

# ***The Mooney Flyer***

The Official Online Magazine for the Mooney Community

[www.TheMooneyFlyer.com](http://www.TheMooneyFlyer.com)

May 2015



# The Mooney Flyer

## Last Call for The Mooney Flyer Summit

The Official Online Magazine for the Mooney Community

### June 12-14, 2015 at Paso Robles, CA

What could be better than Paso Robles in mid June! The weather is clear and cool and there are no crowds. It's a great time to attend the first annual Mooney Flyer Summit, June 12 through 14, sponsored by [The Mooney Flyer](#).



Mooney International will be participating with people, products, and the keynote speaker

Plan to arrive on Friday for a [Mooney Flyer Wine Tour](#) on Friday afternoon. Your host will take you on a special wine tasting at 2-3 wineries. Even if you are not interested in wine tasting, you'll find the wineries and the scenery to be breathtaking. This will be a lovely afternoon. Friday evening, there will be a [Reception at the Estrella Warbird Museum](#), with finger food and drinks as well as a chance to mingle with our keynote speaker, seminar speakers, and sponsors from Mooney, LASAR, Top Gun and Mountain West Aviation.

Mooney will kick off Saturday morning with a Keynote Address. This will be followed by two [Seminar Tracks](#). **The Mooney Owners and Pilots track** will

include topics such as maintenance, modifications, flying/takeoff/landing/stalling Mooney techniques, as well as a personalized session at your airplane. **The Non-Pilot track** will include topics such as Quick Companion Flying and Mooney Destinations.

**There will be a huge lunch with a lunchtime presentation from the Commander of the USN Pacific Strike Force.** After lunch, we plan to have 2 choices for attendees: Seminars for Owners & Pilots, and another entertaining group event. **Saturday night will be capped off with a dinner at a local winery!** Sunday will have 2 ways to have fun. There will be a [Brunch at Hunter Ranch](#) and the [Birds of a Feather Sessions](#). These roundtable sessions will be led by the attendees and driven by the attendees' interests.

**Register Online before May 8th**

\$100 for Pilot  
\$50 per Passenger

#### Fun Fun Fun!

Wine Tour  
Reception Food  
Mooney Bonfire  
Hearst Castle  
Warbird Museum  
Brunch  
"Birds of a Feather"

The Mooney Flyer Summit will conclude Sunday, June 14th at 11:00 am.

[CLICK HERE](#) to Register for The Mooney Flyer Summit  
You can pay by [CLICKING HERE](#)



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Jim Price

#### Contributing Writers

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Bob Kromer  
Tom Rouch  
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Geoff Lee  
Linda Corman  
Cliff Biggs  
Mike Elliott

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## The Mooney Flyer Summit UPDATE



### Mooney International Sponsoring Lunch

We received more good news this month. [Mooney International](#) will be sponsoring our Saturday lunch at the Estrella Warbird Museum. So, the \$100 hamburger just became FREE. A HUGE THANK YOU to Mooney International for their generosity. Additionally, please don't forget that the [Estrella Warbird Museum](#) will also give all Mooney Flyer Summit attendees FREE access to the Museum.

Pre-Registration at the \$100/pilot and \$50/passenger ends on May 8<sup>th</sup>. Based on the seminars and wine tours, museum, and reception party, wine dinner, plus more that you can imagine, this is a great value.

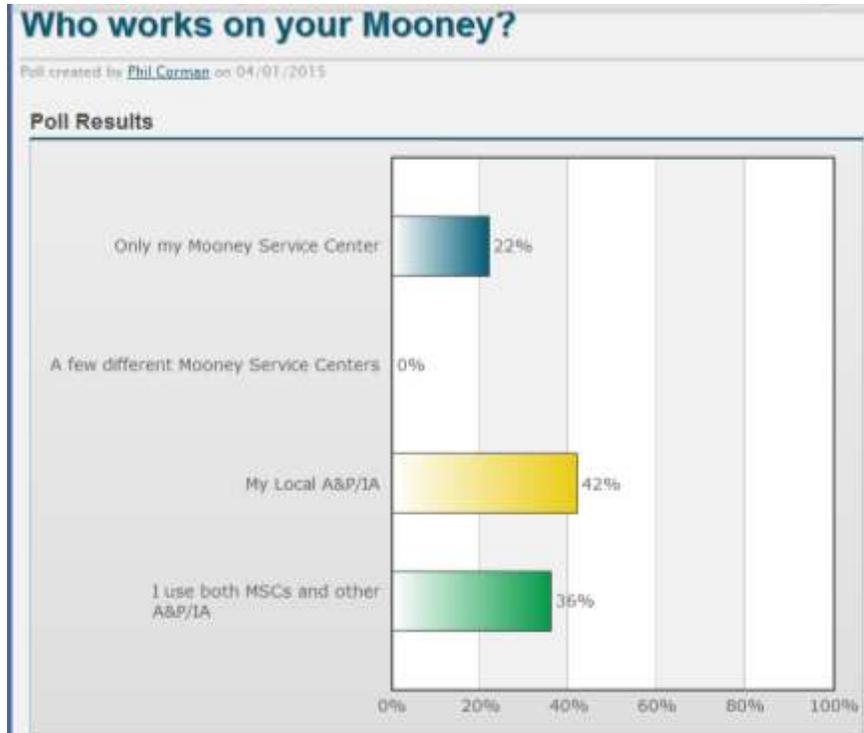
**Speakers** include Jerry Chen & Tom Bowen of Mooney International. Mooney Master CFII Don Kaye, Mooney Guru Kelly McMullen, "Flying for Business" by Kevin Smith, Captain Dave Koss of the US Navy Pacific Strike Wing, and MSC Legends Paul Loewen, Tom Rouch, Mark Rouch, and Don Maxwell. Mooney Engineer Damon Trimble, plus Jan Maxwell and Paul Beck. And of course your Mooney Flyers Jim Price and Phil Corman will be there too.

**Seminars** on ADS-B, Flying Your Mooney Roundtable, Maintenance Issues for Vintage Mooneys, MSC Panel on Mods & Maintenance, Demythifying AoA & Mooney Stalls, Flying Companion Seminar, Mooney Destinations, Single Pilot IFR in Mooneys, and more...

**The best hotel deals** can be found on [www.Booking.com](http://www.Booking.com). Hotels downtown are only 10 minutes away.

**Don't want to rent a car?** Then sign up at Uber (an internet-based taxi service). Then, download the app to your iPhone or Android phone. No sign up fee.. No monthly fee... and Uber will give you a \$30 CREDIT to start. So your transportation for The Summit might be close to nothing.

Please [CLICK HERE](#) to register for The Mooney Flyer Summit

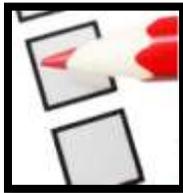


Last month's poll asked, "How involved are you in your Mooney's Maintenance?"

xxx

**Next month's poll:** Tell us about your Certificates, Ratings and Endorsements

[CLICK HERE](#) to vote.



### Appraise Your Mooney's Value

Don't forget about our cool new **Appraise your Mooney's Value** using Jimmy Garrison's valuation. Jimmy is from All American Aircraft,

the country's largest Mooney reseller. We have implemented the models for M20C, M20E, M20G, M20F & M20J. Click on your model to simply complete the valuation. You no longer need paper and pencil. Just another benefit to our subscribers.

[M20C](#) [M20E](#) [M20G](#) [M20F](#) [M20J](#)

Many pilots have a photographic memory. Some don't have film.



**RE: Pinch Hitter** – I thoroughly enjoyed reading Geoff Lee’s “Pinch Hitter”. My wife loves flying in our Mooney together, but has shown little interest in the scenario of landing it should there be a “pilot failure”. Mr. Lee’s article contained dozens of “diamonds of knowledge”. It got my wife and I talking about it. She even read the article. This article is just typical of the excellent information I find in The Mooney Flyer! Thanks to Geoff and the entire staff.

**Tony G**

**RE: Mooney Tales to Prescott** – What’s the deal with Linda Corman? She writes about her adventures in their Mooney, but are they ever home? Is there anyplace she hasn’t taken the Mooney? It’s fun to read about her adventures, and it is very contagious. Reading her articles make us want to take more time and go somewhere, anywhere, in our Mooney.

**Bob F**

**RE: Do You Have a Plan When it Hits the Fan** – I enjoyed Cliff’s article for a couple of reasons. First, it was a great story and I really like Captain Hopkins. It was also instructive for me. I tend to avoid flying at night, as I get older. But the article is forcing me to think about various scenarios, now while I sit in my easy chair reading The Flyer instead of when the &^#%\$ hits the fan.

**Don C**

**RE: Bruce Jaeger’s Article** – Just wanted to drop a note on Bruce’s article. You cannot say it enough. The major cause of accidents and/or incidents have little, if anything, to do with anything other than the pilot. I heard a seminar from Rod Machado once, and he indicated that more than 90% of all accidents are caused by the pilot. Of course, these end up in stalls/spins, fuel exhaustion, VFR flight into IMC, etc., but it all started with the PIC. Bruce’s article rammed this home again!

**Amy G**

**RE: Oil** – I thought it was funny and also very useful to read more about Oil than I ever thought I would want to know. I have recently started using CamGuard and I cannot recommend it enough. Normal oil will stop protecting your engine after about 36 hours in the hangar. CamGuard will continue to coat your engine for up to 400-500 hours, and the polymers keep the water off your internal surfaces.

**Jennings A**

*Mike Elliott*  
Master Flight Instructor, CFII, FAAsteam Rep, Mooney specialist

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317-371-4164

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Tarpon Springs, FL  
34689

Quality instrument and commercial instruction, transition training, ownership assistance, plane ferrying

*The Mooney Flyer*  
**Market Watch**  2015

MODEL	# ON MARKET	HIGH \$	LOW \$	AVERAGE \$
M20C	10	69,000	29,500	50,205
M20E	10	59,000	33,900	47,485
M20F	7	69,000	35,000	45,759
M20G	3	52,000	27,500	43,083
M20J	14	169,900	59,900	102,400
M20K 231	19	199,000	59,900	100,252
M20K 252	10	179,000	119,900	138,469
M20K Encore	3	249,000	169,000	209,300
M20M Bravo	11	280,000	139,000	190,490
M20M GX Bravo	2	290,000	269,000	279,500
M20R Ovation	5	239,000	139,900	189,860
M20R Ovation 2	2	250,000	235,000	242,500
M20R Ovation 2GX	8	399,000	249,000	280,475
M20R Ovation 3	1	179,000	179,000	179,000
M20R Ovation 3GX	3	369,000	335,000	354,666
Acclaim	6	425,000	379,000	376,166
Acclaim S	6	733,900	419,000	502,133

Reference Controller.com



He who laughs last, thinks slowest



## Do You Have a Plan? You should...

As most of us know, the vast majority of accidents are caused by the pilot. Sure, the final straw was a stall, a stall/spin, controlled flight into terrain, etc., but the cause was either lack of planning or lack of execution by the Pilot-In-Command. In this article, we'll look into very common scenarios that we hope you never encounter. We will suggest ways to deal with those situations before you find yourself in a jam.



Before we dive into the common scenarios, it's instructive to reiterate that most aircraft accidents or incidents are rarely caused by a single error. There is the usual, and repeatable, chain of errors. Sometimes that chain starts during flight planning, continues during the flight, and ends with some questionable judgement. It's a good rule of thumb to "Stop a Flight when the second error occurs". This might break the chain that can result in a very bad ending. Let's take a look at some scenarios and steps you can take now to avoid or mitigate them.

### Engine Failure on Takeoff

This is avoidable if the cause is fuel starvation or a poor pre-flight inspection. In those situations, you already know what you should have done. But what about the sudden engine, or partial engine failure during takeoff. Typically, almost half of your takeoffs are from your home airport. This gives you ample time to study the departure ends of all your runways by 1) Driving and/or walking, 2) Google Earth, or 3) Surveying the terrain by Mooney. The thing you are looking for is the most hospitable landing zone to aim for in the event of an engine failure. The potential landing zones should be limited to a zone that is 45° to the left and 45° to the right. This way you are planning to "not attempt the so called **Impossible Turn.**" The key items to consider are minimizing or eliminating obstacles and avoiding collateral damage to people and places on the ground. Open fields, vacant lots,

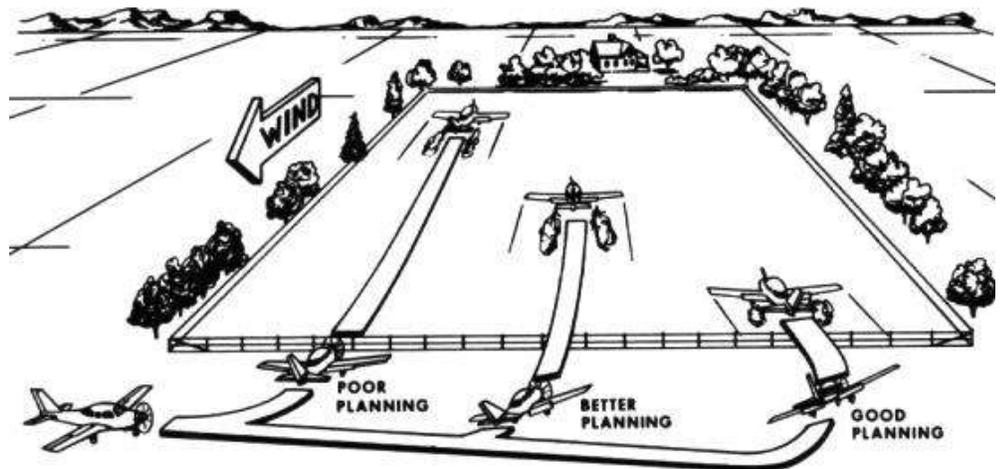


Figure 9-18 Plan the Turn onto Final Approach

**Remember this!**

*If you are forced into making an off-airport landing, your primary goal is to save the lives of all onboard.*

*The insurance company owns the aircraft at this point.*

roads, etc. are the usual places. The point is to select a landing zone “now”, so that you know where you will aim for without having to look, analyze, and lose precious time if the engine failure occurs in the future.

If you have done this planning, and now you find yourself in this situation, what is your plan? Well immediately and aggressively, and we mean aggressively, push the nose downward. Your Mooney will stall pretty darn quickly if you are not aggressive. Then turn to your landing zone. You should already have thought through whether your landing zone is more suitable for a gear down or a gear up. If it’s water, then clearly gear up is preferred. If it’s a field, the decision may not be as clear. If it’s soft or muddy, gear up might be better. If it’s a firmer surface, then gear down might be the choice. Some of your decision points are: 1) Will it cause the Mooney to flip upside down?, or 2) Will it help to absorb some of the impact?

### **Dark Night Departure**

This scenario is more appropriate for an anticipated VFR departure at night: You start your takeoff roll. Everything is good and you are on the center line and the runway lights are parallel to you on both sides. As you lift off, you are ensuring the proper V speed. You clean up the flaps, retract the gear and look out and see nothing but “black”. There is no horizon or outside reference points. You are literally in IFR conditions. What do you do?

In this case the situation is clear. Before powering up your Mooney, and again before you take the runway, you should have a plan that is twofold: First, you should anticipate this IFR situation. Secondly, you should plan to transition “immediately” to your instruments. If the terrain permits, and you are not accustomed to IMC conditions, then continue on a straight out departure. If you are comfortable or terrain demands it, make a standard rate turn away from the higher terrain, but doing so only by referencing your instruments. Once clear of terrain, turn on course. If you look out the windscreen and still do not have any reference points, then continue to rely on the instruments.

*Don't keep transitioning back and forth between instruments and looking out the windscreen. It can be very disorienting.*

### **Into The Clouds (or VFR flight into IMC)**



VFR flight into IMC is deadly. Some reports indicate that most of these situations end in disaster and in only a few minutes.

Clearly the best strategy in this scenario is for a VFR pilot to avoid this. During the day, the most common situation is when a VFR pilot is scud running. This is a double whammy, as you are low with not a lot of time to think.

Unless you are in a canyon or narrow valley, your best option is to transition to instruments and execute a standard rate 180° turn back to VMC.

An extremely disorienting situation in scud is to leave a cloud, see the ground, and then be back in another cloud. It is best to remain on instruments. If the terrain is a concern, you should begin a cruise

speed climb, or more if terrain warrants. Turning around is the best option. It keeps you legal and is just plain safer. Pushing on, especially in unfamiliar terrain, is much too risky.

## Lose an Engine Enroute

*Continue to aviate.  
Then, if you just made  
a change to the  
airplane . . . any  
change . . . then  
“UnDo the Change”.  
For instance, You may  
have switched fuel  
tanks. If so, switch  
back.  
This might solve your  
issue.*

If you have lost an engine enroute due to fuel starvation, then, as they say in Monopoly, GO BACK to Square #1, DO NOT Pass GO and DO NOT Collect \$200. Except for an unknown fuel leak that starts en route, we cannot think of a single situation where this should happen. Are the winds stronger on your nose? No excuse. Did you try to squeeze it to get to a better airport, or cheaper fuel? No excuse. If the engine quits, you should first, fly the airplane. Slow down to Best Glide and point the nose in the direction you want. After running through your checklist, what's next?

If you selected a good, high altitude, you will have bought yourself some time to communicate your situation. We choose to participate in Flight Following because if you have an emergency, you are already talking to ATC and they know your current location. If there is an airport within your glide ratio, then aim for it. Even if the runway is of inadequate length, in most cases, it's better than the alternatives.

You should be aware of the Winds Aloft and try to ascertain the Surface Winds as you approach your landing area. Clearly, gliding aloft with a tailwind increases your range to a landing zone; the reverse shortens it. Knowing the winds aloft at all times enables

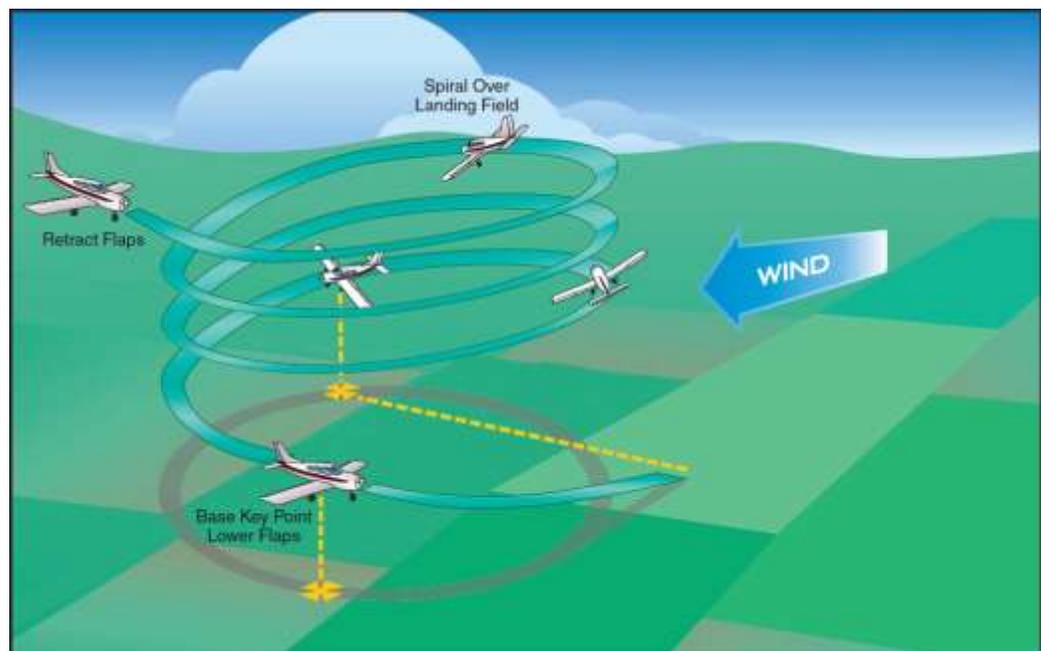
you to determine this almost immediately and avoid the loss of precious time.

## Summary

Sometimes when things go wrong in flight, you have time to deal with it. A good example is when your gear motor fails.

However, many scenarios don't give the PIC a lot of time to make the right decisions and to execute them in a timely manner.

The intent of this article is to help you to plan for these situations and to have that plan ready for execution. A timely and aggressive (and correct) response can significantly increase the likelihood that you'll live to fly another day.



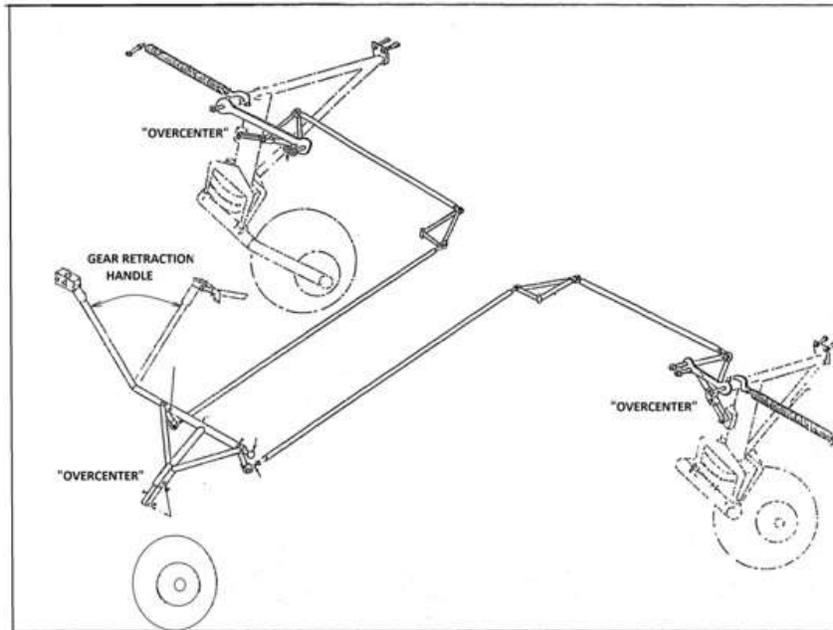


# Mooney Maintenance with LASAR Precision

By Paul Loewen, Owner of Lake Aero Styling & Repair (LASAR)

## The Genius of Mooney Landing Gear Retraction System

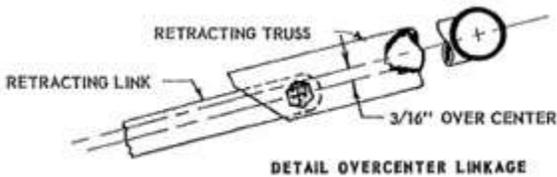
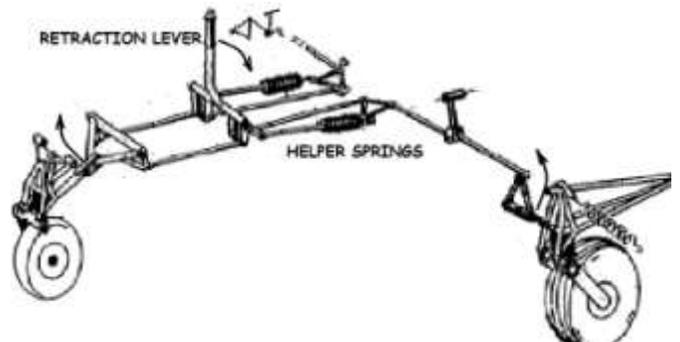
The simple landing gear traction system began with Al Mooney's design of the M-18 Mooney Mite, and it is the same design on all models since.



*Pictured is the M 18 retraction system to show how simple the design is.*

The early manual gear retraction system stows wheels up into its wheel well cavities with one motion of moving the "Johnson bar" lever only 90° (from the panel to the floor). Beneath the floor the retraction letter has short arms where all three wheels are connected with push rods. The arms at the base of the Johnson bar move through the optimal range of the 90° arc, resulting in a linear motion of about 4 inches.

I'll mention at this point, the retraction system with the electric actuator, is the same simple design, where the Johnson bar lever arm is cut off below the floor and what remains is called a bell crank, where the actuator is connected.



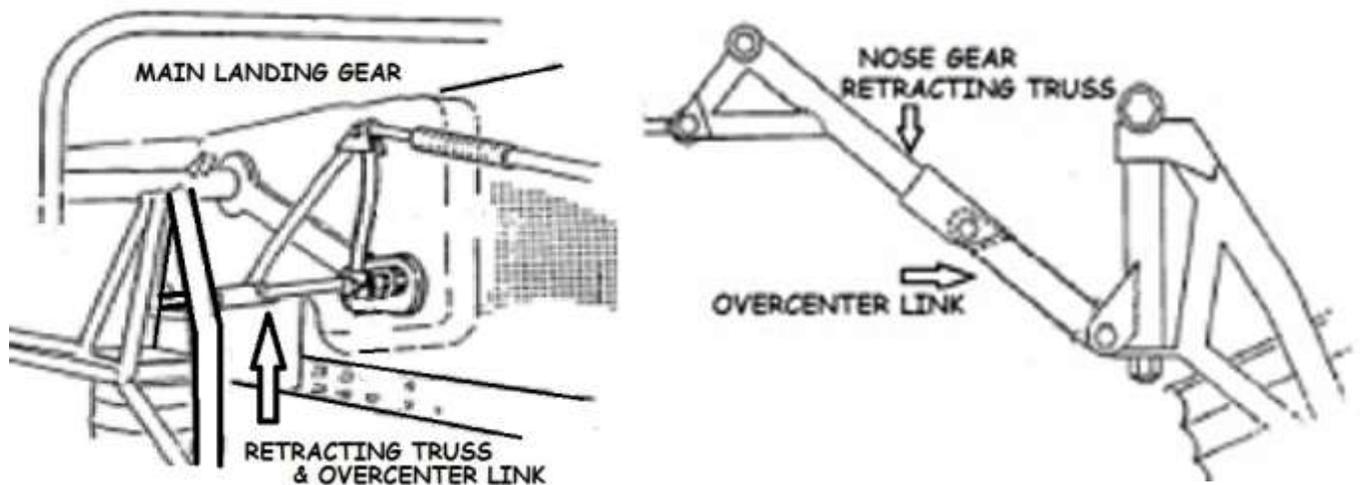
The bellcrank still moves through the 90° arc with the aid of the motor, called a linear actuator. We're getting a lot of action with only a small motion of the bellcrank, where all the gear leakage is connected.

Now here's the story. The gear is not locked down by the Johnson bar or motor, but they help, hence, torque load requirements. Each of the gear is locked down by overcenter arms that resist collapsing by its design.

This "overcenter arm" is the same as on your home card table, where there are folding levers on each folding leg, holding the legs of the table down, rigidly, until you release the overcenter action of these levers.

When the Mooney landing gear is raised / retracted the mechanism moves the overcenter arms to unlock each gear, and the same arms raise the gear into the wheelwells. When retracted, the gear is raised and held up only by the arms, leakages, levers or actuator and helper springs located on the main landing gear and in the belly.

The only job of the Johnson bar or motor and linkages, is to move the overcenter device on each gear, that raises or locks the gear down. The locking characteristic of the over center device only locks the gear down, there is "No gear up and locked".



The gear doors enhance the streamlining aerodynamics of the retracted gear, and the doors action is a part of the retraction motion. The gear doors merely connect to the landing gear and follow the gear up and down, but the geometry and rigging is important.

We see a three door system on the later models, it works simply too.

- The flat outer main gear door functions the same as on the older models, it just hangs on.
- The middle clamshell door simply bolts onto the main gear axle, rigidly.
- The inner door does a "double take", it opens and closes with each cycle. It is closed when the gear is down, but opens and closes again as the gear goes up, then opens and closes again as the gear comes down.

This amazing double action is a freebie, allowed by a motion and geometry of the existing linkage.

Remember, the initial action is only a 90° motion of the retraction lever or bell crank, moving the push rods 4 inches back and forth. This is a genius of engineering simplicity.



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# Your Magical Transponder



We all have a Mode C Transponder, but we



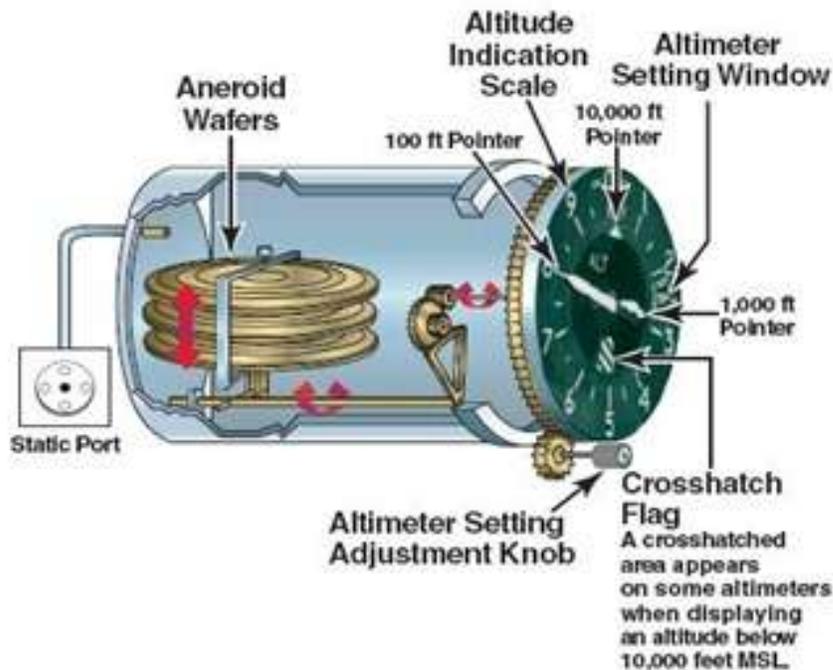
know very little about it. We do know that FAR 91.413 requires that “the transponder must be inspected every 24 calendar months.” We also know that before takeoff, we’re supposed to turn it to “Alt”

and that when ATC asks us to “Ident”, we press a key and it does its magic. How does it know what to do?

## THE STATIC PORT AND THE ALTIMETER



If you want to know your altitude above Mean Sea Level, you simply look at your altimeter. It gets its information from two small tubes coming from two holes or “ports” that are placarded “Static” on both sides of your airplane. If they are obstructed, then the wrong information goes to the altimeter, so we preflight them to ensure that they are open and clear. The altimeter takes the current atmospheric pressure and it is then mechanically changed into something we can read and understand.



*Pressure altitude is changed mechanically into a visual representation on the altimeter.*

## THE ENCODER

The transponder doesn't understand the mechanical language of pressure, so enter the transponder's interpreter, the **encoder**. Its entire job is to take the pressure altitude and turn it into an electronic signal that your transponder can understand. Sometimes it's called a "blind encoder". It's out of sight and out of mind until it stops working.

You can change the barometric pressure on your altimeter, but not the encoder. It will always read the standard sea level pressure of 29.92. If you have a transponder with an altitude readout, perhaps you've noticed that



this reading is sometimes different from your altimeter reading. The ground controllers' computers will, with a little math, convert the transponder's 29.92 altitude reading to your actual or true altitude (corrected for barometric pressure).

Every two years, when the avionics shop tests your transponder, they are testing the nine bit lines, also called gray code wires, from the encoder. These nine wires work similar to binary. Every altitude that is represented to the transponder is a combination of the gray code wires. It's like a piano with nine keys that displays an altitude every time you press a few keys.

When your Mooney has its pitot static check, the avionics guys and gals are running the encoder UP and checking to see if your transponder is displaying every possible combination on the way UP. It takes approximately 15,000 feet before every combination has been used.

The transponder takes the pressure altitude and broadcasts this information through the transponder antenna on the belly. It looks like a little silver spike with a ball on the end of it.



## INTERROGATION

Transponders don't broadcast your position all the time. In fact, the transponder is pretty shy. It will only reveal your squawk code and altitude if asked. It will be interrogated for Mode A (code) or Mode C (altitude) information, but will never be asked for both at the same time.

Mode A interrogation asks for the squawk code that you entered in the transponder. Mode C interrogation asks for the altitude code (provided by the encoder).



## IDENT

When you press the IDENT button in the cockpit, the transponder sets that extra "ident" bit in its reply data. Anytime the transponder is interrogated while IDENT is active (for a set duration of time after you press the button in the cockpit), its reply data block will have the IDENT bit set. ATC computer systems notice this, causing "IDENT" to be shown on the controller's radar display.



ACK A-30 ENCODER

## WHAT DOES AN IDENT LOOK LIKE ON THE SCREEN?

It depends on the type of radar system. Generally, the target will either:

- Blink
- "Blossom"



Now, the next time you have an issue with your transponder, you can understand most of what your avionics shop is telling you. Also, when you're just sitting around the airport with your friends, you can regale them with useless transponder facts.

*Fly Safe,*

*Jim*

That pilot is always behind his Mooney. In fact, his ancestors arrived on the "Juneflower."



## Cliff's Notes

Cliff Biggs

ATP, 767,757,737,727, A320, LRJet,  
CE500, MU-2, Wright Bros Award,  
A&P 46 Yrs, B707, B727, B720,  
B747, DC-10, DC9, DC-8, CE500

## Did You Ever Wonder Why?

Have you ever wondered why all jet aircraft carry a 3<sup>rd</sup> independently powered attitude gyro? Could this be a lesson for us in our Mooneys? It all goes back to a dark and dreary night at KLAX in 1969.

Even though this accident was on a large jet aircraft and in Part 121 service, maybe we can stop along the way and see if anything here can have a connection or bearing on us and our Mooneys. The weather report for KLAX at 1755 that evening was, "Record special, 700 feet scattered, measured 1,000 broken, 2,000 overcast, visibility 3 miles, light rain, fog, temperature 55" F., dew point 50" F., wind 160 at 5 knots, altimeter setting 29.96 inches."

The weather was not bad, considering that the airline was a major US Air Carrier, flying a Boeing 727 with 3 trained and qualified crew members in the cockpit. Would many Mooney Instrument Rated drivers consider the weather simple and routine? Hmm.

Boeing 727s have 3 generators (one on each engine) and a Standby Electrical system that can power the essential flight instruments from any generator, or, the battery alone, if all of the generators fail.

Hmmm, what if all the generators fail and it's powered by just the battery? It seems our Mooneys operate in much the same way, only for the most part, we have just one generator.



On this particular night, [United Airlines 266](#) was dispatched with an “INOP” #3 generator, which was MEL’d to make it legal. Thus, with two generators working, they still had enough electrical power for the flight if there would be no additional problems. Hmmm - “No additional problems”. OK, we’ll see.

After the preflight checks and passenger loading (32 in all), they taxied and lined up for takeoff. Clearance for takeoff was given at @1817, for a flight that would last less than 5 minutes.

The thrust levers were pushed forward, the aircraft accelerated and at Vr the Captain pulled back on the wheel. They were airborne. At the call “positive rate”, the gear came up and the flaps were retracted on the speed schedule. Then, as the flaps were being raised, fate reared its ugly head!

A loud, continuous, ringing bell pierced the silence of the cockpit. At the center of the glareshield the large #1 Fire Warning light illuminated. Its red lens glowed brightly in the dark cockpit.

The 727 fleet had been plagued with numerous fire warnings. Many warnings had been false and the majority were due to hot air leaks from air ducts in the engine compartment. Regardless of the cause, the action required is the same: Treat it as if it really is due to a fire and shut down the engine!

The Captain commanded, “Silence the bell”, and the co-pilot pushed the button to stop the alarm.

“Fire in #1” was recited by the crew and the memory items were completed, which would shut down the #1 engine. (#1 thrust lever – IDLE. #1 fuel cutoff lever (start lever) CLOSED. Fire Warning light PULL to cut off air, fuel and electrical power to and from that engine). A complete checklist is usually done at this point to configure the airplane for a two engine flight to a landing. This not a big deal in a 727, but fate again reared its ugly head.

Do you remember that the flight began with the number 3 generator MEL’d out of service? Well, where are we now? #3 was inoperative and now #1 is shut down. The only generator available is #2. Under normal circumstances, this would be adequate if the electrical system is down and if the crew is aware that the electrical load on that one generator needed to be lowered quickly to avoid an overload of that generator. What actually happened can only be “speculated” through analysis of the Flight Data and Cockpit Voice Recorders. Much remains a mystery, but the conclusions drawn point to loss of all electrical power at this time; EVEN THE BATTERY POWER to the essential flight instruments in front of the Captain.

In addition, (another Hmmm), this was a “black hole” departure. No moon (clouds and darkness) going over water with no ground lights to show the horizon. Once past the Pacific shoreline, 1 mile off the end of the runway, all was pitch black with no visible horizon for reference. We’ll get back to this later.

With no electrical power, all the flight instruments were inoperative, featuring lots of red flags. There were no lights in the cockpit except for the emergency “EXIT” light on the back wall. Its eerie glow was the only illumination on the flight deck. With no Attitude Indicators working and no visible horizon for reference, control was lost and the airplane wound up in the Pacific Ocean, 11 miles off shore in 1,000 feet of water. One airplane, all the crew and 32 passengers were gone in less than 5 minutes.

How could this happen? Again, there’s only the NTSB’s educated speculation.

As was evident on the CVR, confusion reigned on the flight deck with regard to the loss of all electrics. The Flight Engineer said, “Keep trying”, referring to his attempts to regain electrical power. The Engineer commented that he had no idea what was going on. All the while, the airplane was rapidly going out of control.

At this time in the history of the 727, the electrical control system was configured in a way that would later be cited as a contributing factor in the loss of this airplane.

The Battery switch was located in the upper left corner of the Flight Engineer's panel. In close proximity to this switch was the galley power switch. Both operated the same way; up for on, down for off. In fact, both switches had the same look, feel, and design.

The Essential Power switch, which supplies power to only those instruments needed for the Captain to remain in control and be able to perform an instrument landing. It is selectable between each generator and Standby Power, (basically battery power).

Adding to all this complication was a fact that was not cited in the final report, but may very well have had a hand in the action. The F/E was brand new to the airplane with 40 hours of F/E panel time prior to this flight.

Could low experience have played a hand here? Another one of our – Hmmms.

Here's a question to ask yourself: How much total time do you have and how new are you to your airplane?

OK, how could that happen? In the Emergency Check List, one of the first items to be done, is to download the electrical system for single generator operation. An important download consideration is verifying that the Galley Power is "OFF". (Hmmm- download the electrical system. OK, more later.

The Galley Power should have been off for takeoff per the Check List, because a generator was inop. But, what if the Engineer (in the confusion of what may have been his first real emergency), "made sure it was off", but didn't really look at it and just shut a switch off?

On this airplane (and many other 727s back then, (now since redesigned because of this accident), the Galley power switch and the Battery switch felt and worked the same way. Could the engineer have gone back to his training and reached up to shut off the galley power, (as he had probably done several times in training when an engine was lost), expecting the switch to move down to off. Could he have done that to the Battery Switch? We will never know and the NTSB report says as much. One fact remains. He couldn't get Essential Power connected to generator #2, OR to Battery Power.

Could #2 generator have tripped off with an overload after the other operating generator failed? Quite possibly. Why couldn't it have been reset? Again, we'll never know. Why couldn't Essential Power be set to "Battery"? Again, we'll never know if the Battery Switch was off.

The facts remain the same. There was no power to either the Captain's or First Officer's Artificial Horizons. With no Gyro horizons AND no visible horizon outside the window, the end of this flight was inevitable.

Several changes were made to 727s in the aftermath of the NTSB's report and many recommendations. The following four items stand out as the most important.

- 1) If a particular 727 has the Battery Switch and the Galley Power switch within 11 inches of each other, the Battery Switch must be redone with a cover to eliminate inadvertent disconnect.
- 2) Essential Power had to be changed so that it would be automatically powered by the Battery in the event of a generator failure.



- 3) Whenever the “Essential Power” buss is unpowered, a red light shall illuminate on the Engineer’s panel to inform him of the problem.
- 4) Fourth, and most importantly, a 3<sup>rd</sup> independently powered Gyro Horizon, complete with its own illumination, must be installed in full view of the pilots.

And now you know the rest of the story! The requirement for a 3<sup>rd</sup> Horizon was expanded to all jet aircraft. Can we see once again how a string of what could have been independent events, lined up in an unbroken chain to cause an accident?

Let’s return to our points of interest, our “Hmms”, and see what might be applicable to us and our Mooneys.

**Hmmm #1** was the weather report. Most of us would think that this weather would be great if we were filing IFR. But, one item we might want to pay attention to and investigate further, is the temp/dew point spread of only 5 degrees. Also, at an OAT of 55 degrees, we could anticipate icing conditions at around 10,000’ MSL. Don’t most of us cruise right around that altitude, especially out here in the west?

**Hmmm #2** was the loss of all generators, (or in our case, our one and only alternator), and then flying on battery power alone. For most of the airline type equipment, they have about 30 minutes electrical power from the battery alone. In reality, not very much time.

Ask yourself, “How good is my battery if I need it to survive? How old is it? Has it ever been capacity checked? Could it be on its last legs?” Remember, just starting the engine tells you nothing about battery capacity. It will always start the engine until just before it fails! Starting actually takes very little out of the battery.

**Hmmm #3** was “downloading the electrical system”. Do you have a procedure in your POH for that procedure? If not, have you given thought to what you would do to extend your battery life if you lost your generator? What would you shut down? How would you do it? What if you are VFR in clear weather? What if you are in night IMC conditions? Could it be much more important then? Have you ever thought about it?

BTW, when was the last time you checked and/or changed the batteries in your cockpit flashlight?

Maybe we should consider another **Hmmm** of “what items are not working correctly on my airplane right now?” If you have an autopilot, is it fully functional? Wouldn’t that be a big help to lower your work load right now? Is it vacuum, electrical, or both? What about that intermittent gear light indication that you’ve been meaning to have repaired? Now, aren’t you just adding to the confusion with problems like that? What about the volume control on your radio. Is it intermittent or is the frequency selector having issues? I’ve seen airplanes with all of these issues. These seemingly small issues would add to your workload in a stressful situation. Why take on that added burden, even if you only fly VFR?

We have been talking about those of you with electrical powered gyros, but what about those of you with vacuum powered gyros? Let’s say we take off on a dark and dreary night and lose our vacuum pump? This could be a bad night couldn’t it? Sounds like one of my check rides in the simulator with evil Simon Legree as the Check Airman

How “up” are you on using your standby vacuum source? What are its limitations and restrictions? When that red light comes on, signifying that vacuum was lost, are you ready to understand it in a high



stress situation? What will work and what won't? How about those Brittain autopilots? Can you use them while relying on standby vacuum from the engine's intake manifold?

**Now let's look at the Black Hole departure.** Flying offshore where there are no visible lights on the ground is tough. It's hard enough at night with everything working, but now factor in a generator or vacuum failure that you're trying to solve. How prepared are you for this "out of the ordinary" departure scenario in IMC and at night? Maybe those 6 in 6 approaches you've been doing might not be quite enough to handle the task at hand? There are many other Black Hole departures around the country. This may be something you might think about before you leave?

Let's examine the pretext of this article: A standby gyro horizon.

- Is it possible that we need to think about a backup horizon in our Mooneys. What happens if the one in front of you fails? It can fail all by itself because of bad bearings, etc., and not just because of the loss of vacuum or electrical power. Does your gyro make any noise as it winds down after a flight? **Hmmm!**
- Lots of things are available now that weren't available 10 years ago. Just look at almost every "certified" glass panel nowadays. They all have a standby horizon on the panel. How will those of us with steam gages manage? Perhaps you should add a second horizon with power from a different source. How about iPads or Androids with a rudimentary instrument panel? Maybe having an iPad attitude indicator isn't a bad idea, IF you know its limitations and you've practiced with it while under the hood.

The final "nail in the coffin", so to speak, could be your experience level. Just what is your total time and time in your Mooney? How about real IMC time? Have you allowed for your experience level in your Flight Risk Evaluation (FRE) before this flight? You do a FRE for every flight don't you? How competent do you feel on all your emergency procedures? Are you guilty of just blasting off because of an "it'll never happen to me" attitude? Are you constantly banking on an "everything always works" mind set? Maybe a different departure decision is in the works. Remember, 24 hours later, usually means a VFR flight.

EVERYTHING has a bearing on the safety of our flights. Even little item, left unattended, becomes a big item and piles up on us if we have another failure. Plan ahead and think about your flight and what could go wrong. How will you be able to work around it so you can have a safe landing?

If you ever have a real emergency, you will be amazed at how busy you will be and how narrow your thought process and vision becomes. You will need to be very deliberate and careful to get things done safely. In many instances, simple failures, even in VFR conditions, cause us to lose sight of the most important item in flying- FLY THE AIRPLANE FIRST! If you're flying under control and you're stable, maintaining a reasonable airspeed, you can take care of everything else in time. FLY the airplane, then worry about the issues. Follow your check list!

Many years ago, a [Lockheed L-1011 was lost](#) because of a malfunctioning \$3 light bulb, just because someone wasn't "flying the airplane". But that is a story for another time.



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# MOONEY MASTER

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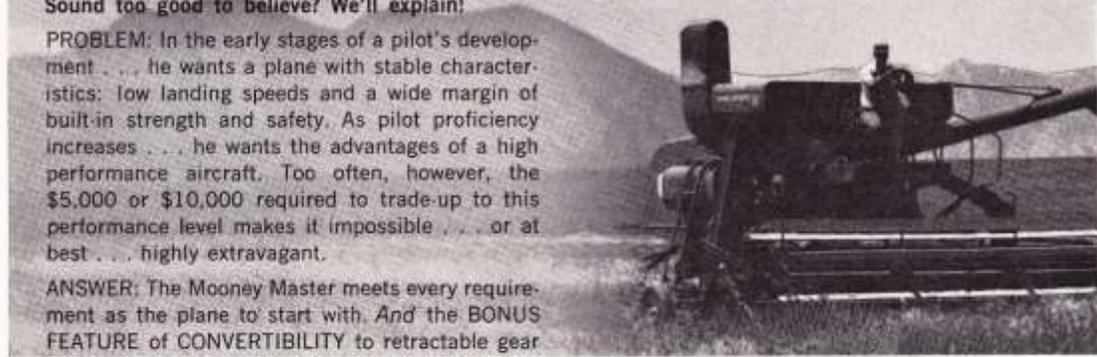
**PROBLEM:** In the early stages of a pilot's development . . . he wants a plane with stable characteristics: low landing speeds and a wide margin of built-in strength and safety. As pilot proficiency increases . . . he wants the advantages of a high performance aircraft. Too often, however, the \$5,000 or \$10,000 required to trade-up to this performance level makes it impossible . . . or at best . . . highly extravagant.

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## Oshkosh... It's the Journey

by Linda Corman

We are planning to take our Mooney to Oshkosh this summer. Our first trip to Oshkosh was back in 2008. My view on flying to Oshkosh is that the journey, or flight, is as amazing as the Oshkosh

event. I thought it would be interesting to recall our first adventure there. We zig-zagged across the country, stopping at beautiful parks along the way and meeting wonderful people as well.

In 2008 I had never visited any of our major National Parks. Phil thought it was time, as we would be so close to most of them on our flight to Wisconsin. We left California and headed to Nevada. The first leg on our way to Nevada was uneventful, but as we got closer to Las Vegas, the weather got worse with rain and significant cumulo-nimbus buildup. We eventually had to do some scud running through Las Vegas and as luck would have it, the air traffic controllers were having a bad day and could not communicate with us because all the big planes needed their attention. We just flew low over the mountains west of Vegas and dodged and weaved our way until we passed Lake Mead. From Las Vegas we landed at Cedar City, Utah.

From Cedar City, we visited [Cedar Breaks](#) and [Bryce Canyon](#) National Parks. It was our first National Park stop and the weather was cooperative. We had a beautiful morning, horseback riding at Cedar Breaks National Park. This park is stunning and the best way to see the multicolored canyons and ravines is on horseback. We checked in with our equine professional for a short truck ride to where the horses were kept. When we arrived, the horses were saddled and ready for us to enjoy the beauty and adventure of Utah's back country. I would like everyone to know I am a novice on horseback. In fact, I have only been on the back of one of these wonderful creatures twice in my life. I have to say they are far from the ground and when they start to trot, it is hard to stay on. Of course, our horses were slow and lazy with no need for speed. They follow each other in a set formation, nose to tail, and stayed that way the whole trip. So, for other horse novices, they are very well trained. We wandered through stubby forest areas and stopped at vista overlooks. We had a couple of young girls from Europe in our group, so we decided to entertain them with our repertoire of old western songs. It was a ball and I highly recommend it if you can carry a tune, (which we could not). You can buy your tickets for the Scenic Rim Trail Rides at Ruby's Inn. Cross the street to where the equine specialist (or trail boss) awaits for the tourists. As we were gone for only four hours on our horse ride, we decided to drive to Bryce Canyon and do some hiking.

[Bryce Canyon](#) is another National Park I had never seen and again, it's well worth the stop. Looking at this canyon from the parking lot, high up, it looks like a creamsicle. The ripples of orange and cream running through the canyon are amazing. The only way to really enjoy the colors and formations is to hike down into the canyon. Phil and I are hikers. This canyon is very well maintained and the decent into and the ascent from the valley floor is moderate to easy on

a hikers scale. There are some great formations that have been named and it is fun to see if you agree with their given names. Sometimes, I had other ideas about what they looked like to me. After our wonderful hike, we decided to head back to Cedar City for dinner because we had enjoyed a full day. We had heard about a great dinner place on the highway leading back to town and stopped to give it a try. We were not disappointed. The restaurant was called Rusty's Ranch House, and it is just 2 miles up Cedar Canyon. Their menu consisted of steak, steak, and more steak. Of course, what did you expect with a place called Rusty's.

We departed Cedar City early in the morning as it was a long flight to our next stop in Wyoming to see Yellowstone National Park. Along the way, we needed to make a fuel stop. Phil selected an airport in Wyoming called [Alpine AirPark](#). The airport and the lake area were beautiful, in this high mountain valley. We swooped down to the lake, then circled to land next to a lovely air park. The FBO at the air park treated us like friends and showed us some of the houses with hangars for sale on the property. After fueling, up we had to climb along the lake to get over the higher peaks. As we reached the mountain tops we experienced a sudden mountain downdraft. This was a good wake up jolt.





We were off the next day to a couple of parks I have always wanted to see, [Yellowstone National Park](#) and the [Grand Tetons](#). Before we got to the parks themselves, I have to say, as we flew past the Tetons, they were breathtaking. The beauty of these mountains from the air cannot be described. We landed at West Yellowstone airport and rented a car to explore the parks. We had to do the whole tourist thing and see Old Faithfull. It does not disappoint. We walked past ponds and super heated pools with brilliant colors and shooting steam. It is hard to believe we were walking on top of the biggest volcanic

caldera in the world. All through the park there are various wild animals; bison, elk, and bears. The one bear we spotted was a gigantic Grizzly. It was enjoying a quick drink in a nearby river that we could see from the road. We did a loop of the park and headed back to town because the next day we were driving to Jackson Hole, Wyoming. On the way to Jackson Hole, you pass near the Grand Tetons and they are nearly as impressive from the ground as from the air. We did a short hike around Jenny Lake with beautiful snow capped mountains reflected in the lake like a giant mirror. Jackson Hole is a fun town in the summer as well as in the winter. In the center of town is a small park with antlers formed to make a grand entry into the park. The town of Jackson Hole has great shopping and numerous restaurants, but we were just stopping there briefly on our way to Driggs-Reed Airport in Driggs, Idaho. They have a restaurant on the airport that we had heard was outstanding. It was. The place was very busy when we got there. We had to wait for a table and it is a good sign that the restaurant is doing well when the townies want to eat there. We completed our round trip and ended back at West Yellowstone. The next morning, we departed early and flew over Yellowstone Park and Yellowstone Lake. It was amazing, as the steam vents were visible and seemed to reach for the plane as we passed over.



From Yellowstone we flew to Custer, South Dakota. On our approach into Custer, off to the left, I could see figures carved into the mountain side and realized it was [Mount Rushmore](#). What a treat to see this from the air. Custer was originally only going to be a fuel stop for us, but after we landed, the FBO owner changed our minds. He came out to help with the gas (even though it was self serve) and asked us about our plans for the evening. As we did not have any, he convinced us to stay and explore the area. He



made the decision easy for us, as he had a car we could use with stickers for all the surrounding parks. He also got us pilot rates at the local hotel. With our stickered car in hand, we were off the next morning to visit [Custer State Park](#). The park's claim to fame is its huge bison herds. We started through the park and were immediately stopped by the biggest bison I had ever seen. This gigantic bison of course, owns the road or so he thought. We did not argue the point with him. We just shut the car down and once he got tired of staring at us, he moved on. After the animal park, we drove to Mount Rushmore via Ironside Road. We were told that as you approach Rushmore, you go through a series of tunnels that were built to highlight the faces on Mount Rushmore. Each corner and tunnel, you are taken closer to the mountain. We



had a great time walking around the monument and also hiking up to the base of the mountains where you can look straight up into the presidents noses. From Rushmore we headed to Crazy Horse, which is still under construction. They have excavated the face and the general outline of the famous Chief. It was interesting, but I cannot really

recommend it as it was expensive to enter the park and you could see the monument from outside for free.

Our last fuel stop before Oshkosh was in Algona, Iowa. When they say the corn is high in Iowa they are not kidding. As we approached the airport, I could not find it because it was surrounded by corn fields that were so lush and high, that hid the airport until we were



overhead. This is a tiny town with very nice people. The FBO gave us the crew car to use to get to and from our hotel. We explained that we would be leaving early in the morning and we wanted to know where to leave the car keys. He looked amused and told us we were not in California and we should leave the keys in the car.

The next day we were off to Oshkosh – our final destination. However, our journey to Oshkosh was the biggest part of our adventure. If you have the chance to zig-zag across the country, to see and enjoy all the wonderful parks we have, I say “go for it”, as it doesn’t get any better than that. Of course, to see it all from a Mooney is the best way to go.



# Upcoming Fly-Ins



# The Mooney Flyer




June 12 – 14, 2015 **Summit** Paso Robles, CA



- May 9, Winter Haven (GIF)
- June 13, Williston (X60)
- July 11, Sebring (SEF)
- August 8, St. Augustine (SGJ)
- September 12, Lakeland (LAL)



- Chattanooga, TN **June 5-7, 2015**
- Atlantic City, NJ **September 11-13, 2015**
- Fort Worth, TX **October 23-25, 2015**

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Send your questions for Tom to [TheMooneyFlyer@gmail.com](mailto:TheMooneyFlyer@gmail.com)

**Q1: I am a new Mooney M20J owner. I am trying to better understand why an MSC is more valuable to me as an owner. I have been reading your Ask The Top Gun articles in The Mooney Flyer and I am impressed. What specifically does an MSC do that sets it apart?**

The advantage of an MSC is all about the experience. We maintain a lot of different aircraft including Cessna twins, Malibus, Cirrus, etc., but by far our experience of over 25 plus years as an MSC, where we currently maintain in full or part, over two hundred Mooneys, gives us a unique level of experience on every model. We save a lot of time for owners in repairs. We know every place on your plane that may be problem areas peculiar to the Mooney, we don't waste a lot of time troubleshooting, since we have usually done the job many times. We also spend a lot of time on the phone helping owners and mechanics anywhere in the world helping to solve problems.

**Q2: I have a long body Mooney (1999) and previously owned an E. The brakes on my M20S don't seem to have much stopping power... Am I stuck with that?**

I have to research that. We have modified a number of TLSs with dual puck brakes as that was a problem with earlier models, but I have never been asked that question about an S model..

Possible problems are glazed brake pads, discs worn thin, gummed up brake cylinders and a possible need to flush the hydraulic system.

#### Rules for Pilots Over 60



1. All pants must fit and not be up in your armpits.
  2. You must walk without shuffling your feet.
  3. No Depends - on the flight deck.
  4. When using a toothpick, you must leave your teeth in your mouth.
  5. If you need more than tri-focals, you are DONE!
  6. No pictures of great-great-grandchildren.
  7. Anytime you call the other guy " Sonny ", he can hit you.
  8. Never, ever mention AARP.
  9. When in a restaurant with your crew, don't request the senior discount.
  10. When checking into the overnight hotel, don't ask if the exercise room has shuffleboard.
- and finally,**
11. No more messing with flight attendants! (You could have afforded to retire at 60 if you hadn't messed around earlier ).



## ***Kneeboards for iPads Debut***

ASA has introduced [two new kneeboards](#) for pilots who use the iPad mini or the iPad Air.

Made from leather, each kneeboard features a wide hook and loop leg strap to hold it in place during flight and a clip on the front cover for securing a notepad or other paper documents for easy access in flight, according to company officials. The built-in adjustable easel folds to position the iPad at a tilted viewing angle; alternatively, it can lay flat. The dock connector/power port is easily accessible with the cover closed, and a window on the back cover exposes the camera lens for picture taking. A small elastic loop holds a pen or stylus. Inside, the lining protects the screen from damage, and a pocket provides additional certificate and document storage. Prices range from \$59.95 to \$64.95. [READ MORE HERE](#)



## ***ASA releases FAR/AIM Android app***

A new [FAR/AIM app from ASA](#) is now available on [Google Play](#).

The app, priced at \$9.99, contains information from Titles 14 and 49 of the Code of Federal Regulations pertinent to pilots, flight instructors, and flight crew, combined with the Aeronautical Information Manual (AIM), and Pilot/Controller Glossary.

Features include free updates, text search, highlighting, bookmarking, profile and landscape viewing, and a “study-by-certificate” tool for quick reference to the important sections relevant to a particular certificate.

ASA tracks FAA changes daily and updates the app when regulations and AIM changes affect pilot operations, officials note.

## ***FAA Plans to Eliminate 736 Approaches***

The FAA has announced it plans to cancel 736 instrument approach procedures around the country that the agency has found to be underutilized or redundant. The list was developed based on the FAA's criteria for canceling instrument approach procedures, a policy that was established on June 27 of last year. The policy was developed through recommendations from the Flight Safety Institute, which received a grant in 2010 to develop such a process.



The list of approaches to be eliminated includes underutilized or redundant procedures using ground-based NDB and VOR navigation sources. While the cuts will be seen countrywide, several states, such as Alaska, California, Michigan, Minnesota and Texas, will each lose dozens of approaches should the proposal be put in effect as written.

According to the Flight Safety Institute, the FAA's National Aeronautical Navigation Services maintains more than 17,000 instrument approaches. Since the first GPS approach was printed in 1995, hundreds of GPS and RNAV approaches have been added each year, and with NextGen being implemented, the number of satellite-based approaches continues to increase.

If you wish to comment on the new proposal, refer to FAA-2015-0783. The comment period on the elimination of instrument procedures closes on May 28.

Reference Flying Magazine, By Pia Bergqvist / Published: Apr 16, 2015

For a list of proposed approach illuminations:

Go To: <http://www.gpo.gov/fdsys/pkg/FR-2015-04-13/pdf/2015-08098.pdf>



## ***Garmin G500 and G600 Get Major Makeover***

Garmin is rolling out a significant update for the G500 and G600 retrofit glass cockpits designed to give the avionics a fresh, new look while also providing faster mapping display capability to go along with a host of additional features.

Garmin says improved dynamic maps in the G500/G600 flight display system are being carried over from the GTN 650/750 touchscreen avionics, resulting in "vivid and superior display quality" that pilots will notice. [READ MORE](#)



## ***WingX Pro7 Android Version Released***

Features include VFR Sectionals, IFR High and Low Enroutes, planned route, weather, TFRs, and Special Use Airspace overlays. WingX Pro7 for Android adds integration with Lockheed Martin's Flight Services system, Geo-Referenced Approach Charts and will continue to be enhanced with the features already on WingX Pro7 for iOS, according to company officials.. Buyers of the Apple iOS version of WingX Pro7 will be able to run the Android version as well, at no additional cost.

"We are actively developing solutions for Microsoft Windows, Google Android, Apple iOS, Pebble and Apple watches as well as working with many companies to include and enhance the integration of numerous ADS-B receivers, Arinc 429 bus modules for the commercial and airline industries, Garmin and Aspen Avionics hardware interfaces and pitot/static systems," said company founder Hilton Goldstein.

[READ MORE](#)

## ***Aspen Announces Major ADS-B Price Cuts***

Competition in ADS-B is clearly heating up and anyone looking for discounts on mandate-ready equipment will find them at Sun 'n Fun from at least one vendor. Aspen Avionics announced today that it's reducing the price on two of its ADS-B products, the ATX100 and ATX100G.

The ATX100, which provides ADS-B In and Out capability and is suitable for an aircraft whose owner wants to keep a Mode-C transponder in place, has been reduced in price to \$2,645 from \$3,995. The ATX100 requires an external WAAS GPS position source, which many aircraft already have. The ATX100G is also a UAT product that provides In and Out capability and has its own onboard WAAS position source.

Originally priced at \$4,995, it has been reduced to \$3495. [FOR MORE INFO](#)



## ***Flight Outfitters Debuts New Flight Bags at Fun n Sun***

[Flight Outfitters](#), a company that combines experience in both aviation and functional bag development, is introducing two new designs made specifically for active pilots.



**The Thrust** is designed with a single, adjustable padded shoulder strap to "sling it" over your shoulder. It is small enough to fit between or under the seats, yet still accommodates an iPad and ANR headset, company officials note. A variety of mesh pockets organize tools and accessories, including ADS-B receivers, charging cords, and even a water bottle. The Thrust is priced at \$79.

**The Lift** is a pilot bag with a fleece-lined headset pocket and a protective iPad sleeve. Multiple organizer sections inside keep everything separated, while an external pocket is ideal for a back-up radio, company officials noted. A steel-reinforced carrying handle makes the Lift sturdy for even the heaviest loads, and a removable shoulder strap is included as well. The Lift is \$99.



## Aspen's AoA Software To Sell For \$1,995



Aspen Avionics' software-based angle of attack indicator will go on the market in July for \$1,995. The AoA indicator is a software upgrade that will display real-time data on the Evolution's primary flight and multi-function displays.

John Uczekaj, Aspen's president and CEO, said the company will promote the indicators as an easily added and affordable safety enhancement. "Our goal is to have AoA installed on every Aspen-installed aircraft," he said.

The indicator calculates angle of attack using flight data received from the Air Data Computer and attitude heading reference system, along with a certified GPS. It will provide trend information for stall margins and accounts for flap configuration as well as slips, Uczekaj said. The display shows a tape-type scale

with a pair of vertically moving pointers; one to indicate flaps-up AoA and the other flaps down. Approaching stall angle of attack, the pointers move from green on the lower scale, to red at the top of the scale. The system will have a de-clutter feature to take the indicator off the screen during cruise flight.

## Stratus Latest Enhancements

Two enhancements for the [Stratus 2](#) portable ADS-B receiver were recently unveiled, which enable flight data recording and synthetic vision. The flight data recording feature allows pilots to automatically log every flight, including GPS position, altitude, pitch and bank. The synthetic vision option creates a 3D view of terrain and obstacles in [ForeFlight Mobile](#), complete with a real-time attitude indicator. Stratus 2 will also be fully compatible with the recently announced Stratus ESG, an all-in-one ADS-B-Out transponder with GPS. [READ MORE](#)





## ***ForeFlight 7 is Here.***

### ***Faster Planning, Faster Downloads, and More.***

With this release, planning gets even better with a more advanced Procedure Advisor and a dramatically improved navigation database that enables visual preview of SIDs, STARs, approaches, and pattern entries. Downloads are significantly faster and use less disk space. Chart Touch technology lets you see the margin information for sectional and IFR en-route charts. Cabin Altitude Advisor leverages integrated pressure sensors to alert you when things don't seem quite right. Support for Apple Watch gives you at-a-glance weather, flight instruments, and timers. Our new web-based flight planning system delivers an industry first Web-to-Panel flight planning experience for supported avionics. [READ MORE](#)

## ***iFlightPlanner Introduces Garmin GTN Flight Plan Compatibility***

*iFlightPlanner* users can now create and save flight plan files for use in the new GTN 600 and 700-series avionics by Garmin.

This eliminates the need for pilots to enter routes by saving a GFP file from [iFlightPlanner.com](http://iFlightPlanner.com) to a compatible SD Card, which can then be loaded to the Garmin unit for activation or storage.

[READ MORE](#)



## ***Flight Plan Close Reminders at 1800WXBrief.com***

Even with convenient mechanisms like EasyActivate™ and EasyClose™ or the ability to activate and close through the Lockheed Martin Pilot Web Portal or partner apps, there is still the possibility a pilot forgets to close and gets the dreaded “we’ve started Search and Rescue procedures on your flight” phone call.

That’s where Close Reminders come in. You can register for reminders to be delivered by email and/or text messages. If you haven’t closed your flight plan by 20 minutes past your ETA, the reminder is sent. In the email version of the Close Reminder, the EasyClose™ link is also provided to make it as easy as possible to get your flight plan closed.

It’s a free service! **BUT, it’s only available if you filed via [1800WXBrief.com](http://1800WXBrief.com).**

Register under **Account > Register for Advanced Services**. Add a new row, if necessary. Select “Text Message”, choose your provider, enter your cell phone number and tick “**FP Close Reminder**” and any other services that you desire.



**FAA NEWS!** [READ MORE](#)

**On October 1, 2015, the FAA will consolidate Flight Watch services into routine flight services in flight frequencies** to eliminate unnecessary

duplication of service and provide greater convenience for pilots. These services provide inflight weather information to pilots. After that date, these services will be available on the same frequencies that pilots use to open and close flight plans and to receive updates on NOTAMs or Temporary Flight Restrictions (TFRs). Dedicated Flight Watch frequencies will be decommissioned.



**The FAA is proposing to phase out legacy Remote Airport Advisory Service.**

Seven of the airports do not meet the Agency's criteria for receiving advisory service. Flight Service is collaborating with our user groups on possible impacts and will be posting the proposed change in the Federal Register for public comment.

**The FAA is also proposing to implement flight plan filing for civil aircraft exclusively under the format used by the International Civil Aviation Organization (ICAO).** Flight plans contain specific information relating to the proposed flight of an aircraft and controllers use them to provide air traffic services. Today, pilots file flight plans in the U.S. under either the domestic or ICAO format. The use of one format will simplify the process and align U.S. flight plans within ICAO standards.



**Lockheed Martin's EasyActivate, EasyClose**

Pilots that register for these services receive an EasyActivate™ email 30 minutes prior to the estimated time of departure for each filed VFR flight plan. The email contains a link to activate the flight. Select the link and that's it – you're flight plan is activated, and you do receive immediate confirmation. An EasyClose™ email is sent 30 minutes prior to your estimated time of arrival (based on your actual departure time) and works the same way. **It's only available if you filed via [1800WXBrief.com](http://1800WXBrief.com).**

Register under **Account > Register for Advanced Services**. Add a new row, if necessary. Select "Text Message", choose your provider, enter your cell phone number and tick **"EasyActivate EasyClose"** and any other services that you desire.

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## Aspen Integrating Angle of Attack (AoA) Indicator

There is a lot of buzz about the reintroduction of AoA Indicators into the cockpit which have been used by Naval Aviators for decades. This month, Aspen

announces their “integrated” AOA indicator. It’s a simple software upgrade to their Evolution display unit. If you already have an Aspen Primary Flight Display (PFD) or Multi-Function Display (MFD), this could be your most direct route to add an AoA indicator to your panel.

Stall and Stall/Spin accidents are a major cause of fatalities in GA. This software upgrade could be a primary tool in avoiding these accidents. To be sure, this is different than a freestanding AoA indicator. The AoA is derived from software, developed by Aspen, that provides real-time awareness of your AoA without any additional hardware, cabling, or other aircraft modifications. This saves you an installation expense. Aspen indicates that after the installation, a short flight with a technician is necessary to calibrate the function.



According to Aspen, here are the system benefits:

- **Improves safety** – Provides real time flaps up and down stall margin awareness - enables the pilot to see the available lift before changing the configuration - crucial when making a go-around.
- **Intuitive display** – Provides an immediate, clear visual display of trend toward stall and stall margin. The pilot comprehends important information at a glance.
- **Easy installation** – Requires no additional probes, wiring or equipment. Installation cost and down time are minimal.
- **Primary Field of View** – AoA is displayed on the Aspen PFD or MFD in the pilot’s natural field of view.

Aspen anticipates its Evolution AOA will be available in July 2015. It will cost \$2,000.

## Mooney Instructors Around The Country

### Arizona

*Jim Price* (CFII, MEI, ATP). Chandler, AZ (KCHD) 480-772-1527. Proficiency training and IPCs. Website: [www.JDPriceCFI.com](http://www.JDPriceCFI.com)

*Boris Vasilev* (CFI, CFII, MEI, AGI), Phoenix Are, Tel: 602-791-9637, email: [boris@atieuhosting.com](mailto:boris@atieuhosting.com), Time in M20C through M20R models. Private commercial and instrument training, BFR's IPC's FAAWings

### Connecticut

*Robert McGuire*, Durham, 203-645-2222 cell, [rmcguire007@hotmail.com](mailto:rmcguire007@hotmail.com)

*Winslow Bud Johnson*, [smgemail@aol.com](mailto:smgemail@aol.com), 203-348-2356

### California

*Geoff Lee*, San Martin, CA, [69050@comcast.net](mailto:69050@comcast.net)

*Don Kaye* (Maser CFI) located in Palo Alto, CA, (408)-249-7626, Website: [www.DonKaye.com](http://www.DonKaye.com)

*Chuck McGill* (Master CFI) located in San Diego, CA 858-451-2742, Master CFI, MAPA PPP Instructor, M20M, M20R, M20TN, Website: [Click Here](#)

*Rodrigo Von Contra*, Oakland, (510) 541-7283, [Rodrigo@vonconta.com](mailto:Rodrigo@vonconta.com)

*George Woods*, Woodland (O41), (530)-414-1679, , [georgemichaelwoods@yahoo.com](mailto:georgemichaelwoods@yahoo.com), Fixed wing CFII, Multi-Engine, Helicopter, Glider & Gyroplane CFI. Owns Mooney Rocket

### Colorado

*Ben Kaufman* (CFI/CFII) – Fort Collins (KFNL) - (801)-319-3218 - [bkaufman.mba@gmail.com](mailto:bkaufman.mba@gmail.com)

### Florida

*Mike Elliott* (CFII) Master CFI located in Tarpon Springs, FL, Contact 317-371-4161, Email [mike@aviating.com](mailto:mike@aviating.com), Quality instrument & commercial instruction, transition training, ownership assistance, plane ferrying

*Robert McGuire*, Hawthorne, (203) 645-2222, (Dec – Feb), [rmcguire007@hotmail.com](mailto:rmcguire007@hotmail.com)

### Georgia

*Jim Stevens*, USAF, Col, (ret), CFII. Atlanta, GA area. 404-277-4123. Instrument, commercial, IPC, BFR, transition training. 20 year owner of 1968 M20F.

### Kansas

*John R. Schmidt* (COL, USAF, Retired) Fort Leavenworth, Kansas and the Kansas City area. Instrument and commercial instruction, transition training, BFR. (913) 221-4937 [jspropilot@att.net](mailto:jspropilot@att.net)

### Massachusetts

*Ralph Semb*, [ralph@bowling4fun.com](mailto:ralph@bowling4fun.com), 413-221-7535

### New Jersey

*Parvez Dara*, [daraparvez@gmail.com](mailto:daraparvez@gmail.com), 732 240 4004

The 50-50-90 rule: Anytime you have a 50-50 chance of getting something right, there's a 90% probability you'll get it wrong.

**New York**

Jack Napoli, Long Island, TT 6,000 hrs & Mooney time 3,000, [kj4kqvh1@yahoo.com](mailto:kj4kqvh1@yahoo.com), 631-806-4436

**Texas**

Austin T. Walden, Lubbock & Abilene, Texas 432-788-0216, Email

[AustinWalden@gmail.com](mailto:AustinWalden@gmail.com)

PhD, Specializing in Models C thru J, [www.WaldenAviation.com](http://www.WaldenAviation.com)

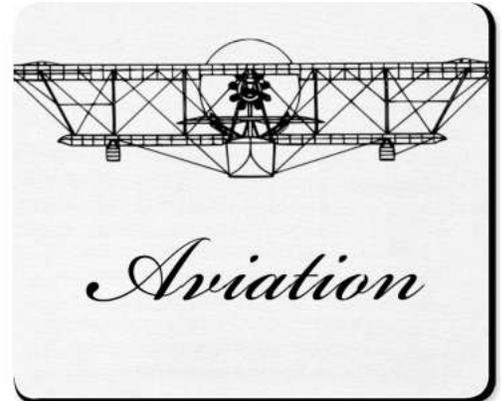
Brian Lloyd, Kestrel Airpark (1T7), 210-802-8FLY, [Brian@Lloyd.aero](mailto:Brian@Lloyd.aero)

Mark Johnson, [mjohnsonf16@hotmail.com](mailto:mjohnsonf16@hotmail.com), 832-773-4409

Jerry Johnson, [mooney9281V@hotmail.com](mailto:mooney9281V@hotmail.com), 817-454-2426

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**For Sale – 1978 Mooney M20J 201.** Aspen with extended warranty, Avidyne traffic, storm scope, very good paint 8, interior a 7. King 200 autopilot coupled to the Garmin GNS 430 and Aspen. Factory engine with 850 hours. \$ 88,000 - [mbmaksymdc10@aol.com](mailto:mbmaksymdc10@aol.com)

### **Mooney M20J/201, N9269N, S/N 24-0751**

TTSM 961/TTSN 3189

Engine time 961 SMOH by Triad

Propeller HC-C3YR-1RF 3-Blade 961 TTSN

Annual due 3/31/2016

Useful Load 1024

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KX-155 Nav/Com w/KI-208

KMA-28 Audio Panel

KR-85ADF w/KR-225 Indicator

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JPI-700 Engine Monitor w/Fuel Flow (monitored to GPS)

Century 11B Autopilot w/ Heading Bug

Other: Yoke Mounted Electric Trim and Map Light

Vertical Card Compass

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Contact Eddie Smith @ 803 684-3425 or [easeddie@aol.com](mailto:easeddie@aol.com). More views at <http://www.heraldonline.com/news/business/biz-columns-blogs/don-worthington/article12303545.html>. Appraised at \$85,750.00, asking \$78,500.00 or best reasonable offer. I have owned for fourteen years; selling for medical reason.

### ***1959 M20A for Sale, as is***

My brother was a Mooney enthusiast, who died nearly 12 years ago. My parents inherited his Mooney M20A (SN 1276). It's been sitting in a hangar at Hicks Airfield near Fort Worth since that time. It was flying until maybe November, 1989, when the prop was tagged.

Total time, 2608 and Tach time 187.

This is a definite fixer-upper. My brother loved his plane and maintained it very well. We have all the documentation and log books back to its original purchase in 1959.

Please make an offer. The buyer would have to transport it.

Contact information: Deborah Evans

Home: [972-985-8471](tel:972-985-8471); Cell: [214-213-0865](tel:214-213-0865); email: [Deborah.parker@verizon.net](mailto:Deborah.parker@verizon.net)

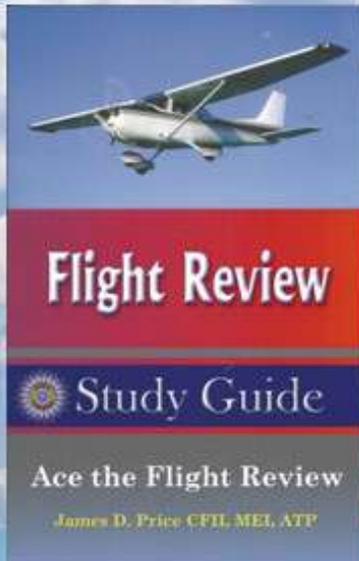




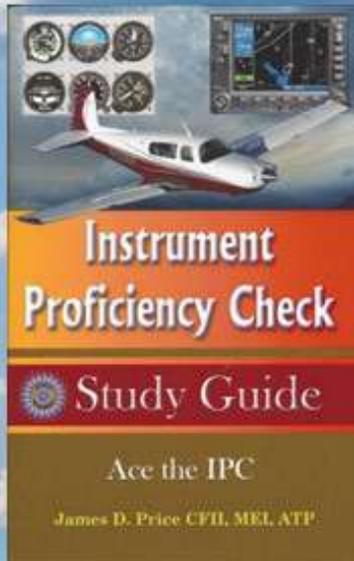
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Check out Lake Aero Styling & Repair's "LASAR" Web Site: [www.lasar.com](http://www.lasar.com) : New under Mooneys for Sale, "List your Mooney for free" and "Mooney Instructors." Also check out Parts, Mods, and Services! LASAR, est. 1975 (707) 263-0412 e-mail: [parts-mods@lasar.com](mailto:parts-mods@lasar.com) and [service@lasar.com](mailto:service@lasar.com)

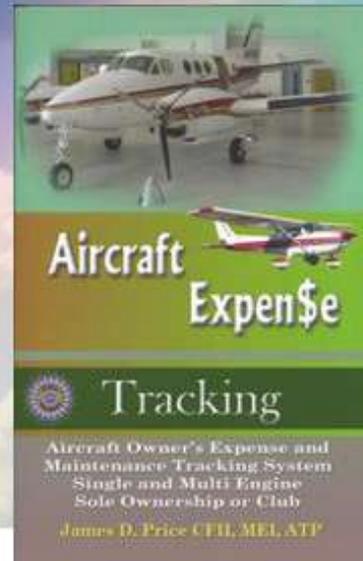
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