are doing to help us Mooney Owners.

My questions are: 1) How often do I need to fly my Mooney to preserve the engine?
2) How long does the flight need to be to burn out all the moisture? 3) If I don't fly for a month, is there anything I should do beforehand or before the next flight?



Interesting questions, but let me change it some to answer, "How do I store my airplane?"

"How often do I need to fly," really depends on a lot of variables like how you shelter your plane and where is it located. First, we need to answer where the plane is kept geographically. The Air Force major storage base is in Tucson Arizona at Davis-Monthan Air Force Base. They store on average over 5,000 planes at a time, and for all the services' excess planes, obviously for the dry, warm climate because all of them are stored outside. There are similar storage sites for civilian planes throughout the southwest, mostly in southern California, Arizona, and New Mexico. Now for most of you that must deal with weather, then of course your best answer is to have a dry hanger that does a good job without much effort. Then, most planes are kept outside in the weather, with at least an aircraft cover for some protection. If you don't fly most of the year then you should at least keep it full of fuel, tires full of air, engine full of oil, etc. There are desiccant plugs (to replace spark plugs) to keep the cylinders dry and you could spray protective oil in the cylinders when you install the desiccant plugs. In my days as a crew chief on the B-52, I would spend time with my plane on the alert pad, (2 days on, 2 days off, for usual 28 days). I mention this only because every other day we would move the plane about 4 feet back or forth to prevent the tires from developing flat spots. It is not as much a problem with the synthetics used today but is something to think about if your plane is sitting in one spot for months. A long taxi will get the tires smoothed out.

How often do you need to fly to preserve the engine? Really, not at all if you have done the basic things I suggested. There are engines stored for years and just running the engine on the ground just creates moisture and you have to start all over. To answer the last question, if you haven't flown for a month or so, then I suggest the most complete pre-flight you have ever done, a thorough ground run, clear weather and use all the runway. I could tell stories of engines that quit on or just after takeoff, usually because of water in the fuel. Therefore, sump your tanks thoroughly.

Top Gun Aviation



Specializing in Mooney and Cirrus

(209) 983-8082

For Service and Maintenance, ask for Mark or Tom

FAX: (209) 983-8084

6100 S. Lindbergh St., Stockton, CA 95206

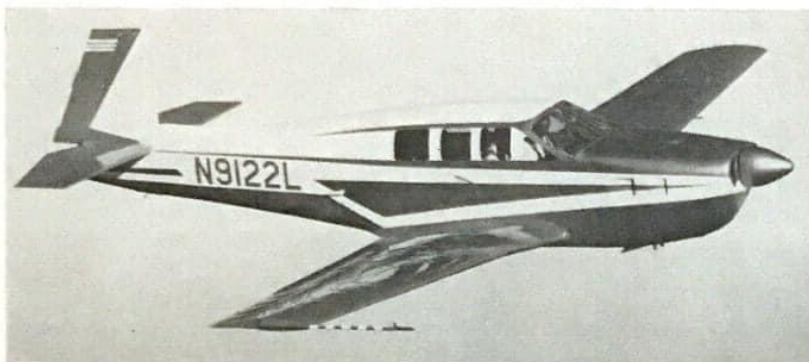
or visit our website at www.topgunaviation.net



Avionics Repair and Installation Services now available on site thru J&R Electronics

MOONEY FOR '65

This all-new—all-star line-up for 1965 is making aviation history. From the fixed gear Mooney Master to the 325mph Turbo-Twin, this is one of the most exciting, most advanced lines of aircraft available in general aviation this year. The greatest single engineering and performance advancement in the '65 line is Positive Control — another aviation first for Mooney. PC adds a new dimension of pleasure and safety to everyday flying. It's standard on the Mark 21, Super 21, and the new Mooney Mustang for 1965.



New Star in the Sky

Mark 22 — *Mustang*

First pressurized single engine aircraft carries 5 at speeds to 250mph and altitudes to 24,000 feet. Coming mid-year!



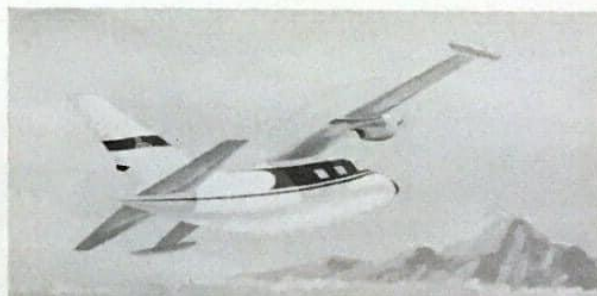
MOONEY SUPER 21 — The convincing new Super 21 with Positive Control. 200hp with 187mph cruise. Ram air power boost adds another 10-12hp at altitude.



MOONEY MASTER — fixed gear. Two airplanes for the price of one. The versatile fixed gear that converts to retractable at owner's option.



MOONEY MARK 21 — The completely new and different Mark 21 with Positive Control plus over 16 other new features for '65... the most practical buy you can fly.



MOONEY MU-2 — Mooney presents another new concept for general aviation. The MU-2 is the first high speed, high altitude business aircraft with real STOL capabilities. Speeds to 325mph, altitudes to 30,000', pressurized and air conditioned. It's coming soon!

See Your Mooney Dealer Now for Details
on These All New, Trend-Setting Aircraft.



See our exhibit at the Paris Air Show!

MOONEY

MOONEY AIRCRAFT, INC. • KERRVILLE, TEXAS

CIRCLE NO. 52 ON READER SERVICE PAGE

Have you
HEARD?



A CANDID REFLECTION ON FAA AIRCRAFT HANGAR LEASES AND HANGAR REVERSION POLICY



While the FAA offers extensive guidance for airport administration policy, particularly in terms of airport compliance, all too often there is much left to interpretation by both airport sponsors and airport users.

[CLICK HERE](#) for more info

\$20 MILLION TO UPGRADE AND BUILD CONTROL TOWERS ACROSS THE NATION



Is your airport's tower getting an upgrade?

[CLICK HERE](#) for more info

House Passes Third FAA Extension



On February 29th, the U.S. House of Representatives voted 410 to 19 to further extend the deadline for passing a comprehensive FAA reauthorization bill to May 10. Expected to pass the Senate as well, the stopgap measure would mark the third such short-term extension of the FAA's authorization since September as lawmakers work on a long-term bill.

Under the second extension approved in December, lawmakers faced a March 8 deadline to complete work on the FAA bill. The House passed its version of the long-term reauthorization bill in July, but the Senate's version had stalled over issues such as the age-65 mandatory retirement age and the 1,500-hour requirement for Part 121 pilots.

The Senate Commerce Committee last month was able to approve the long-term bill out of committee. But rather than bring that bill to the floor first, the House and Senate have begun informally hashing out differences between their respective bills. A compromise agreement could go to the Senate floor instead, as well as return to the House for approval.

"Though I am pleased that we are moving closer to passing a longer-term bill, we will not be done before the current authorization expires on March 8," said [Rep. Rick Larsen](#) (D-Washington), the ranking member of the House Transportation and Infrastructure Committee, offering support for the extension. "We need more time for negotiations...to reconcile the two bills and produce a final, comprehensive bill."






The Garmin 400 Series and the 530. Throwaway Or Keeper?

Despite false rumors and misinformation that the hugely popular Garmin GNS-series navigators are at the end of their service life, Garmin says that 99 percent of GNS users can keep using their units. Moreover, the Garmin factory will still continue to support common repairs and refurbishments as it has for the past 25 years. For a deep dive into the future of GNS support, and some tips for dealing with a dreaded failure, **Aviation Consumer** Editor-in-Chief Larry Anglisano linked up with Garmin's Jim Alpiser. Watch the video here: <https://www.youtube.com/watch?v=qbz6qZeN5Ro&t=1s>

Mooney

Events

AROUND THE WORLD

	<p>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</p> <p>April 13: Flagler (FIN) May 11: Lakeland, (LAL)</p>
	<p>Sign Up at https://www.mooneysafety.com/ppp-registration/</p> <p>2024 Event locations:</p> <p>Santa Maria, CA, Apr 5-7 Owensboro, KY, June 21-23 Burlington, VT, Sep 6-8 Dallas Ft Worth, TX, Oct 18-20</p>
	<p>2024 AGM fly-in will be to Port Lincoln in South Australia. You will be able to enjoy fabulous Coffin Bay oysters, swim with the tuna, visit local wineries and much more.</p>
	<p>Learn more at https://www.empoa.eu/index.php/en/</p>
	<p>June 28-29: The Mooney Flyer RoundUp. CLICK HERE for details. CLICK HERE to Register</p>



Flight Review & IPC Review Guides

Jim Price, a Colonel in the USAF and a Captain for Northwest Airlines has tens of thousands of hours. His knowledge and experience is beyond awesome.

I have always thought that Jim forgets more about flying in 10 minutes than I know.

These two guides are invaluable to us as pilots and well worth a study/read.



FLIGHT REVIEW STUDY GUIDE

Rusty pilot or professional, this will give you a great, in depth review of FARs, charts, airspace, procedures and flight safety. It's packed with color graphics to help you prepare with confidence.

IPC STUDY GUIDE

An easy, but in depth review of FAA Regulations, IFR charts, IFR planning, takeoff minimums, departures, holding, STARs and approaches. It's packed with color graphics to help you prepare with confidence. As an added bonus, this study guide contains the nuances of GPS and WAAS GPS procedures.

The Flight Review Study Guide

Rusty pilot or professional, this will give you a great, in depth review of FARs, charts, airspace, procedures and flight safety. It's packed with color graphics to help you prepare with confidence.

The IPC Study Guide

An easy, but in depth review of FAA Regulations, IFR charts, IFR planning, takeoff minimums, departures, holding, STARs and approaches. It's packed with color graphics to help you prepare with confidence. As an added bonus, this study guide contains the nuances of GPS and WAAS GPS procedures.

[CLICK HERE](#) to go to his website for more info.



Parts for Sale

1959 Mooney 20A - Seeking Mooney Purist * \$17,000

Hangar stored for years, now ready for overhaul(s) and refurbish. * Airframe and engine 1439.1 TT. McAuley prop. O360 engine. Wood-wing.

* Would consider selling only the engine and prop. However, sentimentally prefer to find a Mooney Lover seeking a great project. * Telephone: 419 591 6477 for further information.

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 \$3,500 **REDUCED**

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)



For sale: Wing Covers (front & rear) for M20J. Great condition includes storage bag. Price (including shipping UPS ground, cont. US) only \$279.00. Contact: Dwight Wilcox at: dw_1@verizon.net

Mooney gear actuator and parts FOR SALE

- Plessey actuator removed. 7743 hours. Back clutch spring has 1166 hours.
- Spare Plessey back clutch spring. Purchased in 2012 with “several hundred hours”.
- Manual extension Spool and Cable for Plessey, installed 2021, 206 hours.

Best offer. Parts will be sold separately.

Contact: CarolAnn Garratt, cagarratt@gmail.com or leave msg at 352-342-7182.



For Sale: Complete exhaust system from 1975 M20C. Excellent condition. Drilled for EGT sensors.

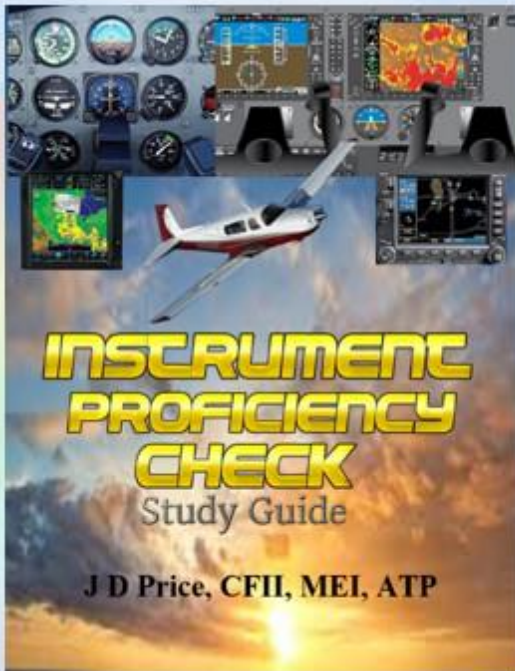
Approximate 2,750 hours TT. Removed for Power Flow upgrade. \$350. For information: 541-382-6752; 541-410-1121;

jhl1csrs@yahoo.com



For Sale: Polished Hartzell 3 blade spinner P/N: A-2295-4P. Fits Mooney M20J and M20C with STC and other applications. Complete with bulkhead. \$500. For information: 541-382-6752; 541-410-1121; jhl1csrs@yahoo.com





Prepare
online

FREE

JDPriceCFI.com