

The Mooney Flyer

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

September 2025



Editors

Phil Corman | Jim Price

Contributors

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

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*

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

[Supplemental Oxygen](#) by Jim Price

[Flying As we Age](#) by Phil Corman

[Open Door in Flight](#) by Parvez Dara

[One Tent, One Bike, One Plane & Bison](#) by Richard Brown

[Second Flight Oops](#) by Jerry Proctor

[Freedom](#) by Don Peterson

[Trust But Verify](#) by Jim Price



If you love **The Mooney Flyer** and want to keep it healthy,

Click HERE to Donate



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

Click HERE to Subscribe



Find all the back issues, starting in 2012.

Click HERE to view the Archives

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



Mooney Across the Desert

Last week Linda and I flew our Eagle to Sedona, Arizona. On the return to our home in California, we enjoyed Ground Speeds in excess of 205 knots. Linda thought we flew too fast to enjoy the sites below.

Landing and taking off on the USS Sedona is a challenge and a delight. It is called that because it looks like an aircraft carrier, as it sits atop a high mesa, overlooking the city. We prefer landing on Runway 3, since there is an upslope of 1.8% and departing on Runway 21, which exits onto a wide valley.

Leaving Sedona, we saw red rock buttes dotted with green trees in the canyons' cracks, full of beauty and life.

Our next waypoint is just north of Prescott and

is high desert filled with chaparral and a ton of Embry Riddle students. (We received a few vectors around flight school traffic). It's beautiful high desert terrain and only 5-10 minutes west of Sedona.

Next is a network of deep canyons with flat rims. Linda noted how beautiful the canyons were and also noted there weren't many emergency landing zones.

Then we approached a mountain chain/ridge just east of the Colorado River. The terrain changed dramatically as we came upon the blue Colorado River and the lush vegetation along the river. There was another unique

landscape, Laughlin/Bullhead off our right wing and Lake Havasu off our left wing. Simply beautiful.

After the Colorado River, we flew over Needles, which begins the eastern flank of the Mojave Desert. It was yet another change of dramatic terrain, with mountains dotting the mostly flat desert, and little or no signs of life. There were miles and miles of gray desert with white dry lake beds and dry river deltas. We were glad our IO550 engine stayed running, as landing in the Mojave didn't look appealing in the late August heat. Stark as the desert was, it was strikingly beautiful from 8,500 feet.

We followed Interstate 40 to Barstow, just SE of Edwards AFB and flew across Antelope Valley with the AFB to our right and Palmdale "Skunkworks" to our left. There is so much history in both places and it's fun to see. At Fox field (KWJF), we turned toward our home drome, Paso Roble (KPRB), and flew over the Tehachapi Mountains, (the southern end of the Sierra Nevada Mountains). We got our usual bumps and overflowed California's central coast just south of Bakersfield. As we approached PRB, we started our descent into beautiful clear VFR and green terrain, filled with verdant wine vineyards, then we made a perfect landing at home. The flight was uneventful, but because of the diverse geography and high speeds, it was a most memorable flight in our Eagle.

Regarding Stalls in my Mooney

I don't like them as my Mooney stalls sharply	41%
They are no big deal	24%
I don't like them as my Mooney wants to enter a spin in a stall	21%
Learning slow flight and avoiding stalls is my choice	15%

[back](#) Voters: 241

Next month's poll: "My Favorite Mooney Model is"

[CLICK HERE](#) to vote



[CLICK HERE](#) to view the most comprehensive list of Mooney Instructors in the USA

Need a Mooney CFI?

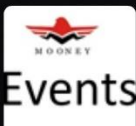
CLICK
HERE

to find one



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.





LTE
Letters to the

EDITOR

TheMooneyFlyer@gmail.com

We were a hit at the EAA! Marvin B

Editor's Note: Two fine looking Mooniacs at Oshkosh



Add _____ the gust factor to your windy-day landings.

You should add **half the gust factor** to protect yourself from windshear and a possible stall on final. If the winds are 10 knots gusting to 20, you have a 10-knot gust factor. You should add 5 knots to your final approach speed.

Rule of thumb

*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 

<https://www.donmaxwell.com/>

AUTHORIZED
MOONEY



SERVICE CENTER

Flying and Aging

As we get older and age a bit, our skills change as does our metabolism, which affects our flying in various ways. Some good and some, not so good.



Because I'm an optimist, let me start with the good. Our years of experience give us an edge in flying. Most good decisions in flying come from good judgement which, in turn, comes from good experience. As we age, our experience just grows and grows. Younger pilots will need to earn this depth of experience. However, other aspects tend to diminish. Let me start with Hand-Eye coordination.

Hand-Eye Coordination and Reaction Times

Muscle memory is a great thing. If we haven't ridden a bike for years, we can still get on a bike and ride away. This is mostly true for flying, but not quite. To keep your skills and judgement alive, you need to fly regularly.

As we age, our hand-eye coordination remains good, but we process things a little bit slower. In turbulence, you might respond a little slower to a drooping wing than you used to, (lifting the drooping wing with rudder, not aileron). You might be a little slower correcting for a sudden gust in the flare. Our response times just slow down a bit. A way to counteract this is to mentally prepare yourself for unexpected events ahead of time, so that you are more prepared to respond.



Eyesight

There is not doubt that our eyesight deteriorates as we age. Our visual acuity diminishes and often we get cataracts, and a graying and blurring of vision. *Deteriorating eyesight is amplified at night, further aggravating the visual situation.*

Deteriorating eyesight is somewhat insidious in that it happens slowly over time. One might not even realize that their eyesight ain't what it used to be.

The only solution is regular eye appointments and corrective eyeglasses or contacts.



Hearing

Yup, in addition to our eyes abandoning us, our ears do also. It used to be the only solution was hearing aids, but while flying with ANR headsets, the volume control can correct for the diminished hearing. You'll know you need assistance with hearing if you find yourself asking ATC to repeat their transmissions.

Skill Deterioration

As we age, our body is like a "system" where weaker components, (i.e., eyes, ears, etc.), show up in our overall flying. This can show

up in sloppy flying, sloppy radio, or both. If you fail to conform to ATC by taxiing on the wrong taxiway or making the wrong departure turn, forgetting to retract flaps on departure, or leave the gear down, these are examples of deteriorating system skills.

Skills can diminish slowly over time, like eyesight or hearing, and you may not notice the deterioration since it is incrementally diminishing. It's a little like hypoxia in that it may go unnoticed.

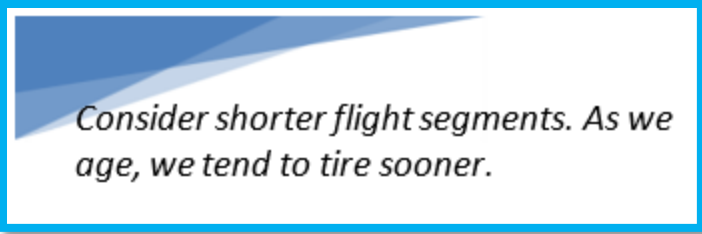
My wife flies with me most of the time and we have a "pact" that we follow, as I have aged. If either of us notices my skills diminishing, we will sit down and evaluate the situation. A second person that is paying attention, may notice diminishing skills before the PIC does. This can be useful.

Physical Health

Studies that deal with health issues are primarily in agreement that issues such as degraded vision, sudden in-flight incapacitation (0.3 percent of all accidents), and cardiovascular abnormalities are of increasing concern for older pilots. This stands to reason, but it's also worth noting that the studies found no evidence that the incidence of these problems increases suddenly at any particular age. Moreover, it is well established in the general scientific literature, that the health-related impacts of aging can be significantly offset by regular physical activity, a healthy diet, risk factor mitigation, (e.g., not smoking), and regular check-ups with medical professionals.

Strength and Flexibility

Many pilots report decreased flexibility and loss of strength as they get older. Most notice that cockpit fatigue sets in earlier than it once did, and some find it more difficult to perform motor tasks, like pressing small buttons. **Recommendations:** »You should get a yearly physical, starting no later than age 50. »Maintain an exercise regimen: 30 minutes of physical activity a day, even simple things like walking, can have a tremendous impact on overall well-being. »Try to schedule



Consider shorter flight segments. As we age, we tend to tire sooner.

flights for the morning, or late afternoon, when it tends to be smoother and cooler. However, you should avoid early mornings and late nights. After-lunch flights can also lead to fatigue problems. »If cockpit fatigue is a problem, allow more time, and plan more frequent stops. Noise-

cancelling headsets can be helpful here as well. »Stay well-hydrated, but avoid coffee and other caffeinated drinks. If in-flight discomfort is an issue, plan shorter legs or carry on-board relief products. »Stay well-fed. Hypoglycemia (low blood sugar) can take a real toll. »As an older pilot, proper rest is even more important. Most of us can't just "power through" as we did in college or our early 30s.

Memory

Working memory is used often in flying, and seems to be the type of memory most affected by aging. Many older pilots find it more difficult to remember things like altitude assignments, transponder codes, and radio frequencies. **Recommendations:**

- Take notes. Anytime you're dealing with ATC, have a pen and paper handy.
- Consider purchasing an altitude reminder device, or adapt something else to the purpose.
- Try to fly when you're "fresh." Older pilots often perform better on memory tests in the morning.
- Enlist the aid of cockpit companions to "back you up" on the numbers and help with things like radio tuning and GPS programming.

As pilots age, routine medical checks become more frequent, especially after age 40, to ensure safety standards are met. However, cognitive processes such as decision-making and task management can decline, leading to increased accidents among older pilots. Studies indicate that while older pilots may initially perform worse than younger pilots, those with higher levels of expertise tend to maintain better performance over time. To continue flying safely, pilots should consider ongoing training, setting personal limits, and modifying their flying habits. Overall, while age-related decline is a concern, expertise and experience can help mitigate some of these effects.

Supplemental Oxygen



Jim Price
Co-Editor

Reduced atmospheric pressure means less oxygen in your lungs and less oxygen in your tissue – which may result in Hypoxia. Symptoms of hypoxia are cyanosis (a blue tint to the tissue around the tips of your extremities and lips), tingling or numbness in the extremities, and a feeling of euphoria. As hypoxia progresses you become sleepy. If not corrected, it will lead to unconsciousness and death.



The birth of nearly every aviation regulation, especially [FAR 91.211](#) is written in blood.

[FAR 91.211](#) discusses Supplemental Oxygen, and states that no person may operate a civil aircraft of U.S. registry —

(1) At cabin pressure altitudes above 12,500 feet (MSL) up to and including 14,000 feet (MSL) unless the required minimum flight crew is provided with and uses supplemental oxygen if above 12,500 to 14,000 feet for more than 30 minutes.



(2) At cabin pressure altitudes above 14,000 feet (MSL) unless the required minimum flight crew is provided with and uses supplemental oxygen during the entire flight time at those altitudes; and

(3) At cabin pressure altitudes above 15,000 feet (MSL) unless each occupant of the aircraft is provided with supplemental oxygen.



Very wise counsel, not noted in FAR 91.211, recommends Oxygen use when flying at night at above 5,000 feet.



Monitoring Oxygen Saturation

Pilots can monitor their oxygen saturation, or SPO₂, which is the percentage of oxygen their blood cells are carrying, by using a [pulse oximeter](#). (You can find an oximeter in a drug store). Normal oxygen saturation is 96% or higher when breathing the air on the ground. This

saturation number will decrease as altitude increases because the atmosphere is less dense the higher you fly.

Most pilots utilize cannulas, but they are not approved for use above 18,000 feet. Above this altitude, you must wear a mask. Some systems also include a directional flow indicator to indicate that oxygen is moving from the tank to the mask or cannula.



Underscoring Oxygen Regulations with a Tragic Event



On January 23, 2003, a Piper PA-28R-200 Cherokee Arrow II crashed near La Sal, Utah, during a night flight from Longmont, Colorado, to Las Vegas. The non-instrument-rated private pilot and her three passengers were all killed when the aircraft struck terrain during a forced landing attempt and was consumed by fire.

The pilot flew for extended periods above 12,500 feet without supplemental oxygen in the unpressurized aircraft.

Probable Cause: The loss of engine power (total) due to fuel starvation, the pilot not

following procedures/directives (fuel management procedures), and the pilot's inadequate preflight planning/preparation for the flight. **Contributing factors** were the pilot's inadequately equipping the airplane (lack of supplemental oxygen), the **pilot's hypoxic physical impairment**, and the pilot's total lack of experience in this type of operation.

This accident and others remind us how crucially important it is to understand and correctly utilize oxygen systems, particularly when flying at high altitudes.

General Aviation Oxygen System Components

There are three key components to most [oxygen systems](#), whether they are portable or fixed. These include storage systems, delivery systems, as well as masks and cannulas.

Oxygen Storage Systems

Oxygen can be [stored in a container](#) on an aircraft in various forms, including gas, liquid, or solid. Each [storage system](#) has trade-offs in weight, efficiency, safety, and application. Let's explore the different storage options:

Oxygen Delivery Systems

From the storage container, oxygen can be [delivered to aircraft occupants](#) in one of three ways.

- The **continuous flow system** delivers a constant flow of oxygen from the storage container to its users, whether they are inhaling, exhaling, or pausing between breaths.
- The **diluter demand system** provides users with oxygen on demand during inhalation and stops the flow when demand ceases during exhalation. Incoming oxygen is diluted with cabin air, maintaining the proper oxygen percentage at various altitudes.

Oxygen Pillow Masks and Cannulas



The [Aithre Nasal Pillow Mask \(\\$250\)](#) is a fusion of a cannula and mask. Due to the tight seal around the nostrils, it improves oxygen delivery at altitudes of 12,000 – 18,000 feet MSL. In the mid to high teens, cannulas tend to be less effective. Because the nasal pillow mask comfortably seals around the nostrils, it minimizes atmospheric diffusion while allowing headset microphone use.

If you prefer a cannula, consider the [Aithre Boom Cannula and Adaptor \(\\$250\)](#). Simply lower the boom into position when oxygen is required and raise the boom when oxygen is no longer needed. It's ideal for altitudes up to 18,000 feet MSL in unpressurized aircraft, allowing for eating, drinking, and speaking.



Please ensure your system is compatible with the oxygen delivery system.

Complete Supplemental Oxygen Systems

If your aircraft does not have a built in oxygen system, you can go portable with something like the [2-Place Cannula Oxygen System \(\\$630\)](#). It utilizes pressure swing adsorption technology to generate 93-99 percent pure oxygen in real time, which is ideal for altitudes of up to 18,000 feet MSL for one person or 15,000 feet MSL for two.





Some pilots are using the [Aithre Turbo Oxygen Maker Portable \(\\$2,745\)](#). It is a compact, ship-powered oxygen concentrator that eliminates the need for portable cylinders. The Turbo does not use a Lithium battery, but instead, relies exclusively on ship power 12-14V, using the aircraft battery or engine-driven electrical alternator. At just 80W or approximately 6 amps at 14V supply, the Aithre Turbo will fit within virtually any alternator capacity, and this results in reduced maintenance, a longer service life, and increased flight safety.

Oxygen Equipment Operation Checklist

The following checklist can be used to confirm the proper operation of the oxygen equipment installed on your aircraft before every flight:

- Pressure: above minimum
- Regulator: functional
- Indicator: steady flow of oxygen
- Connections: secure
- Equipment location: readily available



Please ensure that all aircraft occupants are briefed on the location and operation of the oxygen system. Conduct regular maintenance and inspections of the system according to the manufacturer's instructions.

Choosing the Right Oxygen Equipment for Your Needs

When selecting oxygen equipment for your aircraft, it is crucial to choose products from trusted manufacturers.

Supplemental oxygen equipment is a concern that affects all pilots. Therefore, always know the equipment you have

on board, when to use it, and its limitations.

Fly Safe, Jim

Plan Now to Become a Safer Pilot in 2025

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/](https://www.mooneysafety.com/ppp-registration/)

You can also email Lela Hughes,
lelahughes49@gmail.com or call
[210-289-6939](tel:210-289-6939).

2025

Groton, CT, Sep 12 – 14

Branson, MO, Oct 17 – 19

**CLICK HERE TO
REGISTER**



Open Door in Flight

by Parvez Dara, MD ATP Master CFII



The other day it dawned on me how we as humans react to things that are outside of the ordinary. You know, things that make you go more than “hmm.” For instance, when you are climbing out on takeoff and at 5,000 feet your airspeed remains anemic. Now, all sorts of thoughts are conjured up about the engine and the wrangled nerves get further jangled, as you look for a place to safely put your magic carpet, only to find that the gear is still hanging out and your eyes finally notice the green safe light – taunting you. There are other things that make one go dumb occasionally, but there are events that can happen on take-off or in cruise in a Mooney, or any other make and model. For instance, when the baggage compartment door flings open, because there were distractions during the preflight. Even with the sound and the wind, given a reasonable 4,000-foot runway, you can stop the aircraft and the whole process can be properly recrafted for a safe flight.

More than occasionally, a passenger door opens in flight and causes turmoil. In 2025, an open passenger door in flight has claimed the lives of the occupants in four different aircraft crashes; crashes that should not have occurred.



When this happens, it is mostly handled properly by competent pilots who don't give flight to their fancy of disaster. They fly the aircraft. They AVIATE!

I was right seating for a Mooney pilot and upon takeoff from a towered airport, I opened the door to see the response of the pilot. His initial response was, “Deer in headlights.” There was the sudden whoosh of air, the rattle of things inside the cockpit, the turbulent flight of paper in the rear seats, and the roar of wind that momentarily drowned out communication between us and the tower. Credit to his aviator's instinct, he handled it very well. The saucer shaped eyes grew smaller as

his brain blinked back into gear and he continued to climb to 1,500 feet, called the tower and stated he need to return due to the opened door. He made it a non-event. Impressive!

What happens when the door opens? Nothing really, when it comes to the safety of the aircraft. Only at times, it mashes the pilot's brain. A sudden departure from the ordinary scheme of things is a jarring experience. It rattles us. But anticipating it, makes for an easy call for securing the doors of the aircraft, prior to flight.

Simple steps to remember in such a wild ride. Because of the noise surrounding the pilot and passengers, one needs to keep in mind:

1. Stay Calm. “It's only the door.”
2. Fly the Aircraft – you've heard that before. “Aviate.”
3. You may need to add 2 inches of MP to overcome the drag.



4. Forget closing the door in flight. Why? The open door now becomes a lift device, and the pull of the air is far stronger than that of a puny human arm.
5. Advise ATC/Tower of your intentions to land due to an open door. In most cases, you will be given priority to return to the airport, or in case of a busy Class Bravo airspace, you will be advised to go to another airport that is close.
6. Level flight at the appropriate altitude. No need to go full throttle. That is unnecessary.
7. Land and secure the door.

In all such cases, a calm mind always seems to prevent casualties. One cannot let a minor problem turn into a disaster. So, please DON'T panic and make a non-event an Emergency, that might lead to loss of life.



Keep Calm and Fly the Aircraft. As the age old saying goes, AVIATE. COMMUNICATE. NAVIGATE.

SAFETY IS NO ACCIDENT... SERIOUSLY!





By Richard Brown

One Tent, One Bike, One Plane and Bison



Inspiration comes in many different forms. “Oh, you have four ladies coming to town for a girls’ weekend? I think I’m going to fly somewhere and camp.”

For a long time, I have wanted to fly to Catalina’s airport and camp. Just off the taxiway at the west end of the airport is an area where you can tie down your plane and set up a tent. It isn’t Oshkosh, but a 20-minute flight will let you escape the crowds of Southern California, and your only company is the stars and the breeze. To camp, you need to pay the Aero Club’s annual membership, which also waives landing fees.

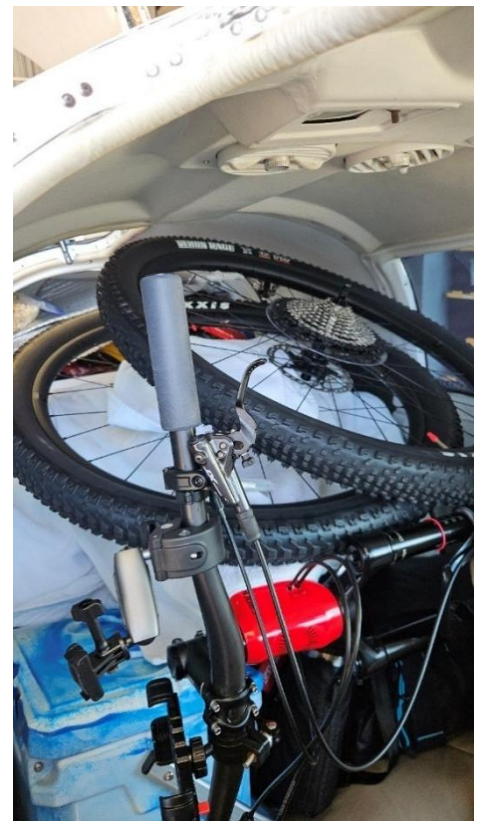
I picked up my new full suspension mountain bike on Thursday and after getting home, put pedals on, adjusted everything, and then hoped I would be able to get a full-size mountain bike with 29” tires in a short body Mooney. If it didn’t fit, there was the option of doing some hiking from the airport, but I really wanted to go on a ride after arriving Friday, and then going down to Avalon for breakfast on Saturday.

On Friday morning, I loaded everything up in the truck so I could go straight from work to the airport. Then, I settled in for half a day at the office. When I was finished with everything I needed to get done, it was a little past noon, and I was able to beat most of the afternoon traffic on the 5 freeway as I headed north to the airport.

My tanks were topped off by the fuel truck and as I was looking at the pile of gear along with my bike, I played a little mental Tetris. It's a good thing this is a solo camping trip because there was no way it was all getting in the plane.

All the lighter stuff got piled in the baggage area behind the back seat. I put my duffle bag and flight bag in the back seat. It was the moment of truth. I slid both front seats all the way forward, slid the seat on the bike as low as the dropper would go, and then climbed up on the wing walk with the bike frame. As I was holding the right seat back forward with my knee, I was reminded that it would be nice if it would just stay in that position without my help.

I knew the chain/seat stays were going to need to go over the back seat into the luggage area and maybe the hat rack if I had any hope of it fitting. So, with a towel covering the back seat, I put the bike frame through the door, back first. About halfway in, I realized that I needed to turn it over the other direction, or the handlebars and fork weren't going to fit. I pulled it out and started again. This time it worked. I can't slide the seats all the way back, but they go back further than the position I fly in. Other than the inconvenience of making it harder to get in, I was good. I tossed a towel over the bike so the wheels wouldn't scratch the frame and stacked them on top.



From Fullerton Ground, I received flight following and was soon on my way. The tower switched me over to SoCal Departure and I was cleared to 4,500' and own navigation. The channel between Long Beach and Catalina was clear and I soaked in the beauty of flying off the California coast. To the north and south there were some low clouds over the water, and as I approached Two Harbors to make my turn towards the airport, I could see areas of clouds pushed up against the island.



There's very little traffic at 2:30 in the afternoon; just one plane on the way back to the mainland. I went from 1,000' AGL on the downwind abeam the numbers to 2,600' AGL as I passed over the cliffs that drop to the ocean below. I was on left base for runway 22 when another plane checked in on the frequency, holding short 22, waiting for me to land. A couple of minutes later, after a smooth landing, I was rolling out, bouncing on the "new and improved" yet still very bumpy runway.

I exited the runway at the first turn off to let the other plane depart and proceeded up the taxiway to the west end. At a very low RPM, just enough to keep rolling, I hoped to not pick up any small rocks into the prop. I taxied back down the dirt to the camping area and came to a stop on a concrete pad, where I chocked the plane before heading to the tower to check in.

When I came up the stairs, Frank knew my tail number and already had me checked in. Frank gave me my bike permit, and we visited for a bit. I mentioned the QR code for "Bison Safety Warning" on the back of the bike permit and we talked about how they can run up to 35 mph. He told me, "We had a guy riding his bike awhile back who saw a Bison on the side of the road and thought he could just zip past it. However, it chased him down, tossed him from the bike, and he earned a helicopter ride back to the mainland." That story would be front and center in my mind in a couple of hours.

I told him thanks for the permit and headed back to set up camp. I looked at the map and inclines involved in the ride I was about to embark on and figured I wouldn't want to set up when I got back. As I looked at the pile of stuff that came out of the plane, I was amazed at what I was able to fit in my plane. That pile should shatter the "Mooney cabins are small" myth.



With the tent set up, cot and sleeping bag ready for my return, and bike back together, I rode over to the restaurant and made a stop at the water spigot to fill my hydration pack. I put the full 2.5 liters in, not knowing how much I would need and like fuel in the plane, it's always better to have extra.

The route I planned goes down to the coast on the backside of the island and then up through Middle Ranch, before finally joining Airport Road on the east side and working my way back to the airport. I did the rough math and figured it should be between 15-20 miles and maybe 1,800-2,000' of climbing. I erroneously thought going from the airport at 1,600' to sea level would be all

downhill, and the first four miles were flowy and fun, with the suspension taking some but not all of the bumps out of the ride. Coming around a corner there was a steep climb before dropping back down again all the way to a beautiful view of the coast.



Middle Ranch is right at the 10-mile mark and as I came around a bend, I saw my first Bison of the ride. It was off the side of the road, but there was a huge feeding trough between us. I kept going until I came around the next bend, where I came to a quick stop. Apparently, all the Bison hang out in Middle Ranch. They were everywhere, on the hillside to my left, in and next to the road ahead, and in the field to my right.

I was standing there, straddling my bike, sipping on some water, and pondering my options. I didn't want to go back the way I came. I knew I was over halfway through the ride, and I had done a lot of climbing. The idea of going back downhill just to go back up, with sweat dripping off my chin, wasn't very appealing. Going forward, there was no way around the Bisons. Side streets don't exist in the interior of the island, and with Bisons in and next to the road, I'm not going through them.



I decided to take a forced rest stop and see if the ones near the road would move along. After a few minutes, I was down to just two Bisons next to the road when I saw a white pickup truck come around the corner. The driver stopped to take some pictures of the Bison from the safety of the truck, before rolling down to me. It was a Ranger in a Catalina Conservancy truck.

Me: "How's it going?"

Ranger: "You feel comfortable going through here?"

Me: "I'm waiting for this last one to cross. There was a bunch of them standing in the road so I guess this is a forced rest stop."

Ranger: "You know if you want, you can toss your bike in the back, and I'll drive you past them. Or you can wait, and I can probably get that one to move."

Me: "If they're over here, am I fine on the road?" (*I said, pointing to the ones in the field to my right.*)

Ranger: "Yeah. Let me try to get this one moved for you, yeah?"

Me: "It's thinking about going."

Ranger: "There's a male there right now and it's the rutting season, so they're a little extra aggressive."

Me: "Somebody out here is kind of snorting and everything."

Ranger: "The big one is a male." (*Pointing to my right at a bull about 50 yards away.*)

Me: "Is it this guy right here in the middle?"

Ranger: "Yeah."

The last one finally moved off the road up ahead.

Ranger: "You should be good. You should get out of here pretty quickly though. I wouldn't linger."

She started backing up and I paced her on the other side, keeping her and her truck in between me and the Bison. When we were past the last one, I gave her a wave and shouted thank you. The rest of the ride was uneventful with a couple of really steep sections where I ran out of gears and had to walk. I pushed the bike up, held the brakes, stepped up next to it, and repeated the process. By the time I rolled back up to my tent, I had gone 17.3 miles and climbed 2,445' and I was regretting the regular ride I had done that morning.

Alone at the airport, I settled in for a dinner of peanut butter and jelly sandwiches and watched the sunset. It cooled down and I got some decent sleep, awakened a few times by the breeze blowing past the tent. Around 3 am, under the full moon, I could see the whole airport; clouds below, and stars above. It was beautiful.



As I lay there with my tired legs, I briefly considered cancelling my ride to Avalon and instead, having breakfast at the airport. However, when I woke up to the sun rising above the clouds, I decided that even if I needed multiple breaks on the way back, it would be worth it. And it was.



Halfway through the 10-mile ride to Avalon, still with Bison on my mind, I heard a noise in the brush just to my right. I was relieved to see it was four deer bounding along and I watched until they cut across the road about 50' in front of me and disappeared down the hill. Most of the road is in very poor condition, and you climb 627' in the process of going down 1,600', but the final 3 miles of steep winding turns is on good pavement, and it was a blast going down. The clouds I rode through on the way down were gone on the way back up and revealed amazing vistas.



The Saturday arrivals were showing up as I broke camp, loaded the plane, and climbed inside. I idled there on the concrete pad, letting the engine warm up. Then, I added enough throttle to get rolling off the pad before pulling it back, hopefully not picking up any rocks into the prop.

The channel below had a low patchy marine layer covering most of it, before giving way to clear but hazy skies right at the coast. It was a great trip, only made possible with the Mooney. In just 20 minutes, I had escaped the bustle of Southern California and enjoyed a piece of this beautiful world we live in.



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.



This story is about a Cessna 172, but the lesson applies to all Mooney pilots

The Cessna 172 pilot was planning a three-hour flight in the pattern at ZZZ. Fuel was visually checked and lined up with what he saw on the gauges at 75% (15 gallons a side).

After about three hours of pattern work, the engine started sputtering on base-to-final. Carb heat was checked and was on, with full flaps. Fuel also was checked and was at five gallons each side.

After switching to the right tank, which did not help, the focus was getting the plane on the ground in a safe manner.

Three to five seconds from landing, the engine shut down and the pilot was able to land the aircraft about five feet short of the runway. After landing, there was no visible sign of damage to either the airfield, plane, or the pilot.

The fuel was checked again and showed empty, in direct contradiction to what was shown earlier and later in the maintenance hangar (Full) on the fuel gauges.

Airport Ops and maintenance were then able to tow the aircraft back to the ramp for inspection.

Cause: Faulty reading of fuel gauges.



Never let this be in
your photo album!

Freedom

By Don Peterson

I was born in the receding shadow of World War II and weaned during the Korean police action. Growing up in north Texas, surrounded by military aircraft, factories and regular sonic booms, we attended the air shows at Carswell AFB, where my hearing loss certainly began. I built numerous aircraft models, guided by my dad, who played with U-line and free flight powered versions. I was more interested in reaching completion than perfection, and they hung by strings in the front window of our living room. My dad's cousin owned her own Cessna 310, and we all had a ride or two. A fifteen-year-old Waco flew chemical application on our cattle ranch. I piloted my dreams without much expectation that I could end up in my own airplane.



This changed in August of 1978, when I happened upon a little airshow in Oshkosh. After a non-stop drive back to Bloomington, Indiana, my new Amex card soon reached critical mass and stayed there for a very long time. And so, it has been 47 years and counting.

After earning my private pilot license in March of 1979, I spotted an ad for a Mooney while waiting for a flight in the O'hare airport. My instructor accompanied me in a small Cessna, and I shook hands with the owner at his asking price, \$15,000 with 1,950 hours on the tach. In 1981, with 150 hours total in my log, I headed off to visit my dad who lived on [Nevis](#) in the Caribbean's Leeward Islands.

For a few years, I flew at every chance. Just being in the air was enough of a thrill. Then, I traveled for my work, getting a lot of instrument time that I might have preferred to avoid. These were mixed with numerous trips to the islands, eventually attracting a fellow traveler who had her own Cessna 170. By this time, flying had become a routine rather than a thrilling experience. We enjoyed trips to exotic places and became engaged in gliders and aerobatics. Antique biplanes became a mission that led to friends all over the world.



After 46 years and four engines, the Mooney is still with me. Along the way, there was fresh paint, two panel upgrades, and nearly 6,000 hours. It's been a long time since I flew for fun, (not counting several years with a PA18 amphib), but now I cherish the Mooney's most important gift. I am free. I can go where I want, when I want, with nearly zero restraints. My big tanks can take me from our hangar in northern Nevada, well into either the north or south boundary countries, non-stop. Frankly, the US has reached a foul mix of boring and irritating. For a while the boring part dominated, but that has recently changed places with the other. Nevertheless, the ability to just pack up and go, even though we often didn't, was sustaining. Freedom is a state of mind, not a place.

Some of you will be aware that we moved to the Colombian Andes in 2022, carrying along a letter from a Colombian Air Force Colonel, explaining our options and steps to house my plane in his country. I have learned that, in Colombia, any answers provided by public officials will either be incorrect, incomplete, or both. This is not corruption, nor anti-gringo behavior. It is just a cultural imperative that one should not quickly offer negative replies. With calm questioning and pleasant demeanor, the rest of the information can be found, or incorrect answers corrected. It took 2 plus years and a final meeting at which we expected to receive the documents to "Temporarily" import my old Mooney. That's when the very friendly and competent importing agent asked to see the documents and financial reports of the Colombian-registered company that would officially sponsor the importation. We handed over the equivalency of the incorporation papers of my wife's company, a very high-level wedding gown design and fabrication business.

"Where are the financial reports and bank deposits?"

"Excuse me, why are these required?"

“The sponsoring company must make a deposit with DIAN, (Columbia’s federal Tax-Collecting entity), equal to the appraised value of the aircraft. I predict they will appraise your plane at \$150,000 USD, or more.”

A bit earlier, we faced an incorrect tax collection by the local municipality that we wished to have returned. We learned another Colombian unbreakable custom: “In Colombia, there are no refunds. Ever”

I had been excitedly looking forward to our plans to have Rambo parked 30 minutes from our home, at an airport with an elevation of 7,700’ on the side of a 17,700’ volcano, with no instrument approach, and one-way-in-one-way-out operation, and poor odds in the event of a go-around, have been abandoned.

We’ve completed our swan-song Mooney tour of South America, which, while long enough, was not nearly long enough. The will remains, but the bones object.

Our recent participation in the Mooney Caravan to Oshkosh (OSH) had not been on my radar, but sudden impulses tend to steer my boat. It was worth doing, and if I had plans to return to OSH, I’d saddle up with the group. The quality of the company was extraordinary. However, OSH itself was ... no longer relevant.

I have been to OSH many times and my previous trip was 30 years earlier. Both “Bonnie” (RIP) and I had planes, and like some women with limitless taste for more shoes, Bonnie’s impulse was for more airplanes – tailwheel only, of course. We restored a French biplane, played with a Starduster Too, Luscombe, a Cessna 170B, and a Zlin 50. With recirculating metal mouths to feed, trips to OSH served many purposes.

There is no longer a fleet of wings, nor a wife with admirable, if ruinously expensive aviation habits.

Having one’s airplane based in another continent undermines the sense of “go anywhere I want, anytime, on a moment’s notice...” So, I’ve committed to pass on my most-faithful flyer to a worthy buyer. First, I need to sort out a couple of paint blemishes and perform the coming Annual Inspection. I am making no plans for the next Mooney adventure. I wouldn’t rule it out if the voices in my head start screaming, but I’ve learned that once a mission whispers, “I’m done,” I quickly steer my thoughts to “what’s next?”

In August of 2026 the “Vintage Aircraft World Championships” (VAWC) will be held in Denmark. What started out as a smallish gathering of friends, has become a fully sanctioned International Championship, dedicated to aged aircraft and often similarly antique pilots. In addition to competing in US club competitions and four Advanced World Aerobatic Championships, my favorite contest was the annual “Coupe d’Anjou”, an aerobatic competition reserved for just the Stampe SV4 biplanes, mostly built in the mid-40s. I did well, confounding the local French pilots, but that event has long been retired, and most of the entrants have gone West.

I’ve been in touch with the organizer of the VAWC and started the search for a well preserved Stampe SV4 with a generous owner. Maybe a European buyer will want to buy Rambo and want his or her new plane delivered?

Second Flight Oops

By Jerry Proctor



You are having a great day! You did your usual excellent preflight and then flew to your \$200 hamburger airport. Yes, inflation hits us all. Now you get to fly your Mooney hot rod home. No, this isn't an article about how to manage a hot start, although I think I am pretty good at that. Maybe I will give you my tips someday. This article has to do with crossing your fingers and toes.

In flight number one, EVERYTHING worked great! It was smooth, safe, and fast. What could be better? Now it's time for the ride home. You walk out with a friend, hop on the wing and assume the captain's chair. Then, you buckle in your passenger. You perform your hot start technique and now it's time to taxi. Add power, humm, bit of a hill? Add more power, what the ... more power and it finally hits you. You left the Chalk in.



Raise your hand if you have ever done that. My left hand is now typing as my right hand is above my head! Yes, one time, ONLY one time, in over 50 years of flying. I flew with a friend to pick up his plane at a busy airport and we got distracted looking at cool planes. I jumped in without doing what I always do – one more walk around.

The idea came to me for this article from an unnamed and undated Mooney Safety event. I noticed two nose wheel chocks that were still in place while the pilot was in the cockpit with the engine running. It can happen to anyone. How can you prevent this?

Always, ALWAYS do a good check on that second flight. I don't do a total preflight, but I do one that is close to it. The most important next procedure is to do one more walk around the whole plane while you are at least 5-10 feet away, to get the big picture. Don't engage anyone or look at your phone while doing this. This is your last chance to not have to raise your hand when asked, "Have you ever?"

Come to the next Mooney Safety event near your homeport. Much fun and learning will be had by all!

Jerry Proctor

**CLICK HERE TO
REGISTER**



Thunderbird Aircraft Sales

**Specializing in pre-owned
Mooney Sales and
Brokerage**

Hello my fellow Mooniacs,

My name is Richard Simile, and I am the President of Thunderbird Aircraft Sales. Thunderbird Aircraft Sales Specializes 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 always to provide a very pleasant transactional experience for all parties involved and that is a formula that works well. We have three offices, Auburn, AL, Chandler AZ, and Pensacola FL. Please give Thunderbird Aircraft Sales a call **602-884-2111**, or email richard@thunderbirdaircraft.com. We look forward to being of service to you. Thank you.

richard@thunderbirdaircraft.com or **602-884-2111**

www.thunderbirdaircraft.com

334-332-2100 Auburn, AL Office

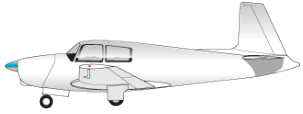
602-884-2111 Chandler, AZ Office

850-723-3644 Pensacola, FL Office

Don't Cancel IFR at Night by Richard Simile, Thunderbird Aircraft Sales

It happens hundreds of times a day. On an IFR flight plan, ATC advises "Airport at 12 O'clock, report in sight." PILOT "Field is in sight, cancel IFR." There are some VERY valid reasons NOT to cancel IFR. One Reason is, you will lose ALL ATC generated emergency services, search and rescue services etc....etc... So, if you have an emergency and land short of the airport, you will sit there waiting for someone to figure out that you are not home yet. In the daytime, the chances are very good that someone will know you went down, maybe because they saw a smoke signal. However, at night, it is a completely different story as there might be no one that knows you went down, and if you can't extract yourself from the aircraft, you may have to wait it out until the morning. Think about it. This is an important consideration to mitigate risk within the GREY AREA between the IFR Cancellation and the destination airport. Of course, if there is a pilot waiting on the ground for your arrival, it would be good to be considerate and cancel for them. However, consider staying on the ATC frequency in case you need to make an emergency call.

Bottomline: Don't leave yourself exposed. Make the IFR cancellation phone call, or radio call on the ground after your safe landing.



Mooney Maintenance



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



CLICK HERE to
download
Mooney's 100
Hour Inspection
Guide



CLICK HERE to find
Parts and Maintenance
Support

A photograph showing a man in a grey shirt and shorts using a blue towbar to move a Mooney aircraft out of a hangar. The aircraft is white with red and blue stripes. The scene is outdoors on a paved surface next to a hangar.

**Tired of struggling to move your
Mooney on the ground?**
Our powered towbar is the solution.
<https://mooneymover.com>

Alpha

aviation

1.800.653.5112

cs@alphaaviation.com • 9am-5pm M-F CT



SEE YOU AT
**EAA AIRVENTURE
OSHKOSH
2025**

**VISIT US IN
HANGAR C
BOOTH #3112**

2 & 3 POINT SAFETY RESTRAINTS

**Replacement,
Minor Change,
PMA, OEM,
and STC**

AMSAFE

**THE CHOICE
OF AIRLINES
WORLDWIDE!**





10%
OFF

DISCOUNT CODE:

OSH25MF

Good July 20th, 2025 to August 31st, 2025
Not valid on clearance items

HYDRAULIC AIRCRAFT JACKS

**3- and 8-ton Capacity
24" to 93" Range
Clears Gear Doors**

OVER 12,000
SOLD SINCE
1995!



www.ALPHA AVIATION.com



Ask the Top Gun

Tom Rouch

Founder of Top Gun Aviation, Stockton, California



Send your questions for Tom to TheMooneyFlyer@gmail.com



My Mooney falls to the right at cruise when I take my hand off the yoke. Two questions. What are the typical causes? And could you explain the process of "rigging my control surfaces" correctly?



Your Mooney should fly level for at least a minute with hands off. Rolling is not uncommon and not found often, since most pilots fly with an autopilot, which will correct for a slight roll. However, it should fly level and if it doesn't, most of the time, the causes are age and wear. Next flight, when it starts to roll, try to see if it will level by just using a little rudder. This works most of the

time. If that doesn't work, then you need to trim the trailing edge of the left aileron to bring the left wing down. Usually, a VERY minor bending down of some of the trailing edge of the outboard end of the aileron will fix the problem. Al Mooney used this method because he didn't want to use trim tabs. We use special pliers with a wide "mouth". However, I have done many "bend downs" with my fingers.



NOTE: Your licensed A&P should do the work. He or she could just bend down the first 6 inches of the outboard aileron. You may have to fly several times to get it right. Your A&P should be careful because if he or she goes too far, you are not allowed to bend the skin back. Your A&P can also bend the rudder skin for the same result. This procedure is included in the maintenance manual. Hope this helps.

Top Gun Aviation



Specializing in Mooney and Cirrus

(209) 983-8082

For Service and Maintenance, ask for Mark or Tom

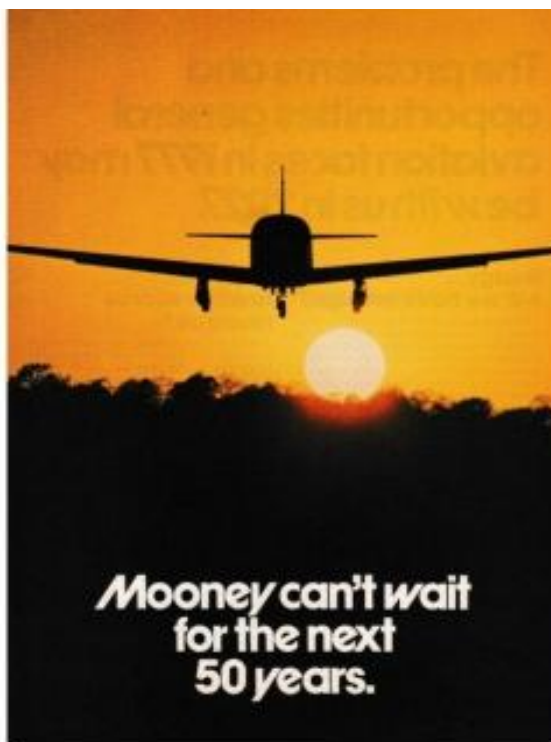
FAX: (209) 983-8084

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



The problems and opportunities general aviation faces in 1977 may be with us in 2027.

Energy... will we have enough?

A few years ago during the 1973 oil embargo, some people said general aviation would die. However, the industry has actually grown, but in large part to get-around energy's fuel efficiency. As our national and environmental policies change themselves to adjust to higher energy costs and fewer energy sources, Mooney believes general aviation will take the adjustments in stride. So it's really not a question of enough energy in the year 2027, but how quickly pilots and manufacturers can respond to conserving our precious energy resources, and become an even more energy-efficient transportation mode.

Mooney believes that fuel efficiency will be doubled in the next 50 years, as it has been in the past 50 years. Improvements are coming via aerodynamic advances, lighter weight materials, and composite construction processes such as hydrograph injection, mixing gasoline with methanol and other cost-reduced fuels.

Airports... another scarce resource?

Likely thousands of privately owned airports have closed in the past 50 years. Increasing taxes, operating expenses, and alternative land uses put farmers down pressures on the private airport. Mooney believes that serious pilots and airport owners must become more vocal with local and state officials to help assure an adequate number of airports in 2027. There are some encouraging trends. A couple of years ago, local pilots and airport owners were instrumental in creating a publicly-owned Caldwell Wright, New Jersey airport and preventing this installation facility from being turned into an industrial park. When the local communities began to realize the contribution Caldwell Wright was making, it became more palatable to set up the machinery to establish a publicly-owned airport. It would also be helpful to reshape the manner in which ADAP (Airport Development Assistance Program) funds had been invested. Right now, it's against the law to use these funds to assist privately owned airports. Yet, a good portion of ADAP funds (from the 1¢ per gallon user tax on aviation fuel) are devoted to airport use to aid from privately owned airports. Please in touch with your state's association and GAMA. When bills come before Congress to provide ADAP assistance to privately owned airports, make your views known.

14

Air traffic control... or out of control?

If a pilot from 1927 were suddenly plopped into a typical 1977 general aviation flight, he would be stunned by how sophisticated flying has become. Especially by today's comprehensive air traffic control system which we have come to live and love. What's next? Some believe that the FAA has positive control for all airspace up to 50,000 feet, a DARS system (Distance Awareness System), and a vastly improved Mode S transponder system.

On the positive control issue, John L. McCullum, former FAA Administrator, offered general aviation pilots some sage advice in an interview with *The Mooney Flyer* (9/15/77): "I think you're in the position of certain controlling limits and with general aviation taking and screaming about it, it's not likely to happen. I think it's one of those tedious balances where you have to do your own thing. But I don't think it's going to happen if you keep your eyes open."

DARS, on the other hand, may offer general aviation and other airspace users some real advantages. Look, with improved communication between controller and pilot, Mooney is all for exploring and developing a practical DARS system, as long as the basic philosophy that the pilot is responsible for the aircraft and the controller's function is to provide safe separation remains a cornerstone of any new back bay. And we demand the long needed commitment to making RNAV "software" more widely available. This effort lead towards the development of improved, more sophisticated RNAV hardware, further computerized input, and fuel conservation for most airports.

15

Will general aviation advance as much in the next 50 years as it has in the last 50? Mooney is betting on it.

When you compare the "Spirit of St. Louis" with today's general aviation aircraft, it's amazing to see how much we've advanced in 50 years. A Mooney 201 is a 1977 light aircraft. It's lightweight, fast, for example, takes about half the time and uses less than half the fuel.

	Spirit of St. Louis	Mooney 201
Horsepower	220hp	200hp
Top speed	124 mph	201 mph
Cruise speed	110 mph	180 mph
Fuel consumed, 100 miles	360 gallons	100 gallons
Consumption per gallon	9.4 mpg	18.1 mpg
Flight time	33:00	18:00

Should we look for the same giant leaps in the next 50 years? You bet. Because one of the biggest constraints on today's fuel efficiency that airplanes go faster and farther on every gallon. The name of the game will be faster speeds on the same horsepower, thereby delivering more range, more payload, and more miles per gallon.

16

The planes Mooney is designing today are built for a world 50 years from now.



Mooney 201 aircraft in flight, showing its sleek design and high-wing configuration.

It takes a lot of time and money to develop new or improved aircraft. General aviation manufacturers like Mooney must focus on a world five, ten, even 50 years from now. That's why we're concentrating on the following areas:

1. Performance. More speed on the same horsepower. The 201's four improvements in range, payload, fuel efficiency... as well as improved performance.

2. Service ease. An ADG (airplane on ground) is totally serviceable. Innovations in service ease and efficiency not only reduce maintenance and service costs, but provide the aircraft owner with better utilization. Look for improvements in this area for years to come.

The 201's engine cooling is a good example. It's made from seven components instead of 137, and removes in three minutes. Mooney (and everyone else) has a long way to go to make the perfect airplane, but we're all trying.

3. Structures. The industry will be paying more attention to designing structures which provide for improved occupant protection, weight reduction, and manufacturing efficiency. Mooney faces a big challenge here because our airplane isn't too large our handling the cabin and single-piece wing, provides outstanding structural integrity, and we know it's tough. So we're shooting for major innovations only if they can better today's Mooney's inherent strengths.

4. Utility. Look for manufacturers to be bringing back engine ability to single-engine aircraft, and single-engine economy to light twins. Mooney's working on both approaches, with older and newer equipment in the evaluation stage for current models, and some serious study of a light twin which will complement our high-performance single with high performance twin numbers.

The next 50 years should be exciting for general aviation. We don't see "magic solutions" changing everything, but enough to keep the industry continually developing better products and services. And the continued joy of the first solo flight, the 200th approach where the numbers are given to the pilot, the 100th birthday. It's nice to know that in 2027, you'll still be able to get from Point A to Point B, even though people tell you, "You can't get there from here."

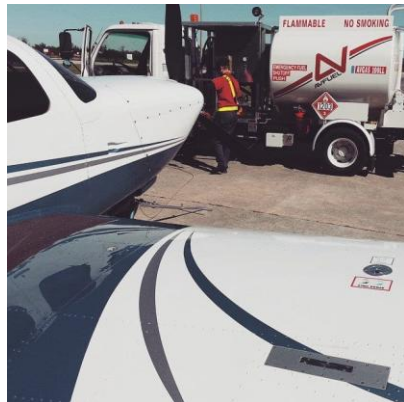
Mooney
Aircraft Division

MOONEY AIRCRAFT CO. INC. 10000 AIRCRAFT DRIVE, P.O. BOX 10000, MOOREVILLE, NC 28387



Everyone Beware

By [Ben Visser](#) General Aviation News, July 25, 2025



What changes will you have to make to your airplane to be ready for unleaded avgas?

I normally answer questions I receive. But in this column, I will be answering a question that every pilot and general aviation aircraft owner should be asking: “What do I need to do to my aircraft before the transition to unleaded avgas and 100LL is gone forever?”

Some of the more pessimistic experts would probably tell you to sell your airplane while it still has some value. I am more optimistic and think that with some work — and a little luck —

you and your aircraft should be fine.

I know that the FAA, the EPA, and all of the other industry experts have claimed throughout this whole process that the transition to an unleaded 100 octane fuel will be an invisible change with no noticeable difference in performance or operational conditions. If you believe that, I have some beachfront property just east of Miami I will sell you cheap.

Since you will be operating your aircraft engine on a fuel it was not designed to run on, the first concern will be exhaust valve recession.

The biggest concern here is with new valves and seats in a new or overhauled engine.

With leaded fuels, the lead improves the sealing with new parts which, in turn, improves the heat transfer and reduces leakage. This reduces the valve face and seat temperature and reduces the seat wear and erosion.

The key here is if you are having a cylinder or cylinders replaced and will be starting out on only unleaded avgas, it is critical that hardened exhaust valve seats are installed. Both Lycoming and Continental offer them, but there may be some old seats still in the system, so check and make sure.

If you have an older orphan brand engine like a Franklin, P&W, Wright or other, your job is slightly more difficult. You have maybe five years until the 2030 self-imposed deadline for GA to transition to unleaded fuel — or as long as it takes the powers that be to finalize whatever specifications or requirements for the new unleaded fuel or fuels they come up with.

I assume there are owner groups that can work together to find a supplier for hardened seats for the various makes and models of orphan aircraft that are still being flown and get them approved. Without hardened seats, the life expectancy of these aircraft will be very short.

Another component of living with only unleaded fuels is exhaust valve/seat operating temperature.

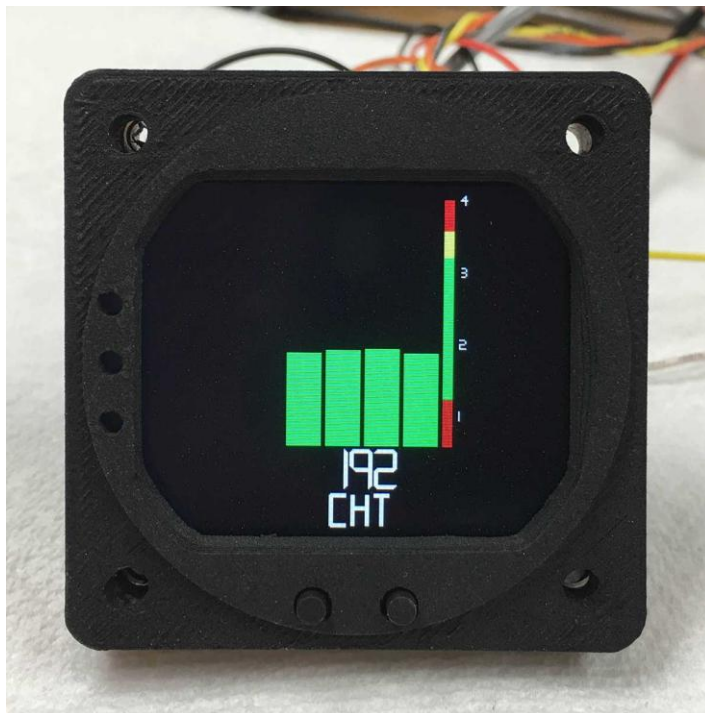
In most engines, especially carburetor models, not all cylinders operate at the same air/fuel ratio in all conditions.

When you lean out the engine until you get some roughness, at this point the leanest cylinder is so lean that it misfires or at least stops producing normal power, while the other cylinders still produce normal power. You then richen the mixture until the engine smooths out.

At this point, the individual mixtures of each cylinder vary with one or more probably being at or near peak exhaust valve temperature. This is going to increase the probability of exhaust valve seat erosion and recession.

So, what can be done?

I recommend that every pilot consider purchasing a multi-point EGT (Exhaust Gas Temperature) or even a CHT (Cylinder Head Temperature) system. When flying, monitor the temperatures and ensure that all are below peak.



Radiant Technology's 4-Channel Engine Temperature Gauge.

I know a lot of pilots have single point EGT systems, but the hottest cylinders can change with varying conditions. Upgrading to a multi-point system and being sure it is properly calibrated is good insurance that all cylinders will be in a safe range.

Another point of concern is anti-knock performance.

When we introduced 100 Low Lead avgas, we received knock complaints from many customers, especially from pilots operating big radial engines. Most had to reduce the allowed boost pressure for the engine during takeoff when going from 100/130 high lead to 100/130 low lead

fuels.

One concern here is that the new unleaded products may not perform as well as 100LL. Also, if more than one fuel is approved, they may not all perform equally, so there may need to be a different spec for each fuel.

There are many other minor points that I don't have the space to cover, but the one big point you need to be aware of is seal and fuel system compatibility.

This is a big concern for the experts coming up with the ASTM specification and one that has no clear answer.

If you look at all of the different fuel system seals and components used since the Wright brothers' first flight, it is mind boggling. And we can't find fresh samples of each component to run tests on. So, there may be leaks, needle and seat problems, or a score of other problems to deal with.

When buying a used airplane, they always tell you "buyer beware." With the new fuels, it will be everyone beware.

A note: Gene McNeely, who flew from 1994 to 2017 with the Aeroshell Aerobatic Team (now the Titan Aerobatic Team), passed away July 5, 2025. He was a great pilot and a good friend and will be missed.

About Ben Visser

[Ben Visser](#) is an aviation fuels and lubricants expert who spent 33 years with Shell Oil. He has been a private pilot since 1985.

Outlaw Propeller STC'd for Mooney M20s

By [General Aviation News Staff](#) · August 29, 2025



Hartzell Propeller's Outlaw propeller has earned an FAA STC for Mooney M20 Series aircraft.

The Supplemental Type Certificate covers the Mooney M20 A through G and M20J models.

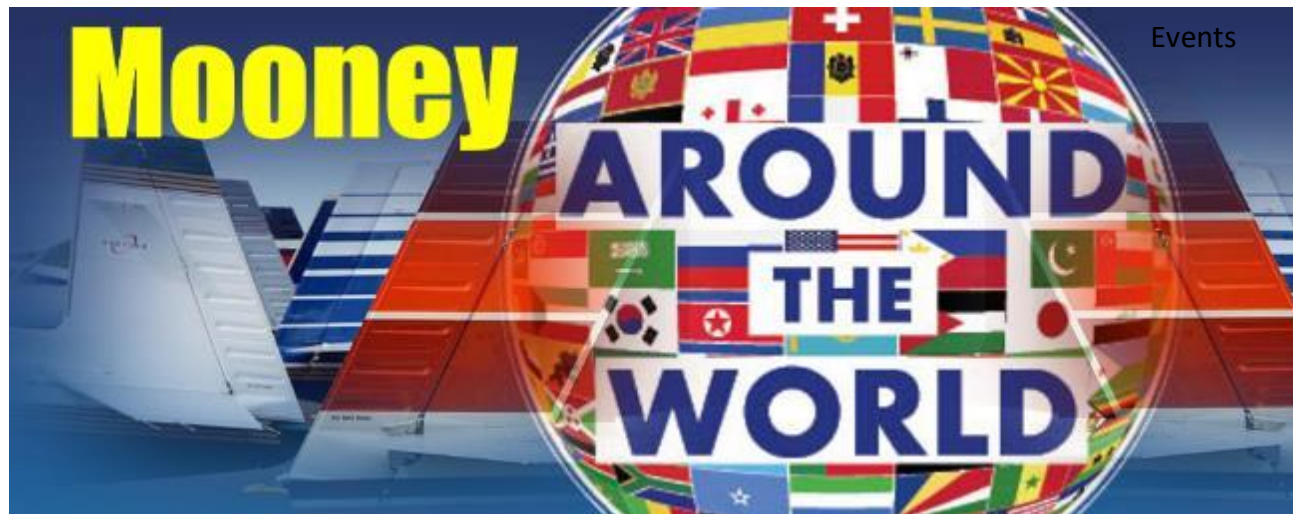
The newly certified Outlaw carbon fiber composite two-blade propeller was developed to deliver the same performance as Hartzell 2-blade metal

propellers with significant weight saving and unlimited life blades, according to Hartzell officials.

The Outlaw weighs 38 pounds, compared to 58 pounds for the 2-blade metal propeller, a savings of 20 pounds. The carbon fiber composite Outlaw is the latest Hartzell propeller to be added to the Top Prop Conversion Program.

The Outlaw name was submitted by Donna Jones, Vice President of Davis Aviation in Bristol, Tennessee, and selected from more than 300 entries received during Hartzell's Name the Prop contest at EAA AirVenture Oshkosh 2024. As the winner, she received \$500 in Hartzell merchandise and earned naming rights for the newest addition to the Hartzell Propeller lineup.

For more information: [HartzellProp.com](https://www.hartzellprop.com)



Contact Mike Weir at (239) 572-3418, before coming to the restaurant, so they can have an accurate count. Events begin at 11:30

Sep 13: Okeechobee ([KOBE](#))

Oct 11: Sebring ([KSEF](#))

Nov 8: Lakeland ([KLAL](#))

Dec 13: Flagler ([KFIN](#))



Sep 12-14: Groton, CT

Oct 17-19: Branson, MO

[CLICK HERE to Register](#)



Learn more at <https://www.empoa.eu/index.php/en/>



September 5-7: Wings to Walla Walla Fly In ([KALW](#)) Join us for a weekend of wine and food. Organized by Robin Oneal, rightseatrobin@gmail.com

Other

Oct 16-19: **MooneyMax** (Branson, MO), Thousand Hills Resort Hotel and Convention.

Arrive on the 15th, Seminars on 16 & 17th & Play on Saturday.

[CLICK HERE to Register](#)



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.

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)

LASAR Cowl Fairing STC Kit for M20A - M20G (<https://lasar.com/stc-kits/cowl-closure-fairing-stc-kit-laskit131>)

\$275.00 (includes US shipping),

Contact Klem Klemmensen ([217\) 245-2480](tel:2172452480) or Tom Alcott tjalcott@gmail.com

Sold my beloved '65 E Model after 30+ years. I have a few items now looking for a home. See links for manufacturer info. Buyer to pay shipping. I will pack appropriately.

For Sale

- Full set of Kennon sun shields with storage bag. \$150
<https://shop.kennonproducts.com/collections/mooney-sun-shield/products/moom20-4010>
- Aerox portable oxygen system; 13 cu. ft. (D size) tank with valve, gauge assembly, regulator, OxiSaver cannulas, seat back carrying case; two person set up. \$300
 - <https://www.aerox.com/build-my-aerox-portable-oxygen-system/>
- Ram X-Grip universal holder with yoke mount for 9–11-inch iPads. \$50
<https://rammount.com/products/ram-hol-un9u>

Contact: email: stuartgw@aol.com, Phone: 541-788-7286



For Sale: Part #75730 LYCOMING TUBE ASSEMBLY PROP GOV LINE: \$450.00

This Part #75730 when installed on Lycoming IO360-A3B6 provides clearance between the prop governor oil line and the Mooney M20J engine mount. This part is factory new and includes FAA Form 8130. The current online price for this part from Aircraft Spruce is \$767.00. Contact Robert Elliott at rce.elliott@gmail.com or 512-947-4037 (prefer text messages vs. voice calls)



FOR SALE - \$115,000

Mooney M20E 1964 SN 347

One owner since 1979
 Factory Rebuilt IO360A1A
 "Zero time", *NOT* overhauled
 300 hrs on 2,200 hr TBO
 Roller-tappet engine
 6,850 Total hours AF
 Surefly
 Scimitar prop new 2007, no ADs
 90-Gallon Fuel Tanks
 PC wing leveler
 New cabin cover

Use QR code to access photos,
 more details, and contact

GTN650 GI275 GTX345 GMA340
 MK12D w/GS, EDM730
 WX500 Remote Stormscope
 JPI Fuel Totalizer
 Spare MK12D, VOR only
 Plus tools, 4-person raft, manuals and
 much more

Contact Don Peterson at
autotech@flash.net



1997 MOONEY BRAVO FOR SALE \$298,000

This 1997 Mooney Bravo offers a rare combination of performance, reliability, and modern avionics. With a low total time and an upgraded avionics suite, it's ready to meet the needs of both experienced pilots and first-time owners. Equipped with FIKI certification and precise speed brakes, this aircraft is ideal for cross-country and all-weather flying.



Contact Information:

- Email: aeroncadoc@comcast.net
- Phone: 425 780 9483

Key Features

Engine and Airframe Time:

- Total Time: 1860 Hours
- Engine Hours: 1100 Hours (Since New)

Avionics:

- Garmin GTN 750: Primary Navigation/Communication System
- Garmin 430: Secondary Communication System (Comm2)
- Garmin 500 GFC Autopilot: Advanced Flight Control
- Dual Garmin G5s: Attitude Indicator (AI) and Horizontal Situation Indicator (HSI)
- Garmin GTX 345: ADS-B In/Out with Bluetooth Connectivity
- JPI 730: Advanced Engine Monitoring System

Additional Equipment:

- FIKI Certified: (Flight Into Known Icing)
- Precise Flight Speed Brakes: For Enhanced Control
- LED Lights: Modern, Efficient Lighting
- Shadin Fuel Flow Monitor: Secondary Fuel Monitoring
- Built-In Oxygen System: For High-Altitude Flights

Recent Updates:

- New Paint: Completed in 2023—Immaculate Condition
- New Front Seats – Interior is in great condition

Aircraft Location:

- Based at KPAE (Paine Field)



***Rusty Pilot* or
*Old Pro***



**INSTRUMENT
PROFICIENCY
CHECK**
Study Guide
J D Price, CFII, MEI, ATP



**FLIGHT
REVIEW**
Study Guide
J D Price, CFII, MEI, ATP

Prepare **FREE** online

JDPriceCFI.com