The Mooney Flyer

The Official Online Magazine for the Mooney Community

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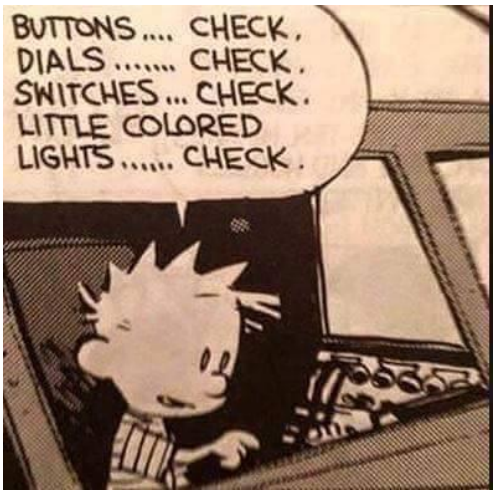
From the Editor

Phil Corman

Mooney International Corporation is offering a unique opportunity to Mooney enthusiasts. You can now fly Mooney airplanes to different locations in China and experience the unique Eastern culture. If you are a Mooney enthusiast and would like to have a chance to fly and tour in China, please contact Kevin Kammer at kkammer@mooney.com



THE AVERAGE PILOT, DESPITE THE SOMEWHAT SWAGGERING EXTERIOR, IS VERY MUCH CAPABLE OF SUCH FEELINGS AS LOVE, AFFECTION, INTIMACY AND CARING.

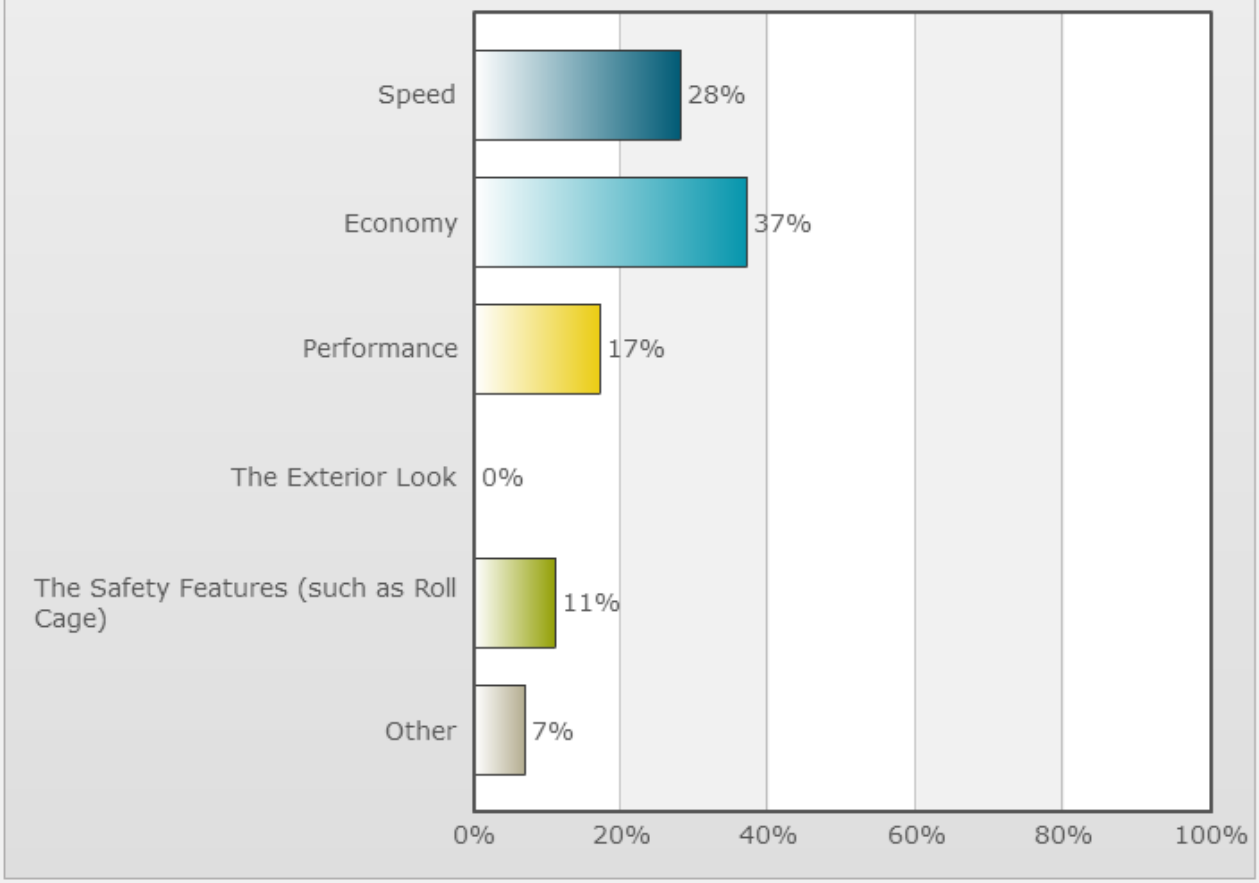
THOSE FEELINGS JUST DON'T INVOLVE ANYONE ELSE.

My wife got 8 out 10 on her driver's test--the other two guys managed to jump out of her way.

I like this feature of my Mooney the Most!

Poll created by Phil Corman on 04/09/2016

Poll Results



Next month's poll: "The Mooney Flyer is"

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

There may be no excuse for laziness, but I'm still looking

RE: Ask The Top Gun -- I always read Ask The Top Gun with interest and I appreciate Tom's expertise and sage advice. In the May 2016 issue of MooneyFlyer you addressed a question about running Lean of Peak (LOP) and you offered your opinion, "... I am not a big fan of LOP ..." I respect that, but I hesitate to say that it was an unnecessary comment as it didn't explain why you have that opinion. New readers who haven't read you before may take that as an expert stating that LOP is a bad idea unless the POH says differently. In balance, many disagree and believe LOP is a perfectly acceptable and better way to run your engine. After flying privately for over 30 years, twisting the red knob in many directions, my personal experience with LOP is good. But, I took the time to learn about the way engines operate, and how the combustion cycle actually works. From my study, I made my own informed decision. Many of my other pilot friends couldn't care one way or the other ... as long as it flies.

Here is my advice to those who wonder about LOP vs ROP engine operation: If you have no interest in learning a little about the way the engine in your aircraft operates, please use the POH and run your engine's mixture exactly as it states. The manufacturer writes the POH with that type of pilot in mind. However, if you as a pilot want to understand how to maximize your engine life and its fuel economy and performance, take the time to review some of the excellent articles on LOP operations. They show how a grasp of mixture control knowledge, applied correctly, may serve you very well.

Those of you who know me, understand that I am a big fan of LOP - AND a big fan of Top Gun!
David V A

RE: Lessons from Wayne -- I have found that the best option is to place a clean paper towel under the oil filler cap (around the dipstick) on my IO-550, when I put the plane in the hangar. This catches the moisture and the oily residue that otherwise collects under the cap. I leave it there until the next flight.
Rae W

Phil and Jim, You do a great job each month. One thing you could easily do, that would help get to each article expeditiously, would be to bookmark each article. If you are combining PDFs with Adobe Acrobat, this is done automatically. In my opinion, it would improve the magazine greatly.
Don

I enjoy reading TMF each month and have encouraged the members of the Australian Mooney Pilots Association to subscribe and support you. AMPA values the information in each issue and we are very happy to support your efforts with a donation of USD50 to your PayPal account.

Also, we'd like to use your article in the May issue (Ten things ……..) in our next newsletter that will go to press in August. Is that okay?

Regards and thanks.

Owen C

Editor Note: A shout out and hearty hail to our Mooney friends down under.

Preventing Loss of Control (Stalls)

Before your first solo, you practiced stalls. In fact, over time, you became very good at demonstrating your ability to recognize a stall and then recover. If pilots are so good at stall recovery, why is Loss of Control (LOC) the leading cause of aircraft accidents?

One reason is because the stalls that we practice in training, don't look, feel or smell like the stalls that catch pilots off guard and end their lives due to LOC.

The power on stall, practiced during training, is actually almost a non-event. However, unlike the practice stall, where you know it's going to happen, the unexpected stalls during takeoff or go-arounds are "sudden", "sharp", and "scary". They also happen at lower altitudes, where there's not a lot of time to recover from a mistake and the results are often fatal.

During a practice stall, you have time to set it up and keep the aircraft coordinated. Also, I'll bet that you're smart enough not to trim nose up as the airspeed decreases. During landing, if you're like most good Mooney pilots, you have the trim set for the slower approach speeds. To assist with the flair, some Mooney pilots increase trim as they pull the power to idle. That nose up trim will work against you if you go-around because you'll need to apply forward pressure – sometimes a lot of it, just to prevent a stall.

MOONEY GO-AROUND ACCIDENTS

These happen too frequently. Here's part of the news report concerning a May 2nd, 2016 Texas accident:

Federal Aviation Administration spokesman Lynn Lunsford says that the pilot of the Mooney M20 was trying to go around for another try after an aborted landing [go-around] and lost control of the aircraft.

THE FRANTIC GO-AROUND

Surprise and **hurry** can be terrible partners during a go-around. When something unexpected happens, and you elect to go-around , the surprise can trigger an "*I gotta get out of here quick*" response.
Sadly, some pilots add lots of power and forget to fly the airplane, (losing control), allowing the aircraft to climb to a very high angle of attack. The aircraft continues to seek its trimmed airspeed and pitches up until it exceeds its critical angle of attack.
You may, during a go-around, be on the verge of stalling and retracting flaps too soon can only make things worse.

THE SOLUTION

If you always expect a go-around, you'll always be ready for it.
Practice go-arounds frequently and this maneuver will become second nature.

Go-arounds don't usually require an immediate climb. The point of the go-around is to avoid a touch down. So, start with a controlled transition. It's not an emergency. It's just a go-around. Consider these go-around points:

- Add power and build your airspeed flying straight and level – Fly the aircraft.
- Retract the flaps to the takeoff position and reduce nose up trim. (During a go-around, depending on your airspeed and angle of attack, you may be on the verge of a stall. Retracting the flaps too soon could make things worse).
- Keep the pitch fairly flat and apply enough rudder to keep the aircraft tracking straight.
- Retract the gear
- Fully retract the flaps.

TAKEOFF

Some takeoff stalls occur when pilots start to panic because:

- There are obstructions at the end of the runway
- The aircraft is too heavy for the runway length and the end is coming up *FAST*!
- The density altitude is HIGH.

What ever the reason for concern, trying to pry the aircraft off the runway before it's ready to fly, is asking for trouble.

SPEEDS

No other airspeed will give you a steeper climb than **Vx** and no airspeed will gain altitude faster than **Vy**. Nailing the desired airspeed will give you the best chance of making a safe takeoff.

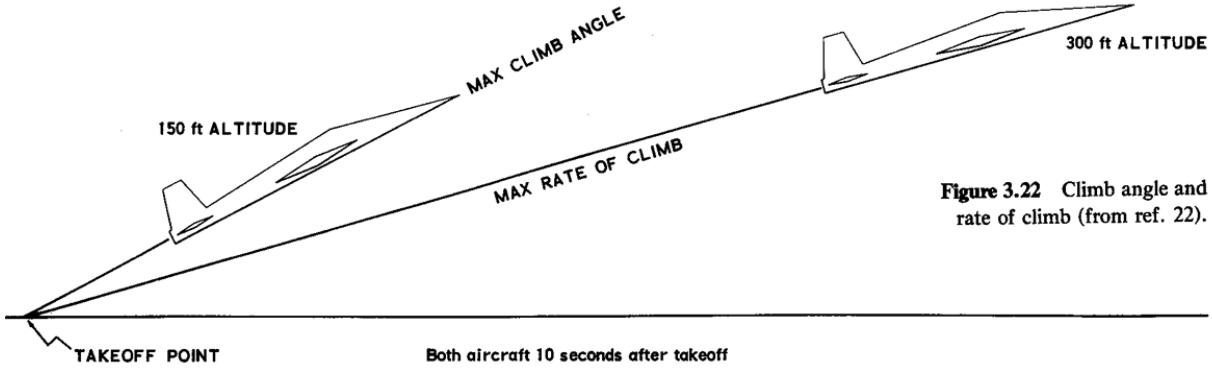
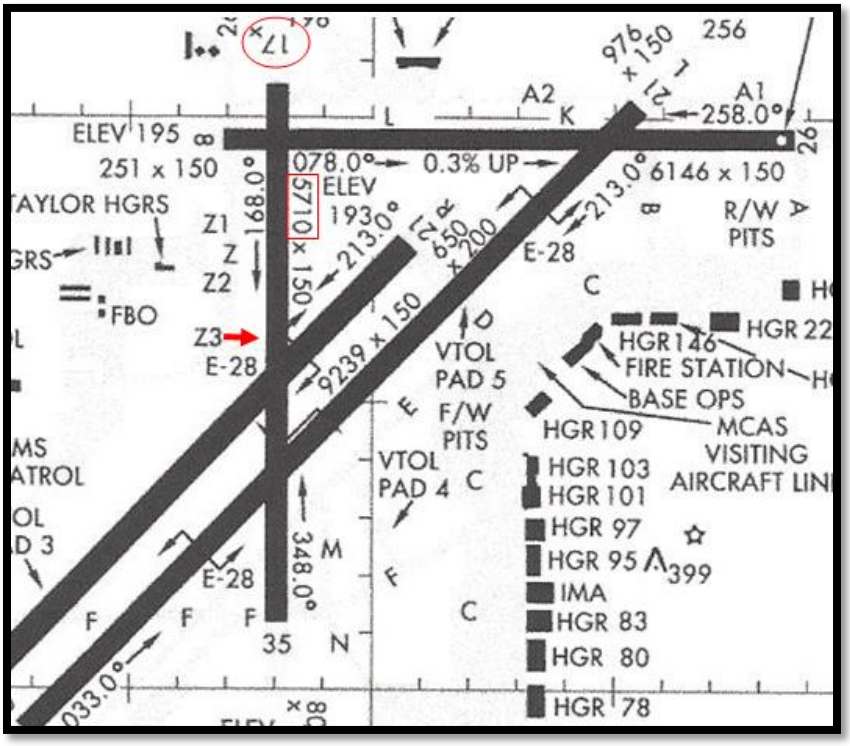


Figure 3.22 Climb angle and rate of climb (from ref. 22).

DO SOME MEANINGFUL DEPARTURE PLANNING ANYTIME THE OUTCOME IS NOT CERTAIN

EXAMPLE: Yuma Marine Corps Air Station/Yuma International (KNYL), has really long runways, but often, GA pilots are directed to take off from an intersection.

Runway 17 / 35 is long enough, at 5,710'. However, for some reason, the tower thinks my Mooney should be happy with half of that. So, quite often, they tell me, and all the other small GA aircraft, to taxi to runway 17 for a Zulu 3 intersection takeoff. Now, only 2,855' is available for takeoff. Can I do it?



I know I can because before I went to Yuma, I looked at the performance charts. I know that on a blazing hot day (well over 100°F), and fully loaded, my Mooney's no-obstacle charted takeoff roll is only 1,400 feet.

PLAN TO USE NO MORE THAN 2/3RD OF THE RUNWAY FOR TAKE OFF

You should never chart a take off distance that is equal to or just short of the distance available for takeoff. This leaves no room for error or for an abort.

The charted takeoff distance (without an obstacle) is 1,400 feet. 2/3rd of the runway available (2,855') is 1,904'. I know that I should be able to take off safely. If my charted takeoff distance is more than 1,904', I'll look for ways to shorten my takeoff distance, or I could simply ask Yuma Ground for a full length take off and utilize the entire 5,710 feet.

IF YOU CAN'T GET EXACT WEIGHTS ON YOUR PASSENGERS AND CARGO, the **AOPA Air Safety Institute recommends** the 50 / 50 rule. That is, you should add an additional 50% to the distance required to clear a 50 foot obstacle. For instance, if you need 2,700 feet to take off and climb over a 50 foot obstacle, you'll need to add another 1,350 feet to the required takeoff distance. The 50 / 50 rule indicates that 4,050 feet is required for takeoff. Ask Yuma Ground for a full length take off and utilize the entire 5,710 feet. (2/3rd = 3,806 feet).

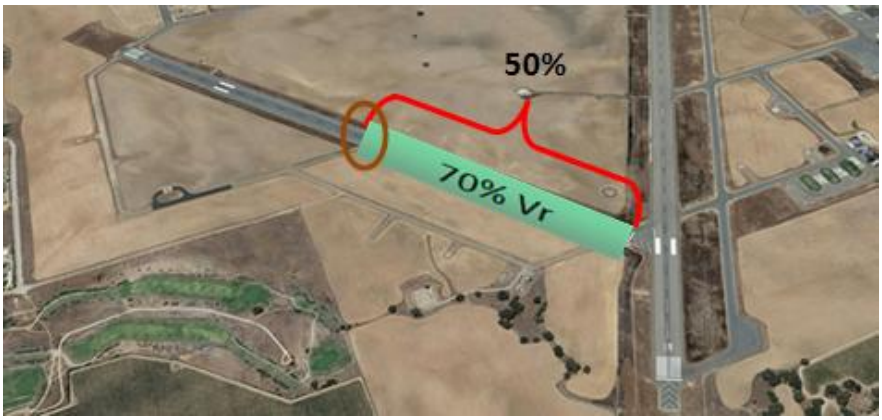
BE FLEXIBLE, SAFE AND LEAN

If you find that you are too heavy for departure, you should consider leaving some cargo behind, or ask your passengers to meet you at an airport with a longer runway. If that is not possible, you may need to wait for cooler weather, stronger headwinds, or both.

If you have a normally aspirated Mooney, when you take off at higher density altitudes, you'll need to **lean** for best power prior to takeoff.

IF IT DOESN'T LOOK RIGHT, ABORT YOUR TAKEOFF!

Military, corporate and airline pilots are all about safety and each takeoff is carefully planned. **As a rule, plan to reach 70% of rotation speed by the time you have used up 50% of the runway.** Shorter runways could require more conservative rules to preserve enough room to stop.



Look at the airport diagram and determine where the ½ way point is located. Next, determine how you can know when you are at that point on the runway. If you fail to reach 70% of rotation speed at that point, abort the takeoff.

If the numbers won't work for you, and it's not safe to take off today, put your baby back in the hangar and try again when circumstances are more favorable.

LOSS OF CONTROL (LOC) STATISTICS

- In 2015, 384 people died in 238 general aviation accidents.
- The number one cause of GA fatal accidents is **LOC**.
- **LOC** can happen in all phases of flight.
- Every four days, a fatal accident involving **LOC occurs**.

PREVENTING A STALL / LOSS OF CONTROL

Understand your Mooney's limitations and what it's doing in space. If you can recognize the circumstances that lead to stalls, this will go a long way towards prevention. Angle of Attack indicators can be a big help, but most of the Mooney fleet is not yet equipped with this great tool.

If you don't have an AOA indicator, you can prevent LOC the old fashioned way, with:

- Alertness
- Understanding LOC
- Discipline
- Practice &
- Planning

Fly Safe, Jim

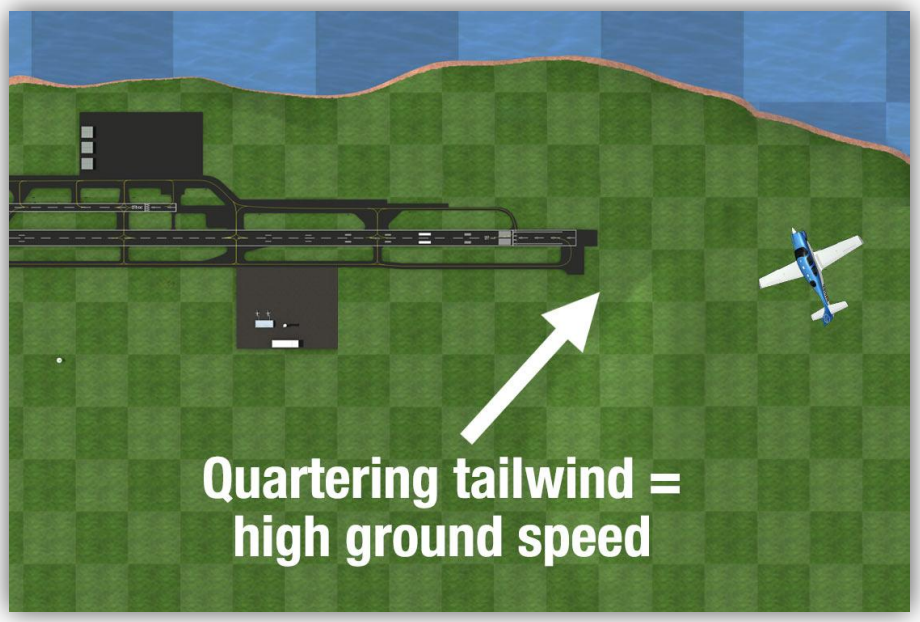
Women spend more time wondering what men are thinking than men spend thinking

Turn to Final.. Don't make it your Final

You've probably read a lot of articles on "The Impossible Turn". That's the turn that pilots attempt when their engine fails on departure. Instead of landing straight ahead, they take a chance and try to make "the Impossible Turn", and try to land on the runway behind them. You should know already what you are going to do at each stage of the departure. A good rule of thumb is to NOT consider a turn back to a runway unless you are at least 1,000' AGL. However, this article is not going to deal with the Impossible Turn.

Instead, it will deal with the Unnecessary Turn. That's when when you overshoot Final while on your Base Leg, with speed or wind working against you. Why do we call it the Unnecessary Turn? That's because it's unnecessary and could be fatal. On your Base Leg, you are low and slow. If you are overshooting final, a natural tendency may be to steepen your turn to line up on final. This is a sure recipe for disaster. The easiest and safest reaction is to declare a go-around and add 3-5 minutes to your Log Book. You can do it right the next time. The best landings start with the best approaches… Go Around… do NOT steepen your turn.

A base leg tailwind is the most common reason for overshooting.



M20S

STALL SPEED vs. ANGLE OF BANK

ASSOCIATED CONDITIONS:
FORWARD C.G.
POWER IDLE

NOTE: UP TO 500 FEET ALTITUDE LOSS MAY OCCUR DURING STALLS AT MAXIMUM WEIGHT

EXAMPLE:

WEIGHT	3000 LBS (1361 KGS)
LANDING GEAR	DOWN
FLAPS	10°
ANGLE OF BANK	45°
STALL SPEED	72.5 KCAS (73.0 KIAS)

GROSS WEIGHT	GEAR AND FLAP POSITION	ANGLE OF BANK							
		0°		30°		45°		60°	
		KCAS	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	KIAS
3200 LBS (1452 KGS)	GEAR UP, FLAPS 0°	65.0	65.0	70.0	70.5	77.5	78.0	92.0	93.0
	GEAR DOWN, FLAPS 10°	63.5	63.0	68.0	69.0	75.5	76.5	90.0	91.5
	GEAR DOWN FLAPS 33°	57.5	57.5	62.0	62.0	68.0	68.0	81.5	82.5
3000 LBS (1361 KGS)	GEAR UP, FLAPS 0°	62.5	63.0	67.0	67.5	74.5	75.0	88.5	89.5
	GEAR DOWN, FLAPS 10°	61.0	61.0	65.5	65.5	72.5	73.0	86.5	87.5
	GEAR DOWN FLAPS 33°	55.5	55.5	59.5	59.5	66.0	66.0	78.5	79.5
2700 LBS (1225 KGS)	GEAR UP, FLAPS 0°	59.0	59.5	63.5	64.0	70.0	70.5	83.5	84.0
	GEAR DOWN, FLAPS 10°	58.0	58.0	62.5	62.5	69.0	69.0	82.0	83.0
	GEAR DOWN FLAPS 33°	53.0	53.0	57.0	57.0	63.0	63.0	75.0	76.0

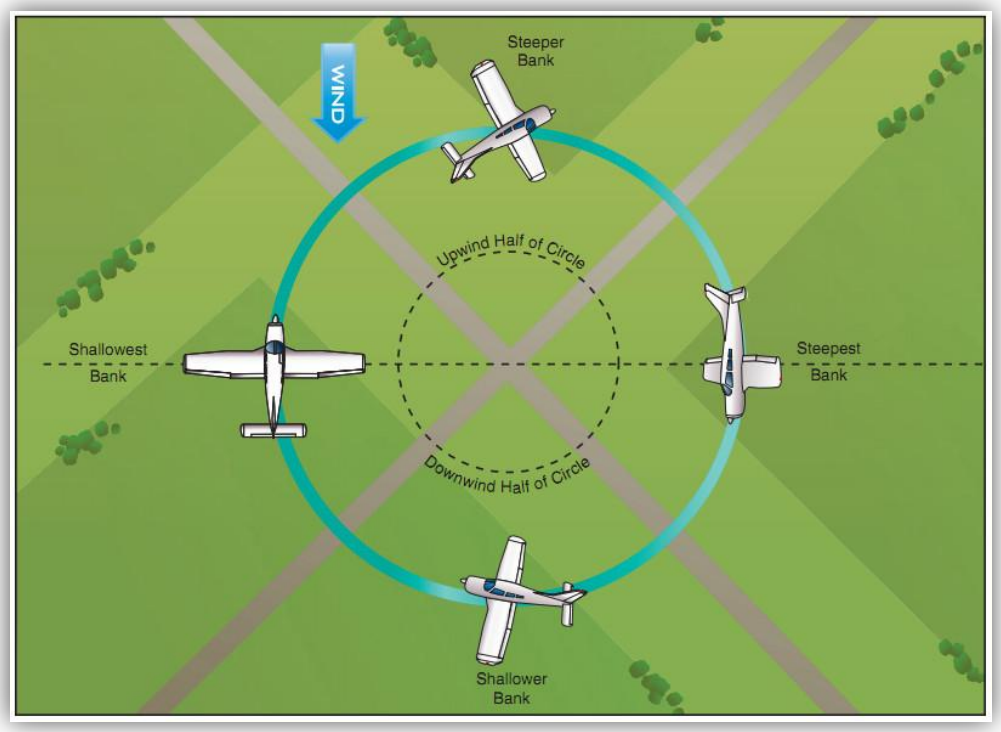
On the left, is the Stall Speed vs. Angle of Bank table, copied from my Mooney M20S POH. With my Gear and Flaps down, my Stall Speed is 57 kts. If I'm in the same configuration and in a 60° bank, my stall speed shoots up to 82.5 kts. That's a 45% increase. Now if you are behind your Mooney, overshooting the turn to final, then you have already made "1 error". If you steepen your turn while you are low and slow and correcting that error, you are more likely to make another

mistake, and this error could be fatal.

Many new Mooney pilots may not use the Rudder in their turns. If they have transitioned from a Cessna or Piper, or similar docile aircraft, rudder control might be an optional consideration. But Mooneys want rudder for a controlled turn… Duh! In many turns, as you turn left, you may add left rudder to keep the turn coordinated. Right rudder for a right turn. Have you noticed that you often apply "opposite rudder" on the base to final turn? Imagine exacerbating the uncoordinated Base to Final turn while you are low and slow.

Things happen fast in our Mooneys. When I was getting my private certificate back in 1978, I remember my instructor telling me not to worry about crashing. I asked him why? He answered, "Because you are about 1 mile behind this airplane".

Do you remember when you got your Private Certificate? You needed to demonstrate turns around a point. It turns out that this is the skill that needs to be honed to deal with Base to Final overshoots. The steepest part of your turn in this diagram is your Base to Final turn, landing into the wind. When is the last time you tried to do perfect turns around a point? This could be a great low and slow flying exercise.



The Bottom Line

First and foremost, you should know the pattern wind direction, speed and gust factor. You should also know when conditions are ripe for spawning a wind shear.

Second, plan your Base to Final Leg turn. If you've got a quartering tailwind, then broaden your turn or initiate your turn to final sooner. You should never steepen your turn and forget about the rudder. The excessive bank may lead you into an approach stall. **Go-around.** As my co-pilot says, "live to fly another day" or "let's cheat death one more time". Put 3-5 more minutes in your log book. Don't make a second mistake on top of the first.

*Flying is a wonderful activity or hobby, but it is most unforgiving of **poor judgement** or **mediocre skills**. We love our Mooneys partly because they demand both.*

Give me ambiguity or give me something else.

Why Airplanes Fly

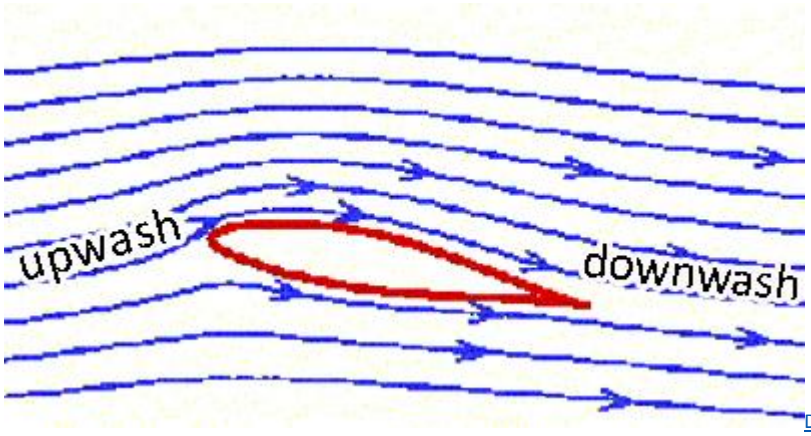
The Myth:

The explanation goes like this: The wings of a plane are designed in such a way that they make air travel faster over the top of the wing than under the bottom. This means the pressure over the wing is less than the pressure underneath, causing lift. It's called the Bernoulli principle, and even the pimp daddy of all nerds, Einstein himself, is said to have given it a thumbs up. Case closed. Right? The principle explains why something rises when you lean over it and blow.

The Reality:

Sorry to decompress your flight cabin there, Einstein, but the "differing pressures" explanation of flight isn't correct. Instead, what's really happening has a much simpler explanation and it's one that you also learned in school. You see, according to a guy named Isaac Newton and his third law of motion, for every action there is an equal and opposite reaction. Therefore, if you want something to go up – like an airplane, then what you want to do is force air to go down and back so that the "opposite reaction" propels the object up and forward.

And that's where the shape of the wing comes in. It's true that a plane's wing must have a very specific shape; just not the one that's postulated by the Bernoulli principle. Instead, the wing is angled so that it forces the air on top to go down toward its back end (down wash), creating upward force toward the front (up wash).



David Anderson/Florida International University

The effects of backwash, meanwhile, are exclusively taught in the school cafeteria.

The wing generates lift, not by magically manipulating air pressure, but by using basic Newtonian physics. While the Bernoulli principle is a real thing, it has very little to do with the reason mankind can fly in metal tubes. In addition, nobody is quite sure why your school's science textbooks, television, and, most alarmingly of all, pilot manuals, have the wrong explanation for flight. But, they don't need to know why the plane flies to fly it... rrr-right?

He who laughs last, thinks slowest.

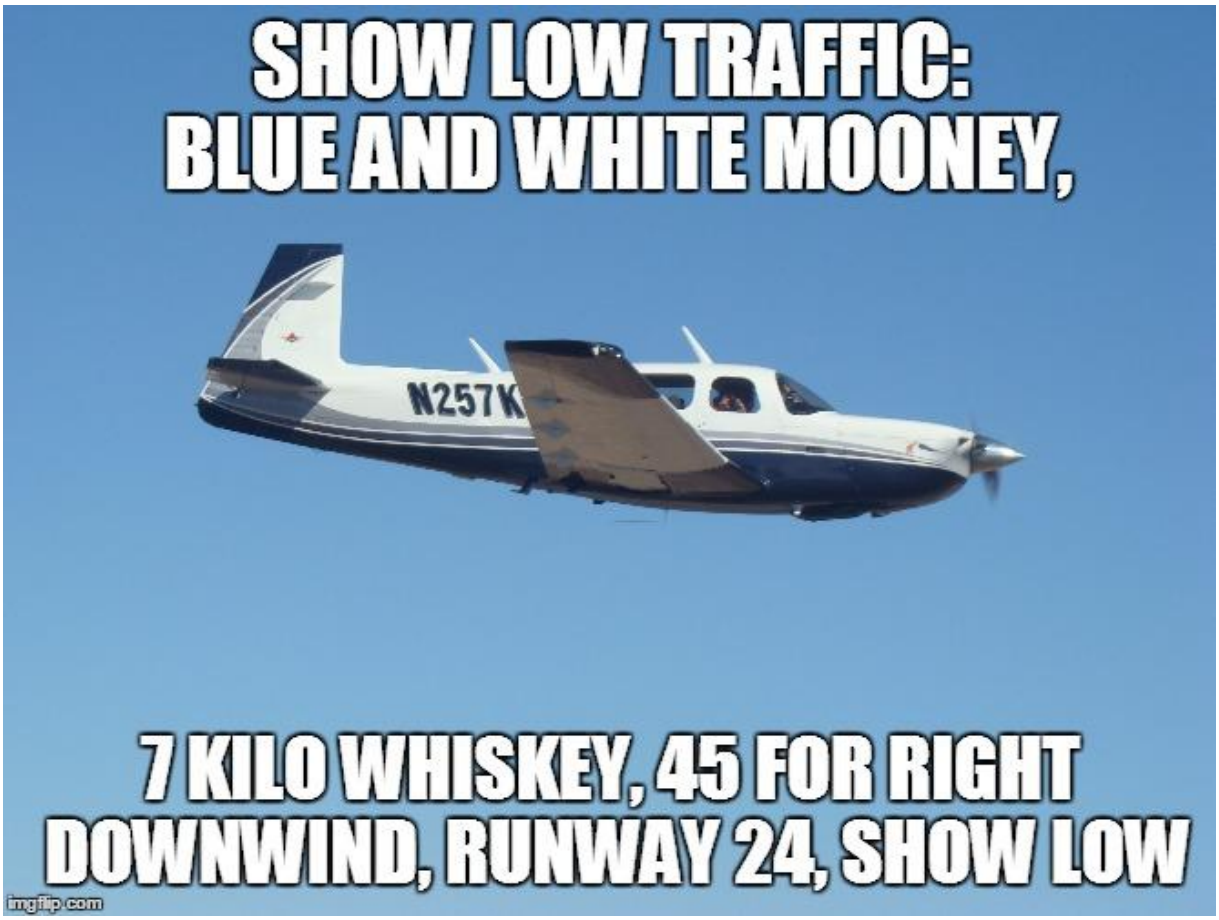
Things Pilots Should Say More Often

Mooney Tunes

Jim Price

Often, we read articles about radio communications that gently "encourage" pilots NOT to say stupid things on the radio. This article is meant to be positive. I learned to fly at Provo, UT. At the time, Provo was an uncontrolled field. I still remember my dual cross country to Salt Lake City (SLC). Even though my instructor was with me, I was still uncomfortable when I was "forced" to speak with the controllers. A few months later, I was in USAF Pilot Training and the radio became less and less challenging. In fact, one of our instructors noted that my classmates and I were not only comfortable on the radio, but that we had a "very cool radio voice". This observation was not meant as a compliment for back then, instructors never complimented students. It seems that we were trying to sound professional, trying to mimic Chuck Yeager's Southern accent. If we talked like him, we might be as good as him?
Below are some things that might make your radio life easier and hopefully, safer.

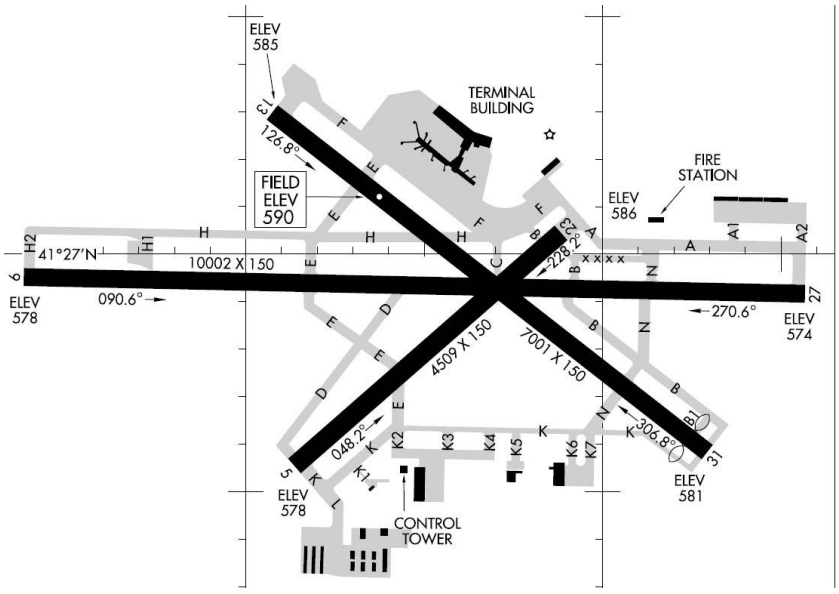
If you have any doubt that you heard the controller correctly, ask the controller to repeat. 95% sure isn't good enough, especially if a misunderstanding might result in a runway incursion, violation, or worse, an accident. When I flew for the airlines, it only took one misunderstanding and the resultant NASA Report that I filled out, to encourage me to be absolutely sure of the controllers directions. Even if the frequency is busy, take the time to say, "Say Again" and get it right. You can thank me later.



If you are flying at an uncontrolled airport, making radio calls with just a tail number does not help pilots, unless they know your N number or possibly your voice. (Your friends may not recognize your voice if you are impersonating Chuck Yeager). When you tell other pilots the type aircraft and the color(s), now they know what they are looking for. With that “colorful” knowledge, it might be much easier for them to spot you. That makes the airport much safer and safer is a good thing!

Smart airline pilots, even those who are intimately familiar with an airport, study the taxi diagram before pushing back from the gate and before each landing. Before the push-back from the gate, the Captain and First Officer discuss various ways they could receive taxi instructions to the runway.

Prior to the approach and landing, they discuss where they might turn off the runway and a possible taxi route, once clear of the runway.



I hope that you will always make an effort to study the taxi diagram. Even then, when you're on the ground, the taxiways look a lot different than the overhead view on the taxi diagram. If you have studied and you are still lost, ask for a "Progressive".

Most controllers will agree that it takes less time to give progressive instructions than it does to fill out the paperwork generated because a pilot was lost and caused a runway incursion. If you are unsure of how to get to the FBO, the café, or the assigned runway, ask for "progressive taxi instructions". You'll feel a little more aware and you'll be making the whole airport safer.

I hope that when you fly, you take advantage of flight following. It can be critical to your safety. Controllers can see traffic well before you'll ever see it. They will try to call out as much traffic as they can, workload permitting.

If they call out traffic and you don't see it within 30-60 seconds, tell them, **"Negative Contact."** If you remain quiet, the controller may assume that you have visual contact and that you'll see and avoid. If you tell the controller, **"Negative Contact,"** he or she can help you with vectors or a change in altitude.

Some pilots, when they have the **"Traffic in sight",** also add, "**maintaining visual separation".** This tells ATC that conditions allow you to monitor the traffic and that if required, you'll maneuver to avoid it. ATC will appreciate this.

The Rush Job

Pilots want to show ATC that they can help them out and do anything that they ask. There is a story about a controller who had forgotten about an aircraft, (as they sometimes do), and finally, gave the pilot directions to descend to a lower altitude. While descending, the controller, realizing that the pilot's descent rate would not be enough, needed help. In a mild panic, the controller told the pilot to expedite his descent. The pilot responded, **"Unable".** The controller was, I'm sure, flabbergasted and said, "What do you mean, you can't expedite? Don't you have speed brakes?"
The pilot responded, "Sure, but those are to fix my mistakes, not yours."

This story's veracity is in question, but it certainly illustrates a bad "attitude". We all want to be mission hackers, and show ATC and all the other pilots how good we are, but sometimes you just have to consider the consequences of a rush job. For instance, if ATC asks you if you can make a short approach, if you don't think you can do it safely, it's better to say **"Unable",** rather than end up with an unstable approach and landing. Just take a few more minutes and do it right.

Is it wrong that only one company makes the game Monopoly?

Men sometimes make fools of men, but most guys are the do-it-yourself type

Turbulence and How I Got Over It

by Linda Corman

When I first flew in a single engine airplane, I was working as a Deputy Sheriff for the County of Santa Clara, CA. My responsibility was prisoner transport. I was not the pilot, just the enforcer. One time I was transporting a 6' 6" felon who was large enough to crush me with a single hand. I am only 5' 5", so I was a midget compared to him. My main focus was to make this particular flight less stressful. So I reminded him that "I have a gun, in case you are thinking of making problems". He was a pussy cat… Thankfully. By doing this, I redefined the problem and addressed it.

Then I met and married my Mooney pilot husband. In the Sheriff's Department, we typically flew Cessna's or Pipers. I immediately noticed a difference in the Mooney. It seemed to handle turbulence better. At least it felt that way. But, it still bothered me. In the western USA, turbulence is constantly prevalent in the deserts and over the western mountains, like the Sierra Nevadas.

Turbulence seems to be caused by convection, due to rising heat, and/or wind that churns its way up and over the irregular terrain below. We mitigate the effects of turbulence somewhat by flying in the early mornings or near dusk.

I realized that because of my anxiety, worrying that the plane would "break up in flight" or simply "fall out of the sky", I made my reaction to the turbulence worse. My pilot husband tried many things. First, he explained that turbulence is like a raod with potholes or washboard dirt road. It is more annoying and irritating than anything, except, of course, when you get caught in a downdraft in the mountains. **That was Step #1.** It helped somewhat. **Step #2** was learning not to grab onto things in the cockpit for dear life. "Relax Grasshopper… take a deep breath… sit back and chill." This also worked, but it took longer to adapt. **Step #3** was for my pilot to mitigate some of the effects of Moderate Turbulence. He did this by slowing down a bit. Then I heard Don Kaye telling someone that extending the Speed Brakes also helps in turbulence. So I "asked" my pilot to try it. This also helped. Now I have little/no anxiety about turbulence. I just relax, and enjoy the flight. I think most of it was psychological, since it was a little unnerving at first. Now I realize that it is simply a reality… that our "indestructible Mooneys" will not break up and fall out of the sky and my Mooney pilot husband will keep the right side up.

But I still check ForeFlight for Turbulence Airmets. Also, while we are flying, I check our GTN 750 for PIREPS involving turbulence. I love it when I don't see any. Clear weather and smooth skies are my favorite kind of Mooney flying. By doing all this, I redefined the problem and addressed it.

I was going to give him a nasty look, but he already had one

Ask the Top Gun

Tom Rouch

Founder of Top Gun Aviation, Stockton, CA

Send your questions for Tom to TheMooneyFlyer@gmail.com

Question 1: I have a pretty healthy oil leak that is landing on my nose tire. Initial indications are a bad prop governor in need of a rebuild. Anyone have any gauge on how to best tackle that on a 1969 M20E?

Make sure you know where the leak is, because working on a prop governor on any Lycoming powered Mooney is difficult. There are also different makes of governors that could be installed. Some are obsolete, but may be repairable. (There are new governors available). An overhaul usually runs $1,000.00, more or less. There are two possible leaks that can be repaired on the plane. There are two gaskets where the governor mounts to the engine that can be replaced by sliding the governor back enough to replace the gaskets. It's not easy, but doable. The other is the jam nut that secures the adjusting screw. It has a built in seal and it can be changed easily. The governor is very difficult to remove and sometimes requires actually unbolting the engine mount and sliding the engine forward, so make sure you know where the leak is. Find out what type of governor is installed and find out if it's repairable before you start.

Question 2: Can you run LOP without GAMI injectors safely? (I don't have GAMI's on my aircraft now, but would consider putting them on if that is the best way)?

The only answer I have for LOP, is to do whatever the Owners Manual recommends. Some engines are designed to run LOP, like the early Malibu engine, or the Ovation engine that has procedures in the manual. You can also ask Don Kaye for his opinion. He is very well qualified concerning LOP and Gami injectors.

Change is inevitable, except from a vending machine

NOW FLYING

This is the MU-2! Turbo-jet efficiency and economy – 325 mile per hour cruise at 20,000 feet – 1700 mile range – 7 passengers. Mooney Aircraft and Shin Mitsubishi* present the practical answer to corporate business flying. The MU-2 prototype is now undergoing extensive flight tests. For information write Mooney Aircraft, Inc., Kerrville, Texas.

*Mitsubishi, parent company of Shin Mitsubishi, is the largest organization in Japan. Shin Mitsubishi is currently manufacturing Lockheed F104J supersonic jet fighters and Sikorsky S-61 and S-62 helicopters. Shin Mitsubishi has also manufactured the North American F86F. Mitsubishi is well known in American industry through affiliations with Tidewater Oil Company Westinghouse Electric, Monsanto, Reynolds Aluminum, Caterpillar, and General Precision, Inc.

THE MOONEY MU-2 - 325 MPH - TURBO TWIN

DISTRIBUTORSHIPS AVAILABLE

CIRCLE NO. 25 ON READER SERVICE CARD

June 11: Williston (X60)
July 9: Sebring, (KSEF)
August 13: Lake Wales (X07) - We will be driven by airport personal 4 or 5 minutes away to Woodies BBQ
September 10: Lakeland (KLAL)

Henry Hochberg's "Wild Wings to Walla Walla" Fly-In

June 24-26: This fly-in takes place whenever Henry gets the urge to host it. It's located in SE Washington state at KALW. Walla Walla is located in a beautiful wine area and Henry usually suggests wineries to visit and schedules 1 or 2 lunch and/or dinner get-togethers. Stay tuned for more details as Henry figures them out. Room reservations can be made at the **Whitman** Hotel via 866-826-9422. If you are really in need of additional information, you can ping Henry at: aeroncadoc@comcast.net

June 10-12: Denver, CO
September 9-11: Manchester, NH
October 7-9: Mansfield, OH

Mooney Summit IV

An educational event and social gathering, will once again be held at Panama City Beach, FL, September 29th thru October 2nd 2016. CLICK HERE for more details.

Alpha Systems Upgrades AoA Displays

Alpha Systems has a new heads-up display that adapts to its Eagle and Falcon angle-of-attack systems. The company also has added new features to its product line and more are on the way, Alpha Systems' Mark Korin told ***AVweb*** at this week's Aircraft Electronics Association show in Orlando. AoA indications are now available for different flap systems, along with gear advisory and integration with cockpit primary flight displays. Future updates include a stick-shaker feature. The company sells several AoA kits for $1,995 each and the Valkyrie HUD adapter is priced at $500.

See the Valkyrie HUD video demonstration here.

The Nflight Cam Elite Aviator Kit by

The Elite Aviator Kit contains all Nflight products, such as the Case, Exterior Billet Mount, Extreme Suction Cup, Audio and Power Cable for GoPro, Skeleton Case for GoPro, and the Nflightcam 58mm Propeller Filter.
The Elite Aviator Kit is currently available at the reduced price of $149.99. Now available at Aircraft Spruce

TMF PRODUCT REVIEW

Rod Machado Books

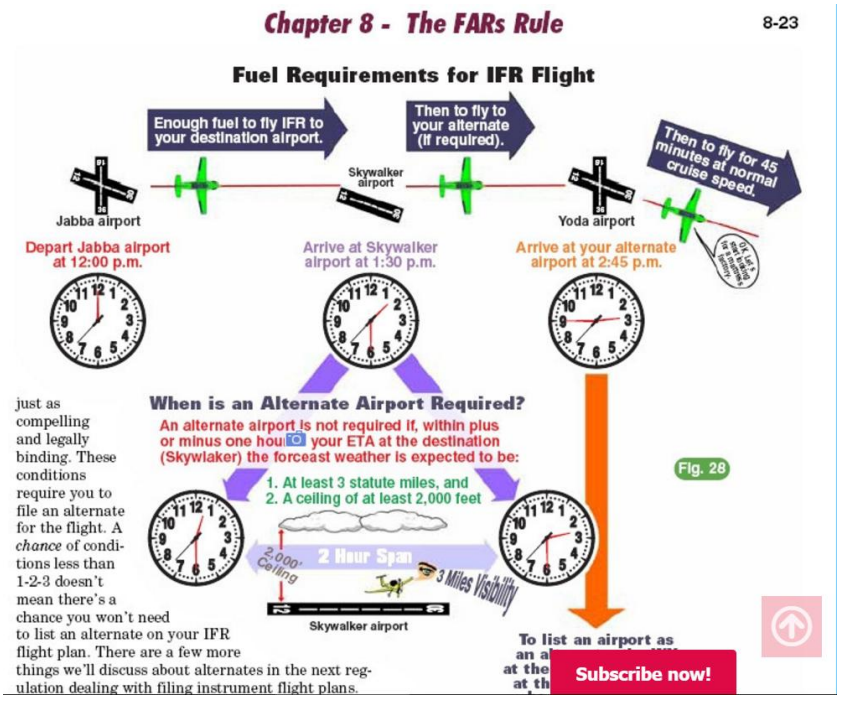
`I have been to many of Rod Machado's seminars at various functions from AOPA to CalPilots to Oregon Pilots Association events. In all cases I have been struck by two things; 1) They are very entertaining, often humorous, and 2) Extremely informative. Rod is an excellent source of knowledge and experience and can communicate with pilots extremely well. All we need to do is listen and absorb it all.

One time he told of a Mooney that had geared-up and he witnessed the event. The Mooney struck an obstacle and flipped over. This seemed like a grave story, but Rod brought it home when he saw the inverted Mooney on the ground and suddenly heard the gear motor extend the gear, pointing up to the sky. It was during this presentation that he said that more than 90% of gear-up incidents are caused by the PIC being taken out of his/her routine and/or landing checklist. This can be caused by passenger chatter (think "sterile cockpit"), a busy traffic pattern, or some other distraction. His recommendation was to "verbally confirm that the gear is down and locked" **THREE TIMES**. First when it's lowered, then on Base Leg, and finally over the Numbers. Why aloud? You will notice the lack of it in the event you are distracted and it can significantly reduce the risk of a gear up landing.

What does all of this have to do with this Product Review? Well, here at The Mooney Flyer, we have always felt that a Pilot Certificate is just a "License to Learn". Being a top pilot requires that we are continually learning new tools and tricks around judgement and flying skills. Rod has material for 1) New Pilots, 2) Advanced Pilots, and even 3) Interactive Courseware.

These typically come in 1) Print format, 2) eBook format, and/or 3) Audio book format. There is material for the student pilot, Instrument Pilot to be, Commercial Pilot to be and Airline Transport pilot to be. All of the material is both informative, easy to read, and fun.

CLICK HERE for a library of his publications.



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.

Boris Vasilev (CFI, CFII, MEI, AGI), Phoenix Area. 602-791-9637, boris@atjeuhosting.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: 13,000
Instruction: 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

Ben Kaufman, Fort Collins. (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: 1600; Instruction: 600

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.**

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.

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 over 6,000 hours of total flying time including 3,000+ hours in Mooneys. He currently 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. 614-975-1003.MFSTRETANSKI@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.

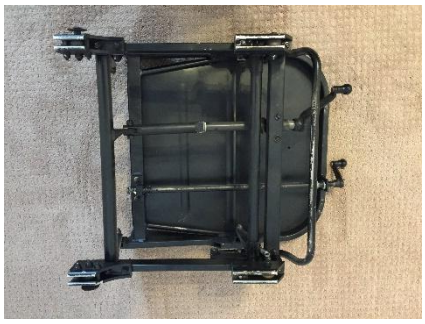
Joseph Bailey, *Winchester. (540) 539-7394. b747aviator@yahoo.com. ATP MEL, Commercial, SEL, SES, Glider. CFI, CFII, MEI, CFIG. EXP in Mooneys A-J. Providing initial & transition training. Total: 7800; Mooney: 500; Instruction: 3000*

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.

NEW For Sale

A single, adjustable seat frame taken from an M20K which was parted out. The item is in great shape and includes the seat back as well. This will fit the M20 series from 1980 onward. Imagine you or your front seat passenger not having to sit on uncomfortable cushions for hours on end, only to have them slip and cover your access to the trim wheel. Your passenger will thank you for allowing them to sit high enough to see easily over the panel. The asking price is $2,000 and we'll ship it free of charge. Contact me at flyboy0681@GMAIL.COM or call 954-755-8594





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

Mooney Cover


This cover will fit a newer, long body Mooney. Asking $600 (When new, these covers cost $1,149), Contact Jason Herritz at Chandler Aviation, Inc. 480-732-9118 parts@chandleraviation.com

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

1978 Mooney 201VL
$ 92,500
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