The Mooney Flyer

The Official Online Magazine for the Mooney Community

www.TheMooneyFlyer.com

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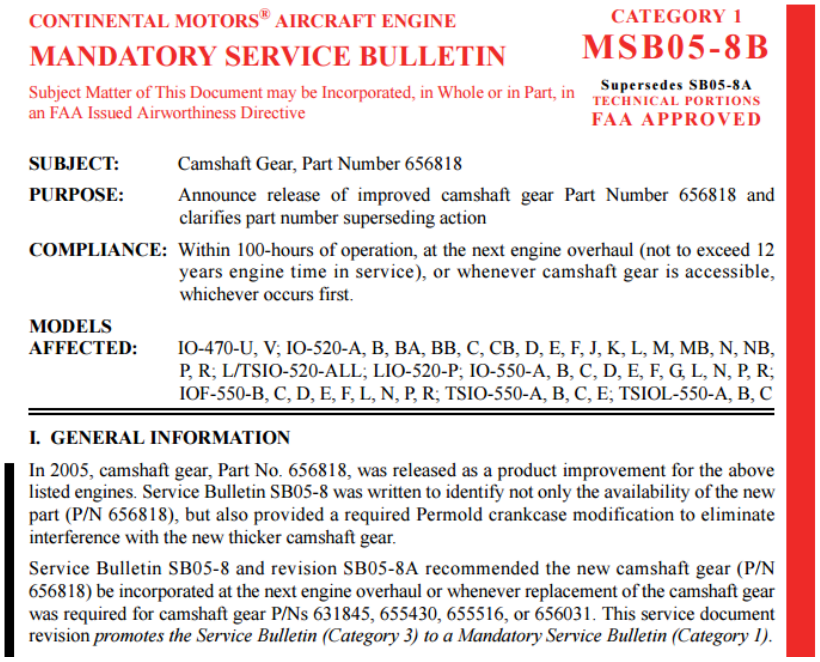
Continental Motors Strikes Again

Continental Motors has issued a Mandatory Service Bulletin (MSB) for all of their IO550 engines, Mandatory Service Bulletin MSB05-8B. The MSB calls for preemptive replacement of cam gears in Continental 520- and 550-series engines (plus a few IO-470s). The MSB calls for tearing down engines with older-style camshaft gears within the next 100 hours in service, or within 12 years of when the engine was built, rebuilt or overhauled (whichever comes first), and replacing the older-style camshaft gear with a new thicker gear (part number 656818). There are a few things that irk us about this MSB. Continental is asking the FAA to make this an AD. If so, this will result in each IO550 being removed from applicable Mooneys, and an allegedly faulty Cam Shaft gear be replaced with a new one, Part number 656818, which is thicker and lasts longer. It was originally thought that the crankcase needed to be split after removal, but now we find that the gear may be replaced via a removed oil pan. The Cam Shaft gear will cost approximately $1,200, but this is dwarfed by the cost of the R and R required to remove and reinstall the IO550. As of this writing, it is unclear if the FAA will make this an AD. Additionally, it may not be necessary to split the crankshaft to replace the camshaft gear. It might be reachable through the oil pan. And as almost everyone knows, doing such a major maintenance item on your engine opens it up to unintentional Maintenance-Induced failures.



CONTINENTAL MOTORS® AIRCRAFT ENGINE

MANDATORY SERVICE BULLETIN

CATEGORY 1

MSB05-8B

Subject Matter of This Document may be Incorporated, in Whole or in Part, in an FAA Issued Airworthiness Directive

Supersedes SB05-8A
TECHNICAL PORTIONS
FAA APPROVED

SUBJECT: Camshaft Gear, Part Number 656818

PURPOSE: Announce release of improved camshaft gear Part Number 656818 and clarifies part number superseding action

COMPLIANCE: Within 100-hours of operation, at the next engine overhaul (not to exceed 12 years engine time in service), or whenever camshaft gear is accessible, whichever occurs first.

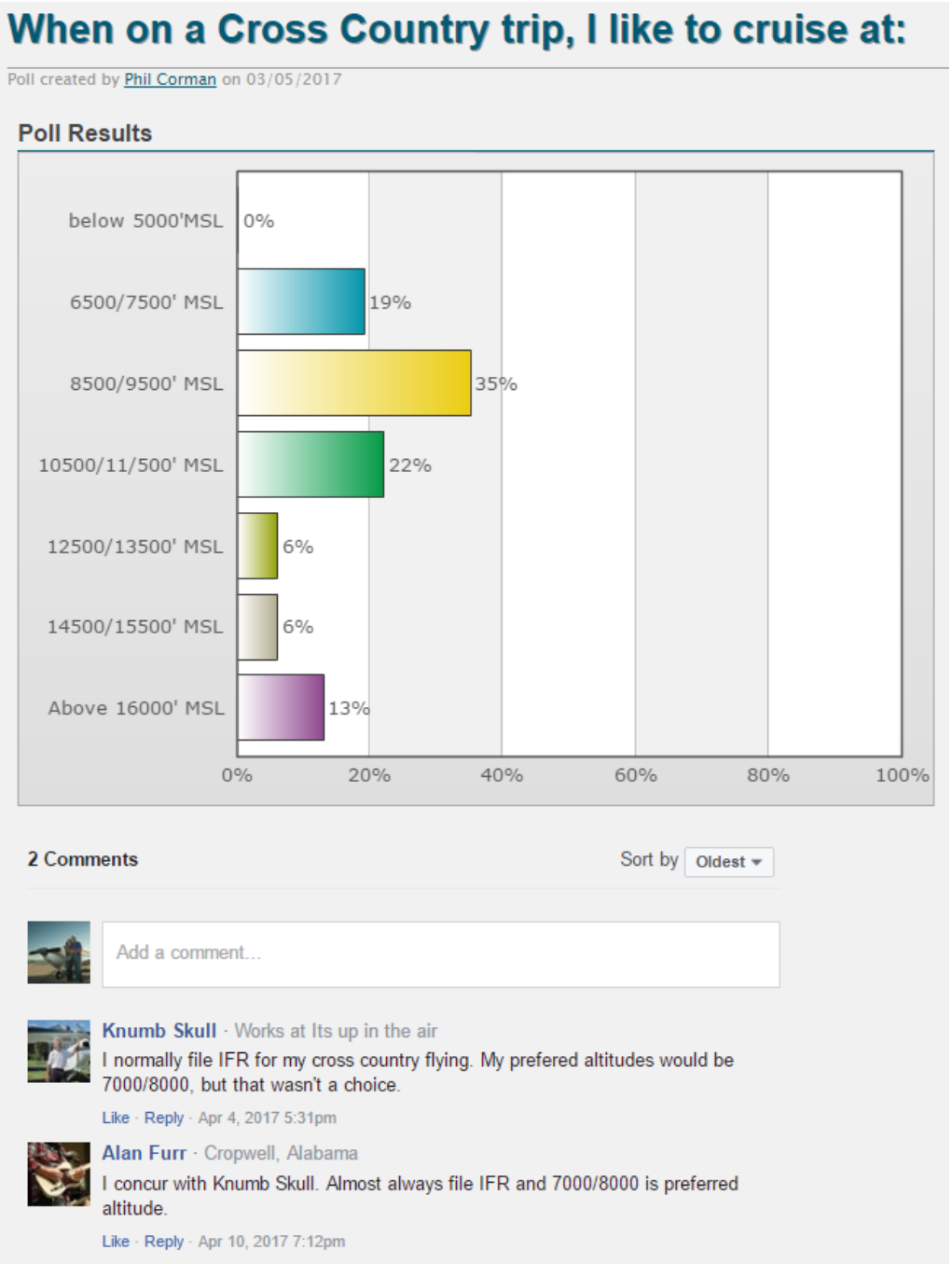
MODELS AFFECTED: IO-470-U, V; IO-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, M, MB, N, NB, P, R; L/TSIO-520-ALL; LIO-520-P; IO-550-A, B, C, D, E, F, G, L, N, P, R; IOF-550-B, C, D, E, F, L, N, P, R; TSIO-550-A, B, C, E; TSIOL-550-A, B, C

I. GENERAL INFORMATION

In 2005, camshaft gear, Part No. 656818, was released as a product improvement for the above listed engines. Service Bulletin SB05-8 was written to identify not only the availability of the new part (P/N 656818), but also provided a required Permold crankcase modification to eliminate interference with the new thicker camshaft gear.

Service Bulletin SB05-8 and revision SB05-8A recommended the new camshaft gear (P/N 656818) be incorporated at the next engine overhaul or whenever replacement of the camshaft gear was required for camshaft gear P/Ns 631845, 655430, 655516, or 656031. This service document revision *promotes the Service Bulletin (Category 3) to a Mandatory Service Bulletin (Category 1).*

To make matters worse, historically, there have been only two failures, so this seems like an amazing overreach on the part of Continental. One reader wrote that they recently had their engine torn down and that the Camshaft gear was in perfect condition. An overhaul shop indicated that it is unclear to them that the existing part has been demonstrated to be at fault, or perhaps installation might have been a factor. Regardless, it seems to us that this should be handled at overhaul, or the next time that the engine is disassembled. The current MSB calls for this to be done within 100 hours. To add insult to injury, the part is in short supply.



Next month's poll:"Regarding Medicals…"**CLICK HERE** to vote.

Appraise Your Mooney's Value

Don't forget about our cool new **Appraise your Mooney's Value**calculator.

M20C M20E M20F M20G M20J

I read your fine publication each month as a former Mooney pilot who now flies the other Mooney (TBM). I felt I needed to point out one minor omission in your flight to Mexico story. You must call USA customs at your port of entry and notify them of your return and the guard will give you his initials as confirmation. This is in addition to the eAPIS filing. Failure to do this will result in a stern lecture. The second time you will get a $5 k fine. Keep up the good work, it's a fine publication.

All the best,
Nigel C

Editor Note: Thanks Nigel for your letter. US Customs Offices vary with their procedure, but our investigation indicated that a properly filed eAPIS, Mexican Flight Plan, and Squawk Code 30 minutes out is all US Customs requires. That being said, we think your advice is wise.

One point On the Step comments below

We all know there are 4 forces that act upon our airplanes during flight; Lift, Drag, Gravity, and Thrust. Assuming all of these forces remain constant, equilibrium must be achieved, which results in the aircraft velocity in terms of IAS. Getting on the step keeps the airplane in a longer climb. The potential energy of the extra altitude is converted into kinetic energy during the decent. Any speed gains will be lost as the 4 forces act upon the airframe and it reaches equilibrium, as it must. The alternative is to level off at the target altitude and accelerate until equilibrium is achieved. The IAS when equilibrium is achieved must be the same. We know that air resistance (drag) increases as a function of velocity squared. Therefore, any time spent above the equilibrium velocity has a higher energy cost than at or below equilibrium for the distance traveled. So I have to believe that any attempt to get on the step will actually have at least a slightly negative impact. Pilots that are in a hurry to accelerate, can maintain the climb power setting longer. Those interested in range or fuel conservation can immediately reduce to their cruise power setting and have a slower more economical acceleration.

All True, and I completely agree…. That being said… I fly a slick low HP M20C and (180) but can cruise at 150KTS…. Step or no step it's the same… But if I just level off at altitude after a long climb and I am high and making even less power, it can take a long time and a lot of readjusting trim before I am at full speed. (Sometimes as long as 3 to 5 min). So I choose to climb 3-5 hundred feet

higher and then start to pick up speed. Then I dive down to my desired alt (of course not while IFR). I find if I do it correctly, (as in don't get too fast and have to wait on the other side for it to slow down… although that will happen faster), then I have less time playing with trim and the temp seams to cool faster once I am level. Then I can fine tune the mixture (which I only ruff in during climb)… Anyway, after 1,000 hours in my C, I will use this if I am going up high (as in over 8,500). No faster ultimate speed and yes with the extra climb time I am sure it takes the same amount of time to get to full speed once I first reach the correct altitude during the climb… BUT, when passing alt, I do not need to play with trim, as I am already trimmed… so my fiddling time to get it trimmed in for level flight is faster… (for us hand flyers without the fancy autopilots.)

Thanks for indulging.
Derek B

We definitely appreciate the effort that goes into putting this together!
Travis S

I too find it hard to fathom how someone can stall/spin in the pattern, but I have to admit it does happen. Of course, flying coordinated turns is a big help in preventing a stall from "departing" into an incipient spin.

In the square pattern vs. the continuous turn to final pattern, (I do teach both), I would like to introduce a simple intermediary that I have found works wonders in eliminating overshoot on the turn to final with its concomitant hard-pull that COULD lead to a stall. What I teach my students is to break the 90 degree turn to final into two 45 degree turns. From the mid-base, turn 45 degrees toward final. Now the turn onto final becomes only 45 degrees. It is easier to judge the turn to final to avoid overshooting. Overshooting has pretty much become a thing of the past for my students. I teach this technique to people who come to me for flight reviews as well.

But, I am 100% in agreement that the real solution is to just fly the airplane properly. Coordinated turns and an awareness of how hard one is pulling in the turn is all that is needed to make final-turn stall/spin accidents go away.
Brian L

We enjoy the Mooney Flyer....Thank you very much for your effort.
DJ B

Mooney CEO and Mooney “Part Ways”

Employees at the company’s Kerrville, Texas, and Chino, California, facilities, were informed via email that Saxena and Mooney “have decided to part ways.” This “parting” occurred less than one year since beginning his leadership at Mooney. Albert Li will serve as executive director until a new CEO is named.

Lance Phillips, Mooney’s marketing director, declined to discuss management changes on April 24, saying only that Saxena is on a “leave of absence.”

Phillips also said, “We as a company are proceeding full speed on production of M20s and development of the M10. There’s nothing else to report.”

Wayne Fisher

Wayne Fisher, former Mooney sales representative and great friend to the Mooney Community, passed away at his home in Carefree, AZ on Monday April 10th. He had not been doing well for some time.

Wayne’s passing was reported by Richard A. Simile, Delta Aviation. No further information is available.

"To fly west, my friend, is the one final check we all must take."

If I choose to take advantage of *BasicMed*, will my Insurance coverage limits change? Will my premium go up?

Some insurance experts indicate that they have not seen any of the aviation insurance companies indicate that they have a problem with the new BasicMed rules. *Avemco* Insurance officials indicate that they do not have any plans to change their underwriting, policy contract, limits offered, or premiums charged just because a pilot converts from a 3rd Class Medical to BasicMed.

BasicMed will require that I visit my doctor every four years, right?

Yes, that's right, but your policy might include stricter requirements than those set by *BasicMed*. For instance, you might be required to have an **annual** physical because of the type of plane you fly, your age, hull value, and/or the liability limits on the policy. This requirement to have a medical every 12 months would be your insurance company's requirement, *not the FAA's*.
Some insurance companies currently stipulate that pilots with certain **medical waivers** obtain additional medical tests above and beyond those required by the FAA. However, these are exceptions and not the rule.

AOPA BasicMed Online Course & FAA Medical Exam Checklist:
https://basicmedicalcourse.aopa.org/client/app.html#/auth/logon?utm_content=tts&utm_campaign=170426special

What about older pilots and *BasicMed*?

The FAA may set the regulations, but insurance companies pay the defense costs and settle the claims. In the event of a loss, they use your recent medical as a defense that helps them settle claims within the policy limits, and protect your assets. So, older BasicMed pilots may be held to a higher standard, especially if they are flying high-performance aircraft, or aircraft configured with six or more seats.

That's understandable because some companies already require older 3rd Class Medical pilots who fly fast and large aircraft to do more than the basic. They might be required to have an annual medical, an annual Flight Review or recurrent training. In addition, pilots living in certain geographic areas, and those with a certain history might also be required to do more. Incidentally, the majority of 3rd Class Medical pilots have a thorough annual checkup with their family doctor.

What are the "Suits" afraid of?

With change comes some caution, especially when it involves making a profit. It's understandable if some insurance companies have a very conservative approach. Insurance companies were skeptical when the FAA announced that pilots could fly Light Sport aircraft with just a driver's license. But, over time, they came around.

Bob Mackey, senior vice president of EAA Insurance Solutions administered by Falcon Insurance Agency, indicated that some pilots may need to jump through some hoops as the insurance markets come to grips with *BasicMed*.

Insurance is a soft market and the competition is keen. When the majority of the insurance market embraces BasicMed, most of the other markets will follow.

In summary, most insurance companies don't plan to deny insurance just because you have chosen the new BasicMed program. We recommend that you check with your agent to make sure you won't have any insurance surprises, should you choose to be a BasicMed pilot on May 1st.

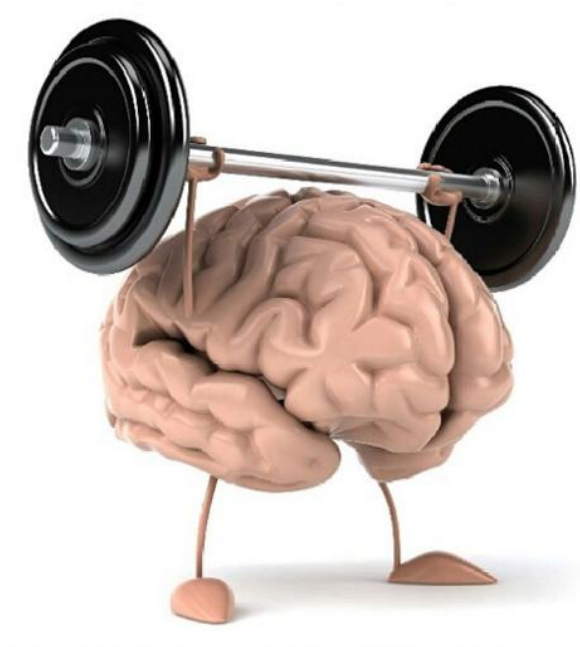
As Mooney Pilots Grow Older

There seem to be a lot fewer Mooney fly-ins these past few years than 10+ years ago. There are still a lot, but definitely fewer. As I look over the Mooniac community, I feel that we are definitely an older lot, generally speaking. A pretty good analogy is with Harley Davidson owners, They are definitely an older demographic than 30-40 years ago. It's as if the customers stayed with Harley Davidson as they grew older.

I started to ponder what we should be mindful of as we Mooniacs grow older. Mind you, I did not say "Grow Up", I said grow older. There are several factors that we should take into account as we plan for and execute a flight. There are three things I want to emphasize in this article, but I cannot remember the first one, so I'll go to the second. Ha Ha! But the truth is that cognitive ability simply wears down with age. It's a fact. It may vary for each pilot, to be sure, but it erodes.

Cognitive Ability

As we grow older, our brain's processing speed and power diminish. It's a fact. The two most important components of an excellent pilot are experience and judgement. Experience clearly grows over time, but judgement can be affected by diminished cognitive ability. A study published the following results: *Older pilots (41+ yr) were more likely than younger pilots to land when visibility was inadequate. The older pilots' mean false alarm rate is 0.44 vs 0.25. They also showed less precise flight control for components of the approach, performing 0.16 SD below mean approach scores. Expertise attenuated an age-related decline in flight control during holding patterns, with the older IFR/CFI performing 0.73 SD below mean score; younger IFR/CFI, younger CFII/ATP, older CFII/ATP: 0.32, 0.26, 0.03 SD above mean score. Additionally, pilots with faster processing speed (by median split) had a higher mean landing decision false alarm rate (0.42 vs 0.28), yet performed 0.14 SD above the mean approach control score.* Decision making is also affected by diminished cognitive ability. This shows up more while flying, as opposed to planning a flight. The reason is that flying demands our ability to multi-task with lots of simultaneous inputs from multiple senses and if our brain processing speed is less than it used to be, our decision making will also be slower. When older pilots make a poor decision, it may be due in part to age-related declines in cognitive abilities crucial for aircraft navigation, such as information processing speed, working memory, and attention, especially in the face of interference or distraction. Distraction is a pilot's worst enemy. That is why we demand sterile cockpits during departures and landings.



What can we do about this? Well, there are two things. First, Checklists are always important to pilots, regardless of age. As we age, they become even more important. Ensure that you have all of your checklists, both normal and emergency, at your fingertips at all times, AND USE THEM. Be aware that you are no longer a young'un. Recognize this, internalize it, and you are well on your way to dealing with diminishing cognitive ability. The second thing you can do is to exercise your brain regularly. Sounds touchy feely, but it's true. Walking is good for your cardiovascular system. So how do you exercise your brain? One way is to eat right (a separate article), but there are foods that are good for the brain. Other easy things to do are puzzles. Do crossword puzzles, Sudoku, and jigsaw puzzles. Another is to read books to extend your understanding of most any topic. This can range from books on Aviation to Physics to Software Coding. The act of learning exercises your brain. Designing wood or metal projects around the home is another good brain exercise. Writing an article for The Mooney Flyer is also good for your brain and helps your fellow Mooniacs!!!

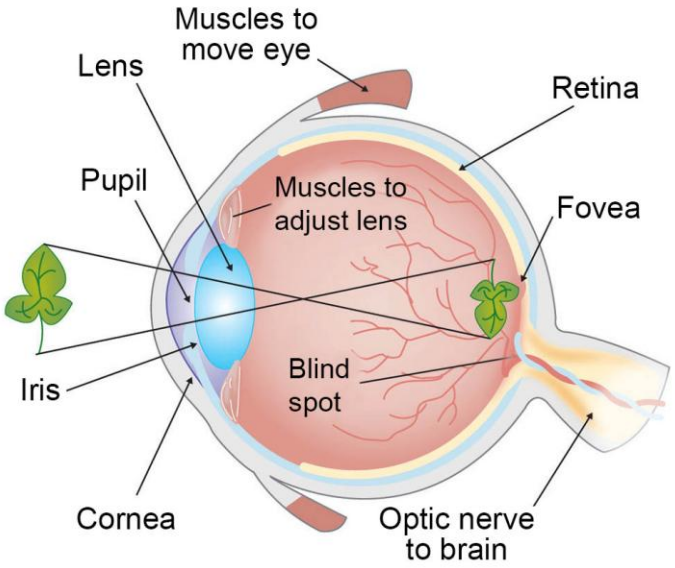
Oxygen Efficiency

The drum keeps rolling here with more things wearing down as we get older. Mere humans seldom have to deal with altitude variation unless they take a trip to the mountains. But pilots deal with it every flight. The FAA says we don't need supplemental oxygen until 12,500' and then, only after 30 minutes. It's not until 14,000 that we need an ongoing oxygen supplement.
But, as we get older, those altitude recommendations start to be woefully inadequate. It would not be uncommon to recommend that we use oxygen at altitudes above 8,000'. Why? Oxygen is the 100LL for the brain. Your brain is already affected by getting older, but to further reduce it by running your brain Lea of Peak (LOP) is not rational. Oxygen is virtually almost no cost when compared with other costs of flying, so it is very cheap insurance to ensure you are piloting at peak efficiency. Without oxygen, you are not only reducing your "old brain's efficiency, but you are risking Hypoxia. Hypoxia will kill you, and it's so insidious that you won't even know you have it until you're dead. So consider using oxygen at lower altitudes. Invest in an Oximeter, available at your drug store and very inexpensive. Measure your oxygen level at home, then record that reading. When flying, supplement with oxygen to maintain that level. This will help you deal with reduced oxygen efficiency.

Visual Acuity

Your visual acuity also diminishes with less oxygen. Have you noticed that your night vision is reduced now that you are older? Oxygen helps a little here.
Now add a few years to your eyes and oxygen becomes more important. Age-related macular degeneration, cataracts, etc. and just plain tired eyes affect a pilot's vision.

You know about the eye's rods and cones. Rods help you in low light situations. Cones are good for color and other bright light functions.



As we age, our visual acuity diminishes. Let's face it, we need these two orbs to work pretty darn well to pilot a Mooney. Oxygen and good food can help. And of course, use eyeglasses or contacts for anything less than 20/20.

The Good News of Aging

Is getting older just about wearing down until you die? No sir-ee. There are things that older pilots have that you only get with older age.

First is **Experience**. You've all heard the adage that goes something like "Excellent experience/judgement is used so that you don't need to use your excellent skills." We know that's true. So older pilots have that going for them.

The second is **Passion**. To be sure, all pilots have passion, but the older we get (certainly for me), the stronger the passion grows. Maybe it's because I know as I get older, my days for flying begin to get numbered. Or maybe, it's because the more we fly, the more we want to fly. It's a gift that we gave ourselves. But to see the world from 4,000' is to understand the beauty and mystery of the planet. How can a dry and mostly barren desert be beautiful? Go see it from 3,000'. It is exquisitely beautiful. Fly for 2 hours over Baja Mexico with stark dry mountains and canyons that end at the Sea of Cortez with its splendor of aqua colors and green islands. Fly to Palm Springs on Memorial Day weekend and see tens of miles of snarled traffic in the desert heat, while you are whipping along at 200 mph at 7,500' at 65^{o}F. Life is grand at altitude, especially in a Mooney, in ways that only older pilots can uniquely appreciate. Age On fellow Mooniacs!

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by Jim Price

Greater Expectations

For the most part, pilots are exceptional people. They are motivated, love challenges and are very successful. Their friends admire their sense of adventure and their great achievements. Yes, pilots possess many exceptional traits, but with all the good looks and success, comes risk. Without a pilot's willingness to accept risk, he or she would never become a pilot.

There's a big lie associated with aviation and we've all propagated this lie and spread it until it seems like the truth. That is, that after your flight, "now comes the dangerous part – driving home". It is a great saying, and it is true when we compare driving to flying on the airlines. But sadly, this cute saying isn't even close to being true for general aviation. In fact, per mile, General Aviation flying is about as safe as riding a motorcycle.

Here's how GA compares in safety and travel:

- Seven times more deadly than automobiles
- Forty-nine times more deadly than flying on the airlines

We pilots have some attitudes that must be disciplined, or else we will suffer great consequences.

The Five Hazardous Attitudes

1. Anti-Authority: "No one can tell me what to do." Rules, regulations, and procedures are silly. It is always your prerogative to question authority if you feel it is in error.
2. Impulsiveness: "Do it quickly."
3. Invulnerability: "It won't happen to me." Pilots who think this way are more likely to take chances and increase risk.
4. Macho: "I can do it –I'll show them." While this pattern is thought to be a male characteristic, women are equally susceptible.
5. Resignation: "What's the use?" These pilots will go along with unreasonable requests just to be a "nice guy."

As pilots, our number one job is managing the risks that we are willing to take when we slip the surly bonds of earth and do a hundred things others just dream of. That's right, our #1 Job as a pilot is Risk Management!

Smart pilots have come up with wonderful checklists to help manage the risks inherent in flying.

To help us plan a flight, there's PAVE, a Risk Management Personal Minimums checklist, which considers four areas:

- Pilot,
- Aircraft
- enVironment
- External Pressures

To help you take an honest look at yourself, the IMSAFE Risk Management checklist was developed:

- Illness
- Medication
- Stress
- Alcohol
- Fatigue/Food
- Emotion

As soon as you become airborne, all the risk factors that you thought you had considered during your rigorous flight planning, begin to change. Things continue to change and evolve throughout the flight, so pilots developed the CARE checklist. This checklist is crafted to protect ourselves from our take-charge, goal oriented personality:

- Consequences
- Alternatives
- Reality
- External pressures.

To manage the risks, we plan and then, plan again. We acquire tools and more tools so we can mitigate our risks when we advance the throttle(s). ForeFlight, Wing-X, Garmin Pilot, FlyQ and others are marvelous tools. When these apps are combined with ADS-B "In" receivers, even more knowledge is literally at our fingertips.

Technological advances have, in less than a decade, given us more tools and situational awareness than I had when I retired from the airlines in 2005.

Yet, despite the availability of all these amazing tools, about 70% of the pilot deviations (violating a Federal Aviation Regulation) are committed by **general aviation pilots**. We still manage to violate the following:

- Runway incursions
- Vehicle violations
- Pedestrian violations
- Altitude violations
- Course clearance violations
- Airspeed violations
- Missing a compulsory reporting point
- Airspace incursions
- Flying VFR into IMC
- Low level flight
- Temporary Flight Restriction (TFR) violations

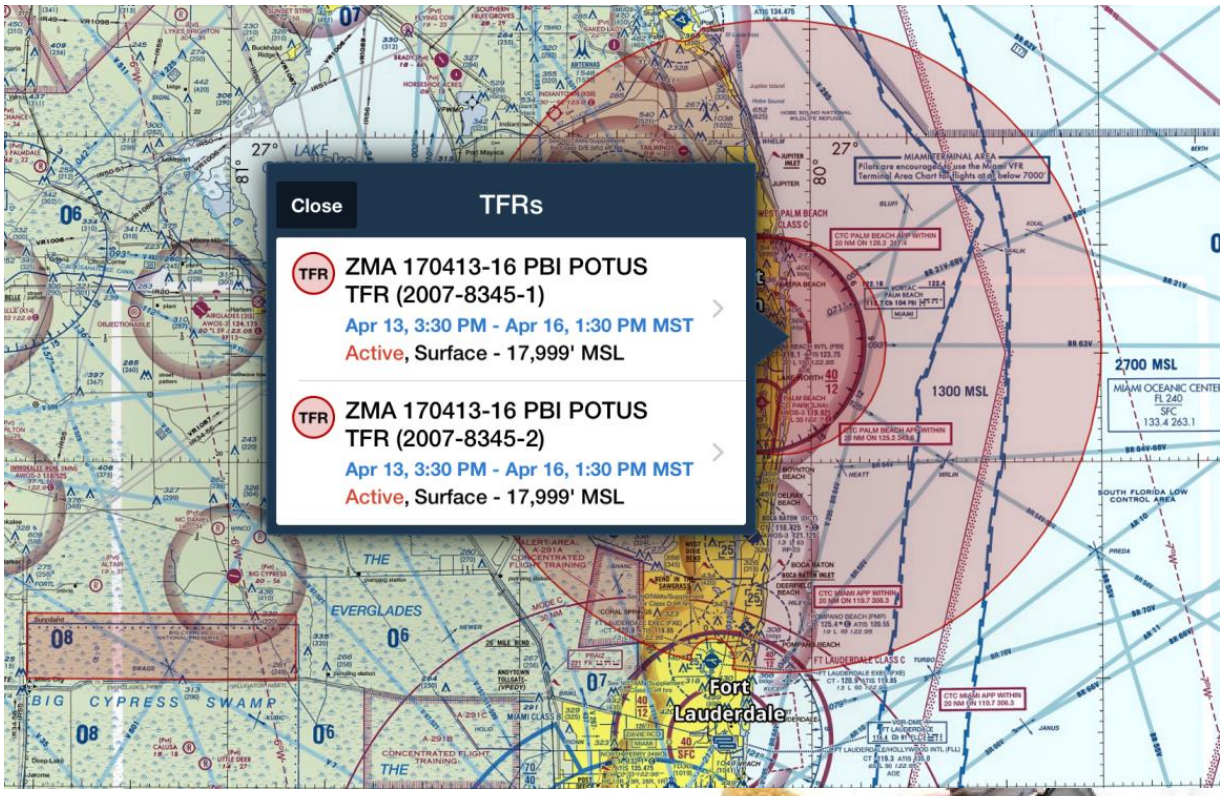
The majority of pilot deviations happen because the pilot failed to manage the risks before taxiing the aircraft. All you need to do is take a little time to plan your taxi route, and flight path, with respect to airspace that can bite you and terrain that can kill you. You can do that by calling an AFSS, use 1800wxbrief, DUATS, or FltPlan.com. Once airborne, you should maintain good situational awareness, apply good techniques and follow procedures that work.

Remember that TFRs can be sneaky and spring up with very little notice, so it is critical that you check for TFRs just before departing. Once airborne, continue to check for TFRs by:

- Using flight following
- Calling an AFSS on the radio

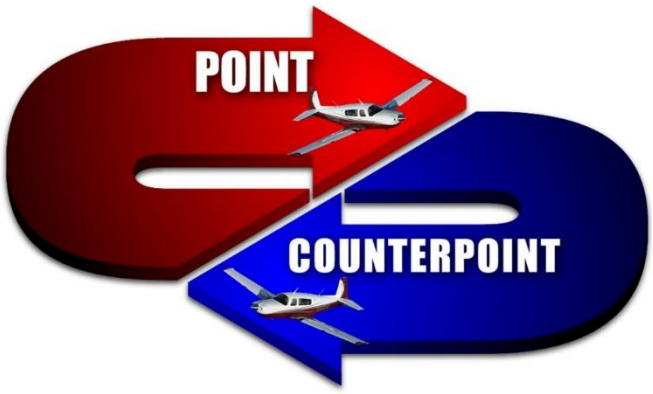
You could also:

- Utilize a Flight Information System (FIS) subscription
- Use ADS-B "In", which graphically displays weather and TFRs on apps like ForeFlight, Wing-X, Garmin Pilot, and FlyQ.



Sure, aviation is risky. That's what drew you to it. However, you can keep yourself, as well as your passengers as safe as possible, by engaging in constant Risk Management. It's not easy, but then, if it were easy, everyone would be pilots.

Now get out there and FLY!



FORUM VS MAILING LIST

How do you like to get your social media for Mooney stuff

So I'm a **Forum** guy. It's the 21st Century for goodness sake.	**Mailing Lists** are so much more effective and you get posts as they are made.
Forums are superior in the same way that GPS is superior to NDBs or VORs. Forums present information in a more organized manner. I can quickly scan topics of interest and avoid topics of non-interest.	The problem is that you are not aware of new, and possibly critical posts until you open a Forum.
That's just not true. Most forums allow you to tag a post and be notified via email if an additional reply/post has been made. Also, Forums don't have the ongoing issue of "Does one reply with new information at the top of an entry or at the bottom of an entry. You simply reply.	Most people learn the correct way to top or bottom post. It's simply a learning curve.
A learning curve that is still in progress. The other peeve I have with Mailing Lists is that many users include the entire post which tags forever to scroll through to view. This is especially true if one gets a "digest" of entries as opposed to an email for each and every entry. The Inbox goes nuts at Mooney speeds.	Again, folks not trimming a prior entry before responding is another learning curve.
I think Mailing List aficionados also cling onto their VORs and detest over-reliance on the magenta line.	It's personal preference.
Forums have multiple "categories" for entries such as Vintage Mooney, Modern Mooney, For Sales, Avionics, etc.	Mailing Lists have Subject Lines
Mailing lists are like a library catalog cards that were dropped on the floor. I have to scan through everything to find anything of interest. I can also post pictures and other documents in a Forum. And then there's the "how do I unsubscribe" on a list.	Unsubscribe is a minor irritation. We are always surprised that folks post and entry asking to unsubscribe, despite the fact that how to unsubscribe is listed at the top of each email. Sigh.
Forums are modern and generally free.	Mailing Lists are my preferred method and you get what you pay for.

PHOENIX BASEBALL

by Linda Corman

One week after we returned from Loreto, Mexico, we decided to fly to Phoenix, AZ for a Mooney fly-in. This was a good time to fly as the weather cooperated and was beautiful. If our readers hadn't heard, we, Californians, have had our share of rain this year and then some. Of course, we are happy that the drought is over, but when you want to fly, it is a little inconvenient. The timing was perfect for this fly-in and several Mooney pilots made the trip. Jeff Mirsepasy was the organizer of the event at Phoenix Goodyear Airport where we experienced a presentation regarding its history. A huge THANK YOU to Jeff. I am not a huge fan of airport history, but I want to say this was very interesting and I am glad to have had the opportunity to hear how this airport came about and how it is still thriving. The facility was originally constructed during World War II as a Naval air station known as NAF Litchfield Park, later renamed Naval Air Station Litchfield Park. In 1941, the Goodyear Aerospace Corporation offered land to the U.S. Defense Plant Corporation. The U.S. Navy used the land to build aircraft flight decks and established a U.S. Naval Air Facility to test fly and deliver aircraft. This meant building a landing field, hangars and runways. Its primary role, following the end of World War II, was that of storage and preservation of excess U.S. Navy, U.S. Marine Corps and U.S. Coast Guard aircraft. At one point, more than 5,000 aircraft were in storage. Following the closure of NAS Litchfield Park in 1967, the city of Phoenix purchased the airport for a general aviation facility. Today, the airport is home to several private companies offering aircraft maintenance, storage, and commercial pilot training. When I write about this airport's history I can't really express the enthusiasm that our presenter and history buff, Ryan Reeves, brought to his talk. Ryan is the general manager at Lux Air. This man is a walking encyclopedia of everything Phoenix Goodyear Airport. He explained that there are half buried aircraft parts and bits of history for the taking, scattered around like an aircraft parts Boneyard from WWI. After Ryan's presentation, he took us on a tour of the Boneyard, which was fascinating and interesting.

That evening everyone who attended the presentation was invited to a local restaurant called the Longhorn, for BBQ and camaraderie. We had about 12 to 15 people for dinner that evening – without reservations. Can you imagine a restaurant being so accommodating on a Friday night? Well, they were. They found tables to put together so we could all visit with each other and catch up on our Mooney adventures. The food was good and the Margaritas were large.

After dinner Phil, as well as a couple of special friends got tickets to an MLB Preseason game at Camelback Ranch stadium. We are San Francisco Giants fans, but saw the LA Dodgers versus the Seattle Mariners. And since Giants fans hate Dodgers, it was fun to see Clayton Kershaw give up 3 home runs in a losing cause. We had originally talked about going to a day game. I am so glad we changed to an evening game, as the temperature was in the 90s and there was no shade. I have never sat that close to a major league baseball game and it was very exciting. Several game balls came in our direction, but we forgot our mitts.

The next day, we decided to see a local attraction – a lake that has a replica of an old paddle boat that you can cruise around on. The lake is called Canyon Lake and is less than an hour drive from Phoenix in the Superstition Mountains. This lake was formed as one of four lakes created by dams on the Salt River. There is a restaurant at the Marina where we had cool drinks while we waited for the boat to return for our ride. I recommend you get tickets early as this is a popular attraction and the lines can be fairly long. The cruise takes about 90 minutes and it's worth the price of a ticket. The shoreline is dotted with cacti and unusual red rock formations. The Captain pointed out an eagle aerie with eaglets nesting on a sheer spire. There is water and cool drinks on board, as well

as snacks, so don't worry if you forgot to bring food. We had a good time and the drive out and back to Phoenix was scenic and fun.

We stopped on our return at a local restaurant called Mining Camp, located in Apache Junction. The food was good and they offered two different types of dining, one family style and the other single party eating. There is also an old time souvenir shop as you enter the restaurant if you want to buy some desert stuff to take home. They had everything from cactus jam to fake rattlesnakes.

This Mooney fly-in was a fun and educational experience and I am glad we could go and enjoy good friends, a boat cruise and a baseball game, all in the space of two days. It goes without saying to get there and back again in our Mooney is also half the fun.

Send your questions for Tom to TheMooneyFlyer@gmail.com

Question: How do I know that the "biscuits" (shock discs) are serviceable?

There is a specific limit for the gap at the top of the discs when the plane is on the ground at max weight. The allowable gap varies per model for the main gear, but on all models, no gap is allowed for the nose gear. The gap on all models is less than one inch, refer to maintenance manual for the exact limit. The next check is to jack the aircraft and check for expansion of the discs. On the mains, if the discs have hardened, then they won't expand and you can grab a wheel and move the whole gear fore and aft. If the discs expand properly, the gear will not move. There is no time limit on the discs, but experience has shown that on the lighter models, C & E, the discs can last for years while on the heavier models, like the M model, the discs may only last a few years. It depends mainly on the hours flown. When there's too large a gap or when the discs get hard, it is a hard shock on the gear and wing when landing. I feel this can be a reason for fuel leaks. We have removed discs that are as hard a steel.

Question: What should I inspect on the Johnson Bar?

It's about the simplest of all retractable landing gear systems, but it's not trouble free. Inspecting the bar itself is only needed at the Annual Inspection but it is important to inspect for possible cracks at the base of the handle. We have seen them break off. Lake Aero Styling has made strength improvements to their replacement. Because of the age and constant movement, any weakening just gets worse with time and since it is not visible, it is important do a through inspection during the Annual. One thing to look at when doing a test during the Annual, is that the carpet in not bunching behind the bar, causing a load when locked in the up position. Also check that the rigging of the gear system doesn't put an extra load on the bar. One other item to inspect is the uplock mechanism for wear. Most of the problems we see is the Johnson bar not properly locking in the down position because of excessive wear in the uplock. Keep your arm away from the Johnson bar during landing. If it comes unlocked, the force of the bar could break your arm.

Question: How often should I check my Landing Gear?

The minimum to check your gear is once a year, but if you are flying more than 100 hours, then it is a good idea to do a modified 100 hour inspection about mid year, checking for an indication of deviation from normal operation. Anytime you jack the plane, it's a good time to check the gear preloads, since that is what keeps your gear down and locked, since there are no physical down-

locks on a Mooney. I might mention that since 1978, the gear actuators have a no-back clutch spring with a recommended change every 1,000 hours. Two main items: That spring is what keeps the gear up since there is no uplock. It prevents the gear from slipping because of the weight of the gear. Hence, the title, no-back spring. The main problem with the design of the actuator is that if the spring breaks during retraction, there is no way to extend the gear. If it breaks during extension the gear will go down but cannot be retracted. I had a customer have the spring break in Malaysia and she had to fly to Perth, Australia with the gear down to get to a mechanic with the knowledge to replace the spring. This was 24 hours with the gear down on a J model. She had the old spring on board from the first change. Most of the broken springs I have dealt with have been in Plessey actuators. That spring is slightly different from the other makes of actuators. Note, that spring is no longer available.

SWITCH TO ICAO FLIGHT PLAN FORM TAKES EFFECT JUNE 5

The ICAO Flight Plan will be required for all IFR and VFR civil flight plans filed with flight service for flights within the National Airspace System and to Canada.

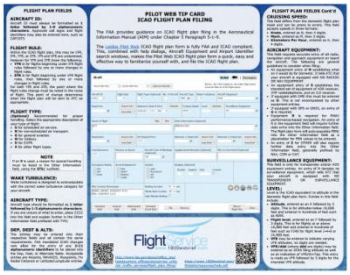
Some of the most pronounced changes on the flight service systems will be experienced by pilots filing Washington, D.C., SFRA flight plans—so the FAA has updated its **online SFRA training course**,

incorporating suggestions from AOPA. Pilots who fly within 60 nautical miles of Washington, D.C., who have already taken the SFRA course are not required to take the course again, but are encouraged to do so to learn about the changes.

For example, the FAA's current version of the ICAO flight plan form provides space for only four characters to identify SFRA departure and destination "gates." The modified form for flight service systems permits up to 11 characters in the departure and destination field. This will allow the pilot to enter the five-letter SFRA gate name as the departure or destination point instead of ZZZZ, as has been necessary until now.

Most online filing sites allow pilots to enter the proper gate—for example, FLUKY, without having to enter ZZZZ. Pilots should follow the guidance provided by their chosen service provider.
The expanded departure and destination fields also will be available to other filers of IFR and VFR flight plans using flight service.
Pilots flying in the SFRA can still expect to enter information in the altitude field as they do now, such as VFR/035," Duke said. "This is helpful to air traffic control, as it is one way to remind them that this is an SFRA flight."

New guidance is expected to be included in the November 2017 edition of the ***Aeronautical Information Manual***. This new guidance is available online to help pilots familiarize themselves with the latest version of the ICAO flight plan.
In a related revision, pilot **knowledge exams** are being updated to eliminate references to the domestic flight plan form in test questions.



Leidos Flight Service (formerly Lockheed Martin) has published an ICAO **Tip Card** and an updated version of the ICAO flight plan **Helpful Hints video**.

For more information, pilots are encouraged to check out this AOPA Pilot Information Center **video** about the ICAO flight planning form, and visit **AOPA's Flight Planner**, which has a tool to assist with the selection of equipment codes and other technical questions. Pilots having difficulties filing a flight plan after June 5 should contact Flight Service (800/WX-BRIEF) for assistance.
"It is highly recommended that pilots give the new flight plan format a dry run in advance of the date its use becomes mandatory," Duke said.

TKM AVIONICS INTRODUCES SLIDE-IN REPLACEMENT FOR KING KX 155/165

The new unit will replace every variation of the original King radio and can operate on either a 14- or 28-volt system and comes standard with VOR, glideslope and touch-screen capabilities. The KX 155/165 replacements are EASA compliant to 8.33-khz spacing. Because all TKM radios are direct plug-and-play replacements, aircraft owner/operators can perform the update themselves, with only an aircraft logbook note required. When the new KX155/165 replacement radio is released sometime this summer, TKM expects it to sell for approximately $3,000. READ MORE

SOCIALFLIGHT INTRODUCES AWARDS PROGRAMS

SocialFlight has introduced what it calls FLY2WIN challenges and rewards, giving pilots the opportunity to win products and badges of honor the more they fly. More than $50,000 worth of products will be handed out to SocialFlight users in the next few months, including products from Aspen Avionics, L-3, Bose, Lightspeed, FreeFlight Systems and more.

In order to be eligible to win prizes under the monthly FLY2WIN challenge, you must check in on the SocialFlight app at least once. Checking in is as easy as tapping on the phone. As long as alerts are active, the app will automatically send a pop up alert asking if you want to check in when you land at a new airport, automatically entering you into the drawing.
SocialFlight users can get double entries in the drawings by becoming one of the Top 20 users on the FLY2WIN leader board. The leader board resets each month.
In addition to entering the monthly drawing, you can build a virtual airplane. Points are collected based on how much you fly and those points add up to parts on an animated airplane that can be viewed on the app.
SocialFlight has also added lists of rebates and special deals from national and local businesses. Since the SocialFlight app was launched in 2013, more than 50,000 events have been posted. The app is accessible across all platforms: smartphones, tablets and desktop computers.

Gary Cohn

PRIVATE PLANES MAY NOT BE TAXED UNDER TRUMP'S PLAN TO UPDATE U.S. AIRSPACE

"We're probably not even going to tax general aviation," Gary Cohn, director of the National Economic Council, told a group of corporate executives at the White House. "There's enough money in the aviation tax rate now."
Fixing U.S. airspace was among the administration's top infrastructure priorities, Cohn said. He noted that other countries had already updated their systems.
"A country that has Silicon Valley and all of the technology entrepreneurs we have, and we're playing catch-up," he said. "That's embarrassing for us."

That could help sell the Trump proposal to opponents, including general aviation manufacturers and lawmakers from rural states. READ MORE

SEATTLE AVIONICS' FLYQ INSIGHT

Seattle Avionics just demonstrated the world's first affordable Augmented Reality system for general aviation - new FlyQ InSight. Using just an iPhone or iPad, not goggles or exotic hardware, all pilots can now see approximate airport positions simply by pointing a camera out the windscreen.
FlyQ InSight uses the camera and computing power of an iPhone or iPad combined new patent-pending algorithms to superimpose approximate airport locations over a real-time video feed. Pilots can point the camera straight out the nose of the plane or rotate it within the cabin to view nearby airports on any side of the plane.

New **FlyQ InSight** uses patent-pending augmented reality to merge live video from an iPhone or iPad with computer-generated airport markers to clearly show airport locations regardless of how confusing the surrounding area is. You can click the camera shutter button to capture in flight photos and post effortlessly to Facebook, Instagram, and Twitter."
In addition, FlyQ InSight includes a unique 2D "radar" view of nearby airports. As the iPhone or iPad is rotated around the cockpit, the radar image rotates so you can clearly see the direction and distance for nearby airports.
The app also includes all the features from FlyQ Pocket including detailed airport information, weather, flight planning, and weather graphics. Pilots can tap on airports to see information about them.

Not Yet Available on the App Store

FlyQ InSight is not yet available in the Apple App Store. When released, FlyQ InSight will replace the company's current FlyQ Pocket (a free app) on the iPhone and iPad.

new 180 hp

fixed gear

"convertible"*

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Here is the most modern fixed gear plane on the market to day . . . rugged all metal construction, high performance laminar flow wing, wide stance landing gear with steerable nose wheel, 33° hydraulic flaps, dependable 180 horse power Lycoming engine, 1100 pound useful load, 780 fpm climb at full gross.

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FEATURE	MOONEY MASTER	BEECH MUSKETEER	PIPER CHEROKEE
Horsepower	180 hp	160 hp	180 hp
Cruise (75% Power)	141 mph	135 mph	141 mph
Climb	780 fpm	710 fpm	720 fpm
Useful Load	1100 lbs.	1000 lbs.	1135 lbs.
Take-off Roll	890 ft.	890 ft.	775 ft.
Landing Roll	550 ft.	595 ft.	600 ft.
Stall Speed	57	62	57
Range (75% Power)	680 miles (48 gal.)	792 miles (60 gal.)	695 miles (50 gal.)
Propeller	Constant Speed Controllable	Fixed Pitch	Fixed Pitch
Cowl Flaps	Standard	None	None
Flaps	Hydraulic (0° to 33°)	3 Position	3 Position
Controls	Dual (Standard)	Dual (Extra)	Dual (Standard)
Cyl. Head Temp. Gauge	Standard	None	None
Brakes	Individual Toe (Standard)	Individual Toe (Standard)	One Hand Brake
Generator	50 Amp	35 Amp	35 Amp Alternator
Super Sound Proofing	Standard	.....	.....
Manifold Pressure Gauge	Standard	.....	.....
Retractable Entrance Step	Standard	None	None
Steerable Nose Wheel	Standard	None	Standard
Tinted Glass	Standard	None	None

From Manufacturer's published figures

MOONEY

MOONEY AIRCRAFT, INC. • KERRVILLE, TEXAS

FLYING—January 1963

13

Contact Dave at daveanruth@aol.com or (352) 343-3196, before coming to the restaurant, so the group can have an accurate count.

May 13: Flagler (KFIN), High Jackers Restaurant
June 10: Sebring (KSEF), JR's Runway Cafe
July 8: Williston (X60), Pyper Kub Cafe
August 12: Lake Wales (X07), Shuttle to TBD Restaurant
September 9: Lakeland (KLAL), Hallback's Bar & Grill
October 14: Flagler (KFIN), High Jackers Restaurant
November 11: Vero Beach (KVRB), C.J. Cannons Restaurant
December 9: Punta Gorda (KPGD), Skyview Cafe

June 2-4: Chatanooga, TN (KCHA)
Sep 8-10: Frederick, MD (KFDK)
October 6-8: Dubuque, IA (KDBQ)

Other Worthy Fly-Ins

July 24-30: Airventure (KOSH) http://www.eaa.org/en/airventure

AOPA Regional Fly-Ins

April 28-29: Camarillo, CA, **September 8-9**: Norman, OK, **October 6-7**: Groton, CT, **October 27-28**: Tampa

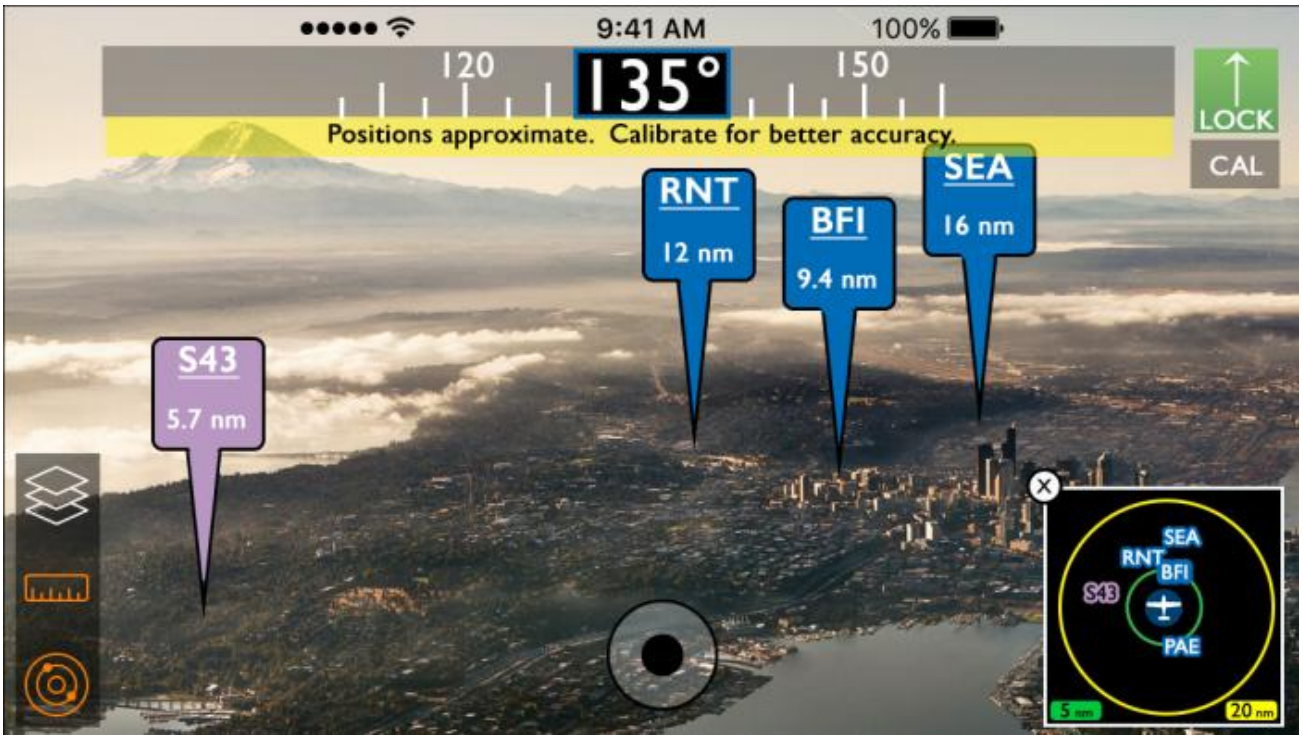
Augmented Reality

We've all heard about Virtual Reality, where you wear special viewers and you become immersed in a virtual world that moves as you move and your perspective changes as you move your head. Fun stuff.

Within aviation, we are becoming accustomed to Synthetic Vision, which is available with iPad apps such as ForeFlight and FlyQ, among others. Synthetic vision does not require any special viewer, other than your iPad or Android tablet. It uses GPS, Terrain data, and sometimes Obstacle data to present a synthetic version of what you should be seeing out your windscreen. This can be very useful at night or in IMC.

Moving Maps have been around for a long time and we have become accustomed to them, perhaps even relying on them for better situational awareness. Seeing a VFR Sectional or IFR Enroute move with our Mooneys showing where we are headed, and what is near us, is invaluable. Recently with Sirius XM and now ADS-B, we can overlay weather radar, satellite, TFRs, Airmets/Sigmets and more. Traffic is now available via ADS-B, making it more readily accessible to more pilots. This data is presented to us in a 2 dimensional representation on the tablet or panel device, such as GPS, PFD/MFD, etc. But, it is essentially a 2D representation.

Now let's move to Augmented Reality. This is where your view of actual reality is augmented or overlaid with additional useful information. An example from Seattle Avionics is illustrated below.



Here you can see that airport IDs are overlaid onto the screen. This can be a big boost for finding that airport you are looking for in a congested area, or when it's blending in with a New England forest or Arizona desert. Seattle Avionics will actually be releasing a new product called **FlyQ**

Insight in the near future. They have really upped the ante for in-cockpit value. Imagine where this could go. We see two directions.

First, additional information could be augmented. It's great to see "traffic" on a 2D traffic screen.

But the limitation is you have to read the relative altitude. Imagine if the traffic were overlaid on an augmented Reality screen and showed precisely where the aircraft you cannot see is actually located. Continue with your imagination and see how TFRs could be shown, and special use Airspaces such as MOAs or Restricted airspace, without the need to read floors or ceilings, but instead, you could actually see them on your Augmented Reality screen.

Seattle Avionics is whetting our appetites with their upcoming release of FlyQ Insight.

What's next you ask? Well, after this Augmented Reality sets in on tablets and panel devices, the next step will be to present it on your windscreen as a HUD (Heads Up Display). Aviation is good and getting better. I only hope I can live long enough and fly long enough to take advantage of all the great things that smart designers can imagine.

Try this in your Mooney!

Mooney Instructors Around the Country

Arizona

Jim Price (CFII, MEI, ATP). Chandler, AZ (KCHD). 480-772-1527. JasPriceAZ@gmail.com Proficiency training and IPCs. Website: www.JDPriceCFI.com.

Ken Reed (CFI, CFII, MEI, ATP), Tucson, AZ. 520-370-3693. Owns M20K and has previously owned an M20C, M20F & M20M.*kr@klrdmd.com*

Boris Vasilev (CFI, CFII, MEI, AGI), Phoenix Area. 602-791-9637freedomflightservice@gmail.com.Time in M20C through M20R models. Private commercial and instrument training, BFR's, IPC's, and FAA Wings.

California

Geoff Lee, San Martin, CA. 69050@comcast.net. CFII, 11,000+, Mooney Rocket owner. Teaching since 1969.

Don Kaye (Master CFI) Santa Clara, CA. (408) 249-7626, Website: www.DonKaye.com. Master CFI. PPP Instructor, MAPA, 8 years; Owner: M20M. Total: 10,265; Mooney: 8454; Instruction: 5641

Chuck McGill (Master CFI) San Diego. CA 858-451-2742, Master CFI, MAPA PPP Instructor, M20M, M20R, M20TN, Website: Click Here. Mooney: 6000; Total: 13,000Instruction: 9800

Rodrigo Von Contra, Oakland. CA. (510) 541-7283, Rodrigo@vonconta.com. Sets record in a Mooney. 7,000 hrs. CFII & Gold Seal; Garmin (including G1000) training; Ferry flights (experience in Central & South Amer) transition training & Aircraft Mgmt; Owner: M20J/Turbo Bullet

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

Paul Kortopates, San Diego Area. (619) 560-8980, Kortopates@hotmail.com. PPP Instructor, MAPA; Owner: M20K/252. Total: 2500; Mooney: 2000

Mike Jesch, Fullerton, CA. (714) 588-9346 (e-mail is best), mcjesch@pacbell.net. Total: 20,000

Instruction: 1500, FAASTeam Lead Representative, Specialites: Airspace, Garmin 430/530, Proficiency flying; Wings Program, VP Pilot's Asso. Master CFI for ASME, IA.

Colorado

Chad Grondahl, Colorado Springs (KCOS), chad@sundhagen.com.
CFI, CFII, MEI & ATP, Mooney owner (M20F) and FAA Gold Seal Flight Instructor specializing in transition and proficiency training, mountain flying, flight reviews, IPCs, turbocharged aircraft

checkouts, ferry flights, and air-to-air photography of your Mooney. Experience: 4,500 hrs TT - 1,800 hrs Dual Given - 750 hrs in Mooneys (most models).

Ben Kaufman, Fort Collins, CO. (KFNL). (CFI/CFII) – (801)-319-3218 - bkaufman.mba@gmail.com.

Connecticut

Robert McGuire, Durham. Cell: 203-645-2222, rmcguire007@hotmail.com. MAPA Safety Foundation Instructor; founding partner, Aero Advocates Aviation Consultant. Total: 6500; Mooney: 5000

Winslow Bud Johnson, smgemail@aol.com, 203-348-2356. Bud specializes in teaching in the M20K and has logged more than 1,500 hours in that aircraft.

Florida

Mike Elliott Tarpon Springs. (CFII) Master CFI. 317-371-4161, mike@aviating.com. Quality instrument & commercial instruction, transition training, ownership assistance, plane ferrying. Mooney: 2300; Instruction: 1000

Ronald Jarmon,Panama City. (850) 251-4181. ***IAELLC@gmail.com***.Total: over 7000. WILL TRAVEL! Will accompany customer out of Country, ferry flights, mountain flying, avionics training, Garmin Products. Total: over 7000. Web Site***: IslandAirExpress.com***.

Robert McGuire, Hawthorne. (203) 645-2222, (Dec – Feb), rmcguire007@hotmail.com. MAPA Safety Foundation Instructor; founding partner, Aero Advocates Aviation Consultant. Total: 6500; Mooney: 5000

Ted Corsones, Naples.tedc@corsones.com, 239-263-1738. Total: 7500, Mooney: 4500, Instruction: 2000+. ATP & MCFI for MEL, MES, SEL, SES, Instrument Airplane & Glider. Master Instructor Emeritus. He serves with the MAPA Safety Foundation as an instructor, treasurer, and chief financial officer.

Jack Napoli, see New York Listing for details

Georgia

Jim Stevens, Atlanta. USAF, Col, (ret), CFII. 404-277-4123. Instrument, commercial, IPC, BFR, transition training, ferry flights. 20 year owner of 1968 M20F. Total: over 6000; Instruction:1500

Kansas

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

Maryland

George "Brain" Perry, Maryland area (Frederick). Commander, USN, Retired.Senior Vice President, AOPA Air Safety Institute. 5000+ hours TT in lots of different aircraft, including F-14

and F-18's. 1000 Hours in Mooneys of all flavors. 1000 hours of dual given. CFII / MEI / ATP / 525S. He currently owns and flies a 1999 Eagle M20S and fly about 200.George.perry@aopa.org

Massachusetts

Ralph Semb, ralph@bowling4fun.com, 413-221-7535. I own and fly a M20S Eagle.

Minnesota

Joe Allen, Minneapolis, jp.allen926@gmail.com, 612-636-5216. I own and fly a M20J and am able to provide BFRs and Mooney Instruction.

New Jersey

Parvez Dara, daraparvez@gmail.com, 732-240-4004. ATP, MCFI SEL/MEL with an advanced ground Instructor rating. Parvez has owned a Mooney M20J and a Mooney M20M (Bravo).

New York

Jack Napoli, Long Island. TT 6,000 hrs & Mooney time 3,000, jacknapoli12@gmail.com 631-806-4436. He has been flying since 1965 (before he owned a car) and has 6,000+ hours of total flying time including 3,000+ hours in Mooneys. He owns a M20K-231.

North and South Dakota

Doug Bodine, Commercial Pilot/Flight Instructor, Cell 605 393-7112, mei.cfii@gmail.com I am a retired USAF pilot, now working as a commercial contract pilot, so various model experience from WWII Warbirds through heavies. I have been flying Mooneys for 12 yrs and have a 201. I have been instructing since 1994 and am at about 10,000hrs. I actively instruct in tail wheel and turbine as well. I have flown all the common Mooney modifications – missile, rocket, screaming eagle, trophy, etc. Even have time in the M22 Mustang. (See also, Texas). Total: 9800; Mooney, 1300; IP: 5600/21 years

Ohio

Mike Stretanski, Delaware Municipal Airport (KDLZ), Delaware, Ohio, AGI, CFI, Mooney Owner/Flyer, Flight Physicals, Senior AME, Test prep/Written review prep, Transition Training, G1000, HP/complex endorsements. 614-975-1003MFSTRETANSKI@gmail.com

Jeff Schnabel, based at Cincinnati Municipal Airport-Lunken Field (KLUK), Cincinnati, Ohio. CFII, MEI, ATP, A&P. 5,000+ hrs exp. Owned a 201 for 18 years, currently flying Mooney Ovation, Bravo,

201 and 231 types. Over 2,000 hrs flying Mooneys. Very experienced flying as well as maintaining these birds. And yes, I am a Mooniac. (513)484-0604 schnabel79@gmail.com

Tennessee

Shawn Cuff, Hohenwald, TN (0M3) ATP/CFI-II-MEI. Flying an M20K with Garmin 530W for local company. Relaxed and pleasant flight instruction, flight reviews and instrument competency checks. Contact: **Shawn.M.Cuff@icloud.com** or 931-230-5400. Thank you for reading and safe flying!

Texas

Austin T. Walden, Lubbock & Abilene. 432-788-0216, AustinWalden@gmail.com. PhD, Specializing in Models C thru J, www.WaldenAviation.com.

Doug Bodine, Commercial Pilot/Flight Instructor, Cell 605 393-7112, mei.cfii@gmail.com Retired USAF pilot, now working as a commercial contract pilot, so various model experience from WWII Warbirds through heavies. I have been flying Mooneys for 12 yrs and have a 201. I have been instructing since 1994 and am at about 10,000hrs. I actively instruct in tail wheel and turbine as well. I have flown all the common Mooney modifications – missile, rocket, screaming eagle, trophy, etc. Even have time in the M22 Mustang. (See also, North and South Dakota). Total: 9800; Mooney, 1300; IP: 5600/21 years

Bob Cabe, San Antonio. Cell: (210) 289-5375, Home: (210) 493-7223, bob_cabe@hotmail.com. Total: 5000; Instruction: 2000+. Pilot since 1965. Served as an instructor providing transition training for people purchasing new Ovations & Acclaims. Total: 5000; Instruction: 2000+

Brian Lloyd, Kestrel Airpark (1T7). 210-802-8FLY, Brian@Lloyd.aero. WILL TRAVEL! Owner: M20K/231; Non-Mooney :-) specialist in spin training, upset recovery training, basic aerobatics formation training, tail wheel transition. Total: 8500; Mooney: 500

Mark Johnson, Houston area. mjohnsonf16@hotmail.com. 832-773-4409. CFII, SEL. Citation 501 and a King Air 350, F-16s and F-117s; currently a T-38 Flight Instructor at Sheppard AFB as a Reservist in the USAFR. Owns an '81 M20J 201. 5800 total hours, 2200 military and 1500 hours of it in Mooney aircraft.

Jerry Johnson, Southwest Texas**.** mooney9281V@hotmail.com.817-454-2426. Commercial, SEL/MEL CFII, Glider, Typed in C-500's. Member MAPA Safety Foundation.Owned a Mooney for over 30 years.Total: 11,000 +; Mooney: 6000.

Vermont

Ted Corsones, Rutland. 813-435-8464, tedc@corsones.com. Total: 7500, Mooney: 4500, Instruction: 2000+. ATP & MCFI for MEL, MES, SEL, SES, Instrument Airplane & Glider. Master Instructor Emeritus. He serves with the MAPA Safety Foundation as an instructor, treasurer, and chief financial officer.

Virginia

William Wobbe, Leesburg. william.wobbe@gmail.com , (713) 249-7351. ATP, SES, SEL, MEL, MES, CFI, CFII, MEI, AGI, IGI, ADX. Time in M20B through M20TN models and very familiar with Garmin G-1000, GTN750/650, and G530/430 avionics. 1600+ dual given in Private through ATP training. MAPA PPP instructor and lots of experience in cross country all weather flying including TKS Known Icing Systems. Flight Service Station Specialist and familiar with iPad weather planning apps such as ForeFlight. I can answer your questions about the Washington, DC SFRA and ICAO Flight Plans.

Joseph Bailey, *Winchester*. (540) 539-7394. b747aviator@yahoo.comATP MEL, Commercial, SEL, SES, Glider. CFI, CFII, MEI, CFIG. EXP in Mooneys A-J. Providing initial & transition training. Total: 7800; Mooney: 500; Instruction: 3000

Lee Fox, Fredericksburg. 540-226-4312, LCFox767@gmail.com. Mooney Staff CFI, Mooney Safety Foundation. Retired American Airlines Check Airman. Owns a M20J 201. Total time: Over 20,000.

Unique airpark community located in prestigious Naples Florida. The community is quiet and gated. Taxi from your garage to the runway. Perfect for aviators and hobbyists alike. Runway is 4400x100 ft/1341x30m. Lat/Long: 26-07-00.3300N/081-42-11.3090W, 26-07.005500N/081-, 26.1167583/ -81.7031414. 5 Miles SE of Naples, FL. Only $209000. Call Cara Mahoney, Coldwell Banker Residential Services, 239-272-3098 or email Ccara4realestate@yahoo.com

For Sale -- Mooney M20J, IO-360-A3B6D, Exhaust System. Removed recently to install a Power Flow Exhaust System. In good, serviceable, condition, according to the Mooney mechanic who inspected it at pre-buy (7 months ago) and the mechanic who removed it (2 months ago). Asking $450 plus shipping. Shipping calculated upon sale. Located in Perry, Oklahoma (F22). Call 405-338-8992.

Parts for Sale

I have several Mooney parts for sale from a 1969 G model. Brand new voltage regulator (never used). Instrument light rheostat controller, cowling plugs and like new fuselage/cockpit and tail feather covers. G model POH. Contact me at Wilson Brown, located in Georgia, 678-469-6182

For Sale – Exhaust system for IO-360-A1A in very good condition with 1200 hours. I replaced it with a Power Flow Exhaust System. $500 plus shipping from New York. Write to Mike at michael@polytest.org."

LASAR'S Free Site

Check out Lake Aero Styling & Repair's " LASAR" Web Site: www.lasar.com New, under "Mooneys for Sale", you can List your Mooney for FREE!

Also check out Parts, Mods, and Services. LASAR, est. 1975 **(707) 263-0412** e-mail: parts-mods@lasar.com and service@lasar.com

FOR SALE

1965 Mooney M20E Super 21

TT 6425, SMOH 783, SPOH 783, 200hp, manual gear, HSI, dual digital King navcom w/GS, MB, ADF, M3 GPS, Argus 3000, Stormscope, **IFR certified**, EI Engine Analyzer, cowl closure, tanks leak-free, leather interior, new carpet, **fresh annual**.

Owned, hangared (AZ) and maintained by A&P/IA last 18 yrs. $42,500.

K. McMullen, 480 460 0639, kellym@aviating.com

FOR SALE: PROJECT MOONEY 1964 M20E, N6974U, SN 334. ~3950 hours

This is a complete, undamaged, disassembled airframe. It was a complete flying airplane when the owner decided to disassemble to use the engine and prop for a homebuilt airplane. The wings and tail are still attached, but all of the control surfaces have been removed. It is 98% complete including all of the control surfaces, exhaust, cowling, most of the interior, auto pilot, and instruments. All logs, airworthiness, and registration are included. I have a core engine that I will sell separately, but no propeller. $8000.

CORE ENGINE from a 1966 M20F. Lycoming IO360A1A. Total time, approximately 1800 hours and 500 hours SMOH in 1985. Original crank. No known prop strike or damage. Includes all accessories except the alternator. The original logs were lost including the AD history. A new log book was begun documenting the times based on the testimony of the previous owner. $8000.

201 Style Windshield Kit: Southwest Texas Aviation kit, STC SA4332SW. Complete new kit in original box with all parts, instructions, and STC (transferable). $1000

Jerry Miel, Green Valley, AZ at jmiel@uim.org or 520-370-7258

1978 Mooney 201VL
$ 85,500
MODEL 201 J - 200HP
mbmaksymdc10@aol.com
AIRCRAFT SERIAL# 24-0398
Lycoming IO-360-A3B6D

TIMES
AIRFRAME TOTAL: 5256

ENGINE TSMO: 878

Engine overhauled BY LYCOMING FACTORY INSTALLED 01/16/2004

Propeller governor INSTALLED 01/16/2004 OVERHAULED PRO - PROP
HOSE ASSEMBLIES FUEL OIL REWORKED 01/09/2004

GANN AVIATION

New propeller 04/01/91 MC CAULEY

Power flow exhaust system 2015
DYNAMICALLY BALANCER 5/23/95
VACUUM PUMP REPLACE 07/15/2015
NEW SKYTEC HIGH TORQUE STARTER and upgraded start relay
Electrical New zcftronics voltage regulator
INSTALLED M-20 AIR/ OIL SEPARATOR
NEW ENGINE TACK CABLE AND OVERHAULED TACH 2007

AIRFRAME
Alternate air door kit
Complete brake overhaul
PILOTS MASTER BRAKES CYLINDERS REPLACED 03/2008
ALL NEW TIRES AND TUBES
RIGHT and left FUEL TANK completely resealed 2015
12V CONCORDE RECOMBINANT GAS BATTERY

INSTRUMENTS
Altimeter, static, integrated system, transponder IFR

ANNUAL 09/01/2015

CORROSION TREATMENT each annual

RADIO
INSTALLED GARMIN GPS 430
INSTALLED GPS ANTENNA GA-56GPS
INSTALLED GARMIN 340 AUDIO PANEL

FOUR PLACE AUDIO I/C
ASPEN 1000 PRO
AVIDYNE TAS-600 traffic
STAND BY VACUUM GYRO
STORM SCOPE WX1000 PLUS
ENGINE EDM 700 4C A6 WITH FUEL FLOW
KFC 200 AUTOPILOT with altitude hold AND CONNECT TO ASPEN
1 COLLINS VHF 251ACOMM
1 COLLINS VIR351 WITH TO /FROM AIRTEX 345 406 February 2016
COLLINS TRANSPONDER TDR-950 UP DATED 03/2011
DAVTRON MODEL 811BDIGITAL CLOCK
NEW ENGINE TACK CABLE AND OVERHAULED TACH

GENERAL INFORMATION
ELECTRIC LANDING GEAR
ELECTRIC TRIM
ELECTRIC FLAPS
Control wheel steering
Navigation annunciation
System annuncator
ROSEN SUN VISORS
Mooney shoulder harness installed
Wing tip strobes
External power receptacle
Copilots brakes

Study any time at http://jdpricecfi.com/