The Mooney Flyer

The Official Online Magazine for the Mooney Community

www.TheMooneyFlyer.com

August 2017

Editors
Phil Corman
Jim Price

Contributing Writers
Bruce Jaeger
Bob Kromer
Tom Rouch
Paul Loewen
Geoff Lee
Linda Corman

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Features

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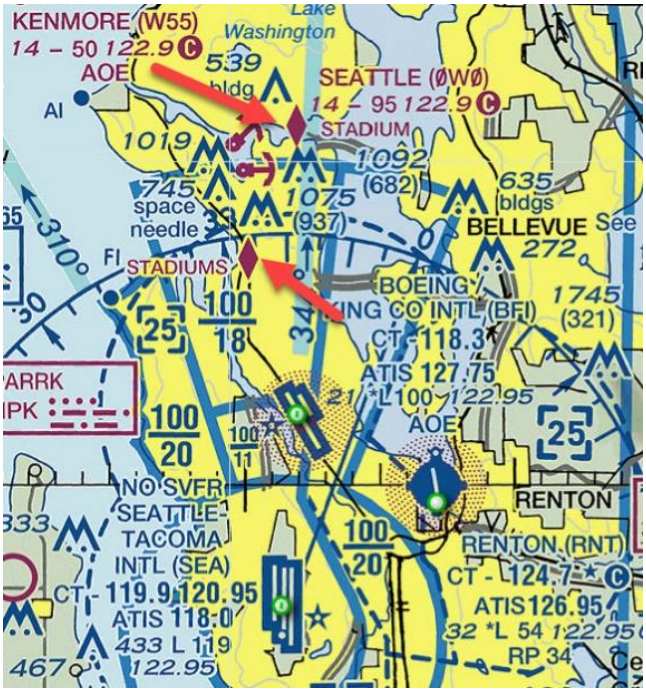
CONTINENTAL MOTORS GROUP MANDATORY SERVICE BULLETIN UPDATE

Mandatory Service Bulletin MSB05-8B (camshaft gear) downgraded to non-mandatory, FAA will not issue AD. This is great news. This MSB was issued over an older Camshaft Gear that would have costs 520 & 550 engine owners a lot of money. Ironically, in over 53 years, there has only been 1 gear failure so it certainly appeared that CMG was overstepping and hurting a lot of Mooney & Cirrus Owners. The FAA has declined to convert this to an Airworthiness Directive (AD) and CMG has re-issued the Service Bulletin as non-mandatory. Thanks to Mike Busch of Savvy Aviator for his leadership on this topic.

NEW SYMBOL ON VFR CHARTS

Looks like the FAA has changed the symbol for stadiums. Not to be confused with “diamond ski runs”.



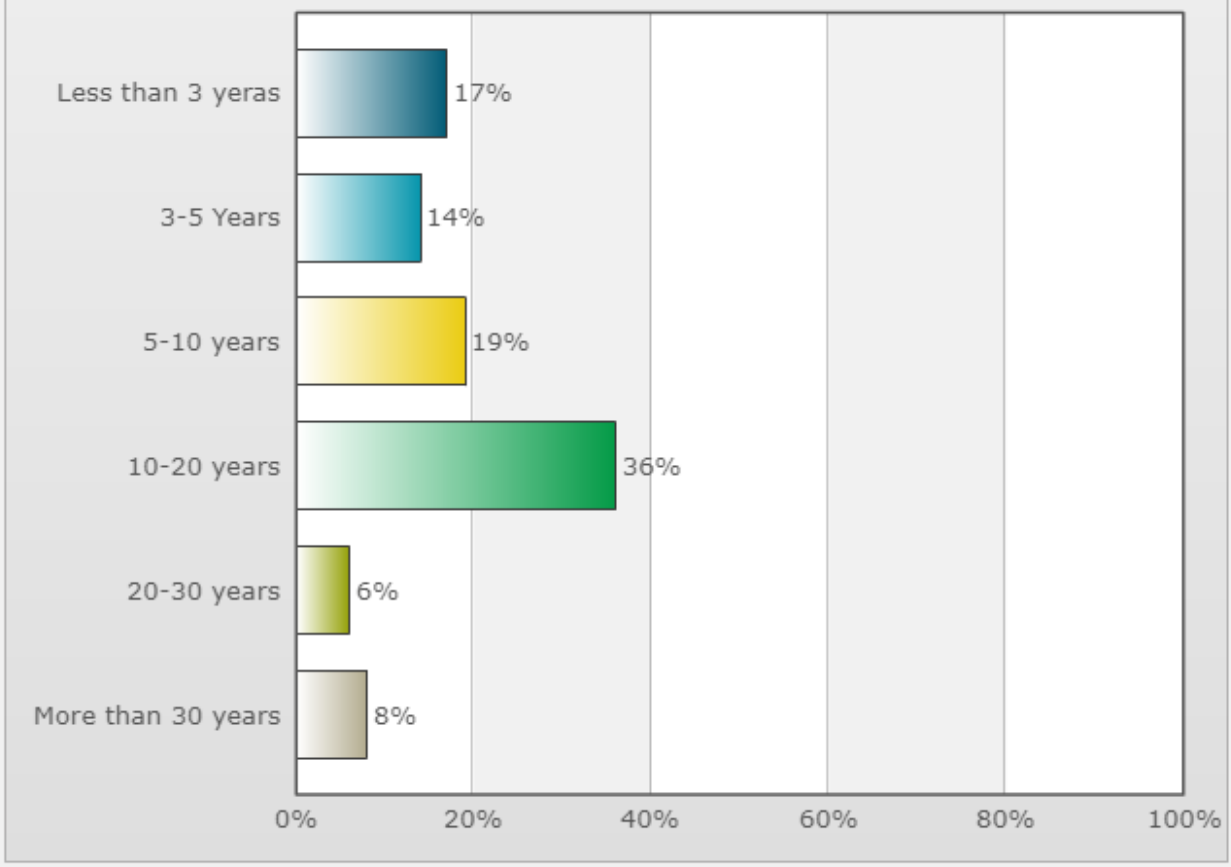
ADVERTISING IN THE MOONEY FLYER

We are pretty excited with the response our advertisers are getting. Several have called or written us on the success. One quote was “The majority of my calls/inquiries and business are coming from The Mooney Flyer”. Another advertiser indicated that they had no calls on their new business until they advertised in The Mooney Flyer. Give us a try, it may just help your bottom line.

I've owned my Mooney for:

Poll created by Phil Corman on 04/25/2017

Poll Results



Next month's poll:"If I didn't own a Mooney, I'd own a…". **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

From Baja Bush Pilots – Outstanding job on The Mooney Flyer! Best General Aviation Magazine that we have seen!

RE: Privitization -- It is a pleasure to read The Mooney Flyer magazine every month. I own a Mooney M20J and I am French Canadian, based in Montréal, Québec. So this can explain my poor English ☺

I read your article about the privatization of US ATC and I also read a lot about that in the past. In Canada, as you know, the government is not in charge of ATC as it is performed by NAV CANADA, which is a non-profit company. That means they can't make money. So all the money they make has to be put back into the company.

Our system is great and no charge for ordinary people that are not flying (not a penny is coming from our government).

I do not think our system is safer. As you stated in your article, the USA system is as safe as any other one. It is more about how much your system costs and how effective it is. Keep in mind that Canada is a very, very big country with little private owners and we do have the same service throughout Canada. Can you imagine what kind of service you guys could have in your very populated country.

The cost for a private pilot is about 78$CA per year for NAV CANADA. This gives us unlimited access to ATC, flight planning, flight following, etc..... TO be honest, it is very inexpensive.

Thanks, and please continue to write nice articles. There are a lot of French Canadian pilots and Mooney owners that like to read The Mooney Flyer!

Best regards
Alexandre F

RE: Descent Planning - I always enjoy reading the Mooney Flyer. In July you had articles about descent planning and slowing the aircraft. I use a different approach that, at least for me, involves a little less math. At 120K ground speed, I'm covering 2 NM/minute. At 150K it is 2.5 miles and at 180K it is 3 NM. Since I like to descend at 500 FPM, it will take twice those mileages to lose 1000'. **Since I usually cruise and descend at 150 KTAS, for no wind it will take me 5 miles to lose 1000'.** I'll look at the ground speed to see if the winds are a factor and adjust accordingly. **Assuming 5NM/1000', if I have 7000' to**

lose, I'll start down 35 miles out (5 x 7), terrain and airspace permitting. For my J, I roll the RPM back to 2200-2300 **and keep the MP at 20" in the descent.** That seems to give me about 150 KTAS. It does require pulling the throttle back periodically during the descent. **When I'm planning a visual pattern, I'll simply plan my descent to arrive at the airport at field elevation. By doing that, I'll level at pattern altitude about 5 miles from the field.** If I'm making a straight in, a normal glide path will only require 3 miles to lose 1000'. **That means I have at least 2 miles in level flight to slow the plane below gear speed.** If I'm headed for a 45, I have even more time. **When I level, I'll pull the MP back to 15".** I have no problem being at about 110 KIAS after 2 miles of level flight.
Bob P

Thanks for your help with the new salvage business---I'm getting calls already!
Thanks, **Paul Loewen**, ***LOEWEN'S MOONEY SALVAGE***

Editors Note: Several Advertisers have told us that they are getting more calls & business from ads in The Mooney Flyer, than from any other magazine. We love it. The Mooney Flyer is working.

Applaud the effort you and Geoff Lee have made to prevent stall spin accidents in the pattern.
Here are a few equations and numbers that are useful for determining rate of turn and distance for different bank angles and speeds.

V = Velocity in knots
B = Bank angle in degrees
Rate of turn (degrees/sec) = (1092.5*tan (B))/V
Radius of turn (feet) = V^2/(11.26*tan (B))
Accelerated stall = SQRT (weight/gross weight)*SQRT(1/cos(B))

(Rate of turn, Radius of turn)

B V->	80	90	100	120
10	2.4, 3223	2.1, 4080	1.9, 5037	1.6 7253
15	3.7, 2121	3.2, 2685	2.9, 3314	2.4 4773
20	5.0, 1561	4.4, 1976	4.0, 2440	3.3 3614
25	6.4, 1219	5.7, 1543	5.1, 1905	4.2 2742
30	7.9, 988	7.0, 1245	6.3, 1538	5.3 2215
35	9.6, 812	8.5, 1027	7.6, 1268	6.4 1826
40	11.5, 677	10.2, 857	9.2, 1058	7.6 1524
45	13.7, 568	12.1, 719	10.9, 888	9.1 1279
60	23.6 328	21.0 415	18.9 513	15.8 738

Accelerated stall at gross weight (2740) for the J

B	Vso(0)	Vso(15)	Vso(33)
0	63	57	55
15	64	58	56
20	65	59	57
25	66	60	58
30	68	61	59
35	70	63	61
40	72	65	63
45	75	68	65
60	89	81	78

Reduce stall speed by 10% at weight of 2200.

Best regards, **Boyd Wilson**

The POH vs. Commercial, Off-the-Shelf Checklists

by Jim Price

In a recent Safety Alert for Operators (**SAFO 17006**), the FAA warned pilots of the risks of using checklists, other than those contained in the manufacturer's Pilot Operating Handbook (POH)/Airplane Flight Manual (AFM). Using a checklist that does not match the checklist in the POH/AFM not only raises safety concerns, but could also contribute to flawed procedures.

Why the Safety Alert? Recently, a pilot used a commercial off-the-shelf (COTS) checklist that omitted certain steps, significantly contributing to the pilot's inability to fully extend his aircraft's malfunctioning landing gear. Upon landing with the gear partially extended, the aircraft suffered a landing gear collapse and sustained substantial damage. The accident investigation "found that the COTS checklist did not match the manufacturer's checklist relating to the landing gear failure and manual gear extension… Further, [a] CAUTION statement in the POH/AFM was not present on the COTS checklist."

You're probably thinking, "Aren't some Mooney Pilot Operating Handbooks large and bulky? If I have a problem, finding the correct procedure in a timely manner may take forever. Well, it may seem like forever!"

Invariably, Commercial Off-the-Shelf Checklists are not perfect. They are small and compact and when it comes to Emergency Procedures, perhaps in the interest of brevity, some things are not included. In addition, the procedures may not be specific to your exact model or serial number. For instance, let's look at the "Alternator Low Voltage" procedures found in the M20K 252 POH.

SECTION III
EMERGENCY PROCEDURES

MOONEY
MODEL M20K

ALTERNATOR LOW VOLTAGE (Voltage warning light flashing)

Alternator Field Switch(es) . . . . . OFF then ON
If warning light still flashing, the following are required:

Alternator Field Circuit Breaker . . . . . PULL
Non-essential Electrical Equipment . . . . . OFF
LAND as soon as PRACTICABLE.

Now, let us compare those procedures to those found in a Mooney M20K 252TSE COTS.

LOW VOLTAGE	
Alternator Field Switch	OFF / Verify problem
Ammeter	Confirm discharge
Alternator circuit breaker	PULL / Verify
Electrical Load	Reduce/Land soon
NOTE: Landing gear lights will not be visible after complete electrical failure	

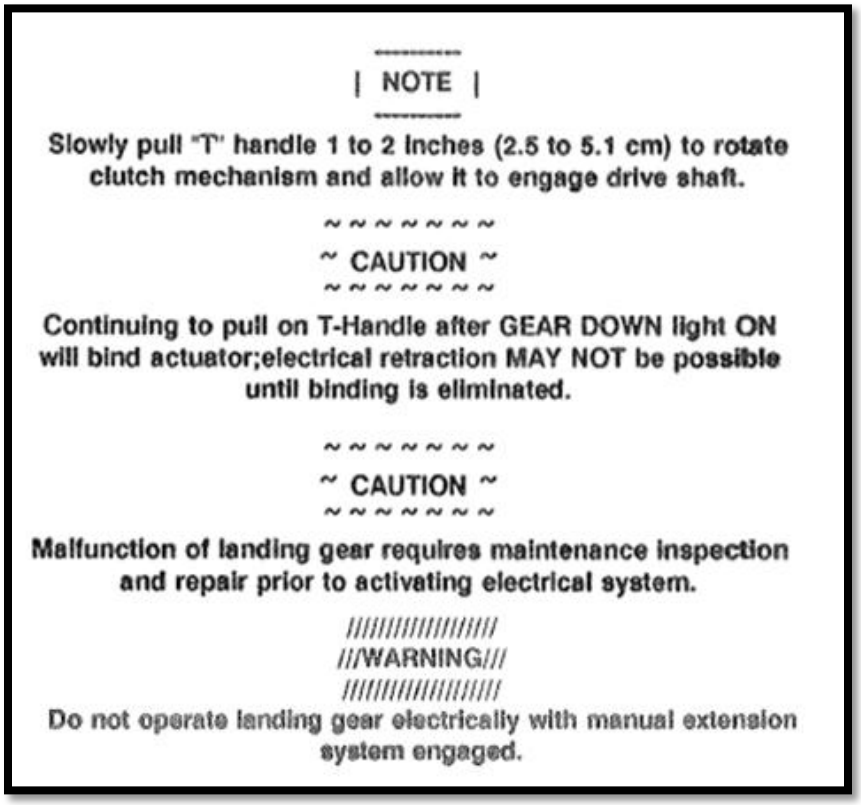
Not exactly the same are they? Nope. Not even close!

What happens if you experience an Overvoltage? This particular COTS calls it "Excessive Rate of Charge". Unlike the POH, it doesn't address the annunciator "steady" illumination and omits the POH's first step, "Avionics Master ---- OFF". This can add confusion and destroy confidence.

One of the Mooney M20K 252TSE COTS includes manual gear extension procedures (MGEP) that are basically correct. However, it advises the pilot to "Crank Clockwise". My 252 does not have a crank, but it does have a T-Handle that one pulls 12 – 20 times to get the gear down.

Unlike the subject of the "FAA Safety Alert for Operators" cited at the beginning, I could quite possibly manage the MGEP without incident if I was familiar with the extension process.

In addition, there are many important Manual Gear Extension NOTES, CAUTIONS and WARNINGS in the POH (shown below), that were not included in my COTS.



NOTE

Slowly pull "T" handle 1 to 2 inches (2.5 to 5.1 cm) to rotate clutch mechanism and allow it to engage drive shaft.

~ CAUTION ~

Continuing to pull on T-Handle after GEAR DOWN light ON will bind actuator;electrical retraction MAY NOT be possible until binding is eliminated.

~ CAUTION ~

Malfunction of landing gear requires maintenance inspection and repair prior to activating electrical system.

///WARNING///

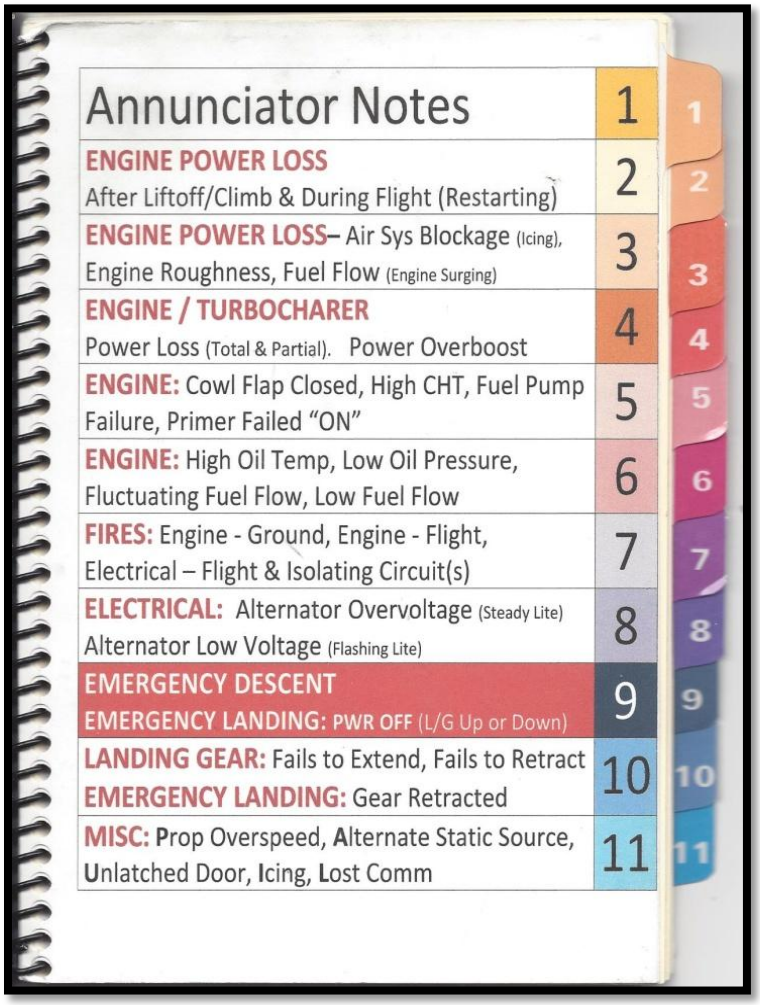
Do not operate landing gear electrically with manual extension system engaged.

Those are just a few of the many discrepancies you can find when comparing the emergency section of your POH with a COTS.

What about normal procedures, such as before takeoff? The commercially developed checklists are basically good, but once again, they leave out some checks, plus many NOTES, CAUTIONS and WARNINGS. For instance, my M20K has two alternators and checking both of them is indicated in the BEFORE TAKEOFF area of the POH, but not in my Mooney M20K 252TSE COTS.

One particular **Mooney M20K 252TSE COTS** does include a lot of handy information, such as:

- TAF/METAR codes
- Day and Night VFR weather minimums in A, B, C, D, E, and G airspace
- PIREP format
- Density Altitude chart
- VFR cruising altitudes
- A Weight and Balance calculation
- Crosswind component chart
- Temperature conversion (C and F)
- Speed conversion (MPH and KTS)
- Distance conversion (SM, NM and KM)
- Time zones and Zulu conversions

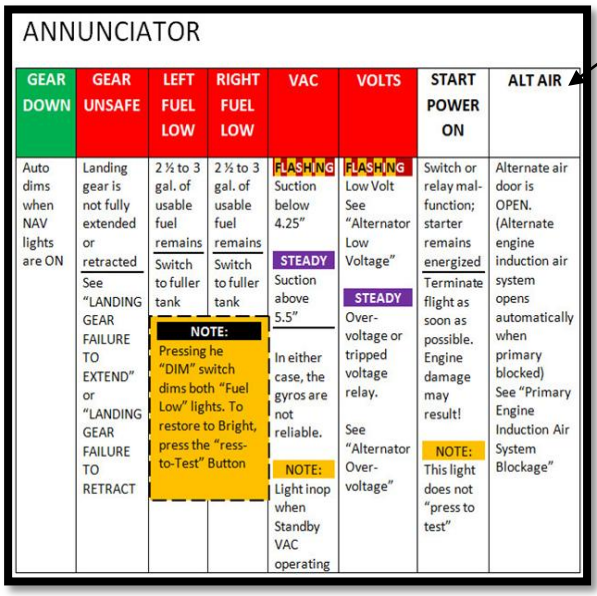


The Quick Reaction Handbook or QRH

While flying for Northwest airlines, I grew accustomed to the easy-to-use checklists and our dear friend, the QRH. Recognizing that pilots could not recall all the emergency procedures, Northwest developed the QRH so that pilots could, with confidence, quickly find abnormal or emergency procedures and follow the appropriate steps.

I knew it was amazing, so I developed a QRH for my Mooney M20K 252TSE.

My spiral bound QRH is 5.5" (14 cm) **x** 8.5" (21.5 cm), the size of a piece of paper that has been folded in half lengthwise. This makes it easy to store in the aircraft side pocket.
Tabs, which I cut to fit the QRH, help me find the sections quickly.


ANNUNCIATOR

GEAR DOWN	GEAR UNSAFE	LEFT FUEL LOW	RIGHT FUEL LOW	VAC	VOLTS	START POWER ON	ALT AIR
Auto dims when NAV lights are ON	Landing gear is not fully extended or retracted See "LANDING GEAR FAILURE TO EXTEND" or "LANDING GEAR FAILURE TO RETRACT	2 ½ to 3 gal. of usable fuel remains Switch to fuller tank NOTE: Pressing he "DIM" switch dims both "Fuel Low" lights. To restore to Bright, press the "ress-to-Test" Button	2 ½ to 3 gal. of usable fuel remains Switch to fuller tank	FLASHING Suction below 4.25" STEADY Suction above 5.5" In either case, the gyros are not reliable. NOTE: Light inop when Standby VAC operating	FLASHING Low Volt See "Alternator Low Voltage" STEADY Over-voltage or tripped voltage relay. See "Alternator Over-voltage"	Switch or relay mal-function; starter remains energized Terminate flight as soon as possible. Engine damage may result! NOTE: This light does not "press to test"	Alternate air door is OPEN. (Alternate engine induction air system opens automatically when primary blocked) See "Primary Engine Induction Air System Blockage"

Section one of my QRH, explains all the annunciator lights, with notes from the POH.
Sections two through eleven contain emergency procedures, which are arranged according to systems and events, such as ENGINE POWER LOSS, ELECTRICAL, FIRES, LANDING GEAR, etc. Every emergency procedure found in the POH is reproduced verbatim and includes all the NOTES, CAUTIONS, and WARNINGS.

The Airline QRH

When an Airline pilot calls for the Dual Engine Failure and Ditching checklists, can you imagine the First Officer opening the massive Aircraft Operating Manual (AOM) (see red arrow) in search of the procedures?

When things go south, Airline Crews have immediate access to a comparatively compact QRH (see black arrow), with step-by-step procedures and notes that are right out of the AOM.

My Story

Friday, July 7th, 2017, my wife Gerry and I were returning to Chandler, AZ (KCHD) after visiting family and friends in Idaho and Utah. While on an extended left base to runway 4 left, I moved the gear switch to the down position and nothing appeared to be happening. A look at the blank GEAR DOWN annunciator confirmed that the gear had not extended. I tested the annunciator lights and all the appropriate lights illuminated. I notified the tower controller that I could not extend my gear and that I would need a place to "sort it out".

I was told to climb a mere 300 feet and that I could circle the airport for as long as I needed. In addition, the controller confirmed that my landing gear was not down.

While climbing, I grabbed my QRH from my side pocket, opened it to tab 10 and asked Gerry to read the **LANDING GEAR: FAILS TO EXTEND ELECTRICALLY** procedure. Because Gerry was carefully reading the checklist, she felt involved and didn't have time to be nervous. In the time it took us to circle the airport once, we were able to successfully complete the procedure. Get out the party hats! We now had an illuminated "GEAR DOWN" annunciator light. Per the QRH, I checked the visual Gear Down Indicator (on the floor) to ensure that it too, was aligned and illuminated. It was! On downwind, we had confirmation #3, when the controller announced, "Your landing gear appears to be down."

We landed safely and taxied to the hangar because our CHD Mooney Service Center, Chandler Aviation, was on holiday that week. Monday, the belly pan was removed and Frank Setzler discovered that a "wire had disconnected from the gear down limit switch splice connection."

This was the first time since I started flying nearly 48 years ago, that I had needed to manually extend the gear on ***any*** aircraft. Yes, I have lived a sheltered and fortunate life.

I was able to follow my QRH with confidence, knowing that the procedures, NOTES, CAUTIONS, and WARNINGS were verbatim from my M20K 252 POH. ***Fly Safe***

PHIL CORMAN

LANDING GEAR FAILS TO EXTEND WHAT'S NEXT?

This happens more than you might think on our Mooneys. It has happened to me and it has happened to my Co-Editor, just to name a few. My case was in my M20S Eagle several years ago. We were departing Camarillo, CA (KCMA). While climbing out, I retracted my gear and there was a huge clunk. I circled and the tower informed me that my right main gear was exended, while the other two were retracted. After a few tries, the gear came down.

Recently, Jim's landing gear neglected to extend electrically. In Jim's case, he had to extend the gear manually.

Both examples ended in happy landings. In my case, the cause was that a critical bolt had not been safety wired. Neither LASAR or Top Gun Aviation had heard of such a problem. The bolt backed out and caught on a cross member. I brought the plane to LASAR and Robert Brown told me to go look at a J's landing gear. Sure enough, the very same bolt was not safetied. Go figure.

Regardless, what do you do when it's time to land and your gear remains tucked up under the wing and nose cowling? When it first happens, mild panic sets in. But after a bit, our training and experience takes over.

For Electrical Gear, it's pretty simple:

- ✓ Pull the Landing Gear Actuator CB
- ✓ Set the Landing Gear Switch to Down
- ✓ Slide the Manual Gear latch forward and Lever back
- ✓ Pull on the T-handle 1-2 inches to engage the clutch
- ✓ Pull 10-20 times until the gear indicators show down & locked.

Remember, do NOT operate the landing gear electrically while the manual system is engaged or you will make a bad situation worse.

Next time you have your Mooney on jacks, why not go through the emergency/manual extension process with your mechanic! It's free and you won't have to go looking for the Circuit Breaker or guess how to engage the manual clutch while flying. Hope for the best, plan for the worst.

Latest

MOONEY INTERNATIONAL CORPORATION **SERVICE BULLETIN**

Click DL to Download the latest Service Bulletin from Mooney.com

M22	M20	M20A	M20B	M20C	M20D
M20-314A 2012, 29 Feb DL	M20-318 2014, June 2 DL	M20-318 2014, June 2 DL	M20-318 2014, June 2 DL	M20-318 2014, June 2 DL	M20-318 2014, June 2 DL
M20E	**M20F**	**M20G**	**M20J**	**M20K**	**M20L**
M20-318 2014, June 2 DL	M20-318 2014, June 2 DL	M20-318 2014, June 2 DL	M20-325 2016, Dec 14 DL	M20-325 2016, Dec 14 DL	M20-325 2016, Dec 14 DL
M20M	**M20R**	**M20S**	**M20TN**		
M20-325 2016, Dec 14 DL	M20-327 2017, Mar 22 DL	M20-322 2015, June 23 DL	M20-326 2017, Mar 6 DL		

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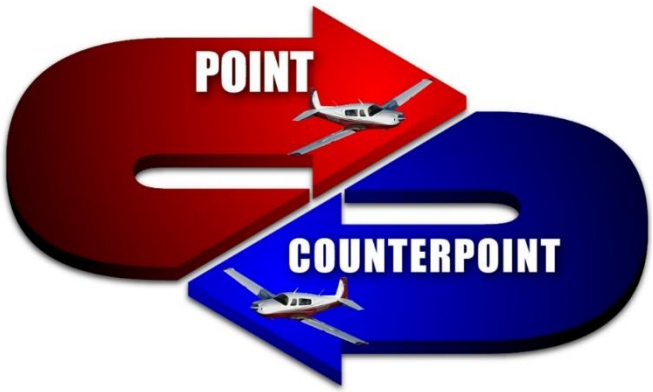


SAY MORE VS SAY LESS

The radio frequency is a shared resource and when one pilot is talkative, safety is adversely affected. Nobody else can report.	Communication is essential. It is better to say more than leave something important out.
My first pet peeve is someone who clicks the transmit button and then decides what to say. It goes something like this. “Airport traffic, this is blue & white Cirrus N, we are, ahh, 10 miles away, I think nort. We are at, aah, about 5,000’, and we are landing airport x.”	All the useful information is there. What’s your beef?
The pilot should have said, “Airport traffic, Cirrus N is 10 N landing R/W x, left traffic”. More info, less words.	OK. That makes sense, but I still don’t see the big deal.
How many times should a PIC report his or her position when approaching a non-towered field?	I call 20 miles, then 10 miles, then 45^{o} entry, then established on downwind, base, final, and short final.
Maybe if there are a gazillion aircraft in the pattern, but 5 miles out seems enough, then 45, downwind, base and final. Again… less is better.	We can agree to disagree.
How about the guy that is on the ground at parking and is going to taxi to the fuel depot. Why tie up CTAF with a 5 mph taxi, when airplanes are barreling through the traffic pattern at 125kts!	Maybe you haven’t heard about taxiway incursions.
Radio is not necessary on the ground except to enter/cross runways.	So are you for/against letting other planes know when you exit the runway?
That is important, especially for departing aircraft who may not see an airplane on the runway at a distance.	Let’s talk about enroute radio. When handed off to another sector, I say, “Mooney N, checking in with you at 13.5”
Not horrible, but I see two areas of improvement. The first is “Checking in” is superfluous and actually irritates some ATC folk”. Second, you indicate altitude with “one three thousand five hundred”.	Nit picking I think. How do you call ATC initially for Flight Following. I call “xyz Center, Mooney N at 5,000’ 7.5 miles SE KPRB requesting Flight Following.”
Not bad, but I believe the initial request should only indicate “xyz Center, Mooney N, VFR Request”. Again, you are not tying up frequency and ATC will get back to you when able.	

Send your questions for Tom to TheMooneyFlyer@gmail.com

3 Questions:

1) What are the most common things that go wrong with the landing gear that's actuated with a Johnson Bar?
2) What are the most common things that go wrong with Electric Landing Gear?
3) What is a "squat switch" and are these used on Mooneys?

The Answers:

I always like discussing landing gear actuator problems. The biggest problem of all, and one that helps my business, is when the pilot forgets to lower the gear down. If my memory is right, one year *Top Gun Aviation* repaired five Mooneys that had landed "gear up". There is a common problem associated with both the manual and electric gear, and that is, Mooneys don't have a mechanical downlock. This should grab everyone's attention. The gear is held down by preload, using spring tension to keep the gear down. Checking the preload, which requires special tools, is part of the Annual Inspection. We frequently find airplanes that have improper preload settings and the most scary of all, sometimes no preload. The most common accident occurs during a crosswind landing, which puts a side load on one gear and then it folds. Sometimes the damage is limited to the folded gear and associated wing. But, when one gear folds, all preload is lost and all the landing gears can collapse. Sometimes landing on the nose gear first will bend the nose gear rods. The nose gear goes under, but the mains can collapse too, since the preload is gone.

Manual Gear Problems are Usually caused by Lack of Proper Maintenance. This gear is so simple and "trouble free" that it's ignored during the Annual Inspection. However, the up-lock mechanism can become so worn that eventually, upon landing, the gear handle will pop out, allowing the gear to retract. That's why you don't want to leave your hand in front of the handle, because if the gear

handle suddenly pops out, it could break your wrist. Additionally, the gear handle can become so worn and rusty, that it can actually break off, especially if the gear system is worn and extra pressure is needed to operate the system.

The Electric Gear Models have Problems that Usually Involve the Up/Down Switches.
The job of both switches is to shut the motor off at the end of the retraction/extension, and turn the gear light on/off. This is done by having two micro switches inside one assembly. and results in a common problem many Mooney owners have seen. You lower the gear and it comes down, but there's no light. You then verify the gear is down by checking the visual gear down indicator on the floor. Pretty clever, huh! What caused this? The two switches in the assembly don't wear evenly, so one closes before the other. We have replaced dozens of these switches throughout the years. The switches have improved, so if the originals have been replaced, it is a rare problem. The early Mooneys have Dukes and ITT actuators. These are a real problem today, since we can't get parts, except for the updated gear kits (40:1). Most commonly, the disengage unit that allows the manual extension crank to engage, happens to be a high wear item, and we have no parts available. We have had to retrofit newer gear actuators to older models because of lack of parts and have almost used everything in the salvage yards.
Since 1977, Mooney has used a linear jack screw actuator, which is a much more reliable system. While there are several manufacturers, all are interchangeable. Later models are 24 volt, but the motor is easy to change so you can put a newer actuator in an older model, just by changing the motor.

The No-Back Clutch Spring
These newer models have a common problem with the no-back clutch spring, which is recommended to be changed every 1,000 hours of aircraft time. A no-back clutch spring is what keeps the gear up when retracted. It keeps the gear from unwinding after the gear up switch shuts off the power.
I have dealt with planes that have a broken no-back clutch spring. Most of these had Plessey actuators, which were used in the late 90s. These use a slightly different spring from all other actuators. The Plesseys are now obsolete and their no-back clutch springs are not available. A later problem we have found on the Eaton actuators is chipping of the jack screw. While difficult, I have been able to buy a new jack screw. I don't know current prices, but I do know that a new actuator is well over $10,000.

If the no-back clutch spring breaks while retracting the gear, the gear will not go down for landing. If it breaks during extension, the gear will go down, and probably hold the gear down. You probably won't know that the no-back clutch spring is broken until the next flight when the gear won't retract. The main defect in this gear system is that the emergency extension depends on an intact no-back clutch spring. Another problem with the newer actuators is the wear on the emergency extension cable. It is Teflon coated and the Teflon can tear and peel loose and that loose Teflon can actually jam the actuator. It actually happened during a practice emergency landing gear extension.

The Emergency Clutch
The other wear item is the emergency clutch, which is made out of soft brass. If the emergency cable is not rigged correctly, this may allow partial connection of the emergency clutch to the actuator drive gear, which causes the brass on the emergency clutch to wear off, and the clutch will not engage.

What is a "squat switch"? It is a switch mounted on one main gear that completes the electrical circuit to the gear actuator, so you cannot operate the gear on the ground. On takeoff when the weight is off the gear, the switch closes, allowing you to retract the gear. This system is used on many different aircraft, but only on a few Mooneys. The main Gear Safety System on most Mooneys, and all Mooney models since 1977, is an airspeed safety switch. Mounted in the airspeed line to the airspeed indicator, it is set at about 65 to 75 knots, depending on the model, to prevent retracting the gear at too low an airspeed. The airspeed safety switch is to be checked during the Annual Inspection.

I have covered a lot of info this time, so if you have some questions, email me at TheMooneyFlyer@gmail.com, and I will be glad to provide more details.

WHY DO WE DO THESE THINGS? WHY DON'T WE DO THESE?

By Phil Corman

Pilots are capable people, possessing a good understanding of Aerodynamics, which in turn, requires an understanding of Mathematics and Trigonometry. It requires intense planning to safely conduct a flight. Additionally, a pilot must be intimately knowledgeable on the specifications of the airplane about to be flown. He/she needs to understand what an Airworthy Airplane means and how to verify that the aircraft is indeed airworthy before taking to the sky. The pilot must know the FAA regulations and all data pertinent to a safe flight. A pilot must know what to do when things don't go "as planned" in the airplane. Sometimes, this can involve analyzing, checking, etc., while other times, the airplane demands an almost instantaneous response. And much more…

This article tries to identify why pilots with so much knowledge and so many skills, sometimes do "dumb" things, while other times they do "dumb" things by not taking appropriate action. The question is why?

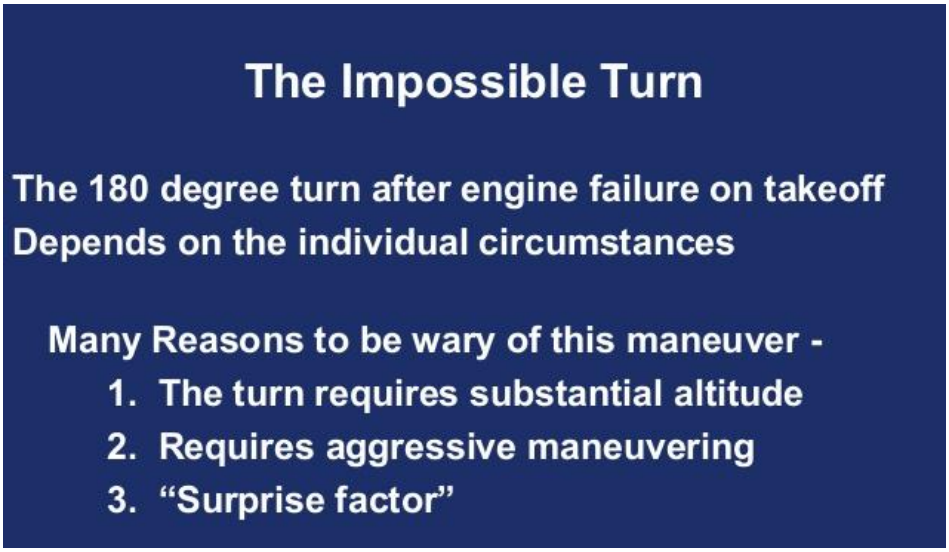
Why Don't we Go Around?

Elsewhere in this issue my editing partner, Jim Price, writes about a failed go-around. In other cases, pilots have failed to initiate a go-around and "forced a landing". Why is this, and what is the right decision that we need to make every time?

We all like to think we are excellent pilots. But in truth, your pilot certificate is simply a "license to learn". Excellent pilots are always students of aviation. If we think we are already excellent, then that attitude may lead to complacency or "I don't need to go-around. I will correct the error and land". And if you get away with this enough times without incident, bad decision making is somewhat reinforced.

The correct thinking for every landing is to plan for a go-around in your mind. Landing is Plan B, and only if everything is correct. What makes a go-around desirable? Well, clearly if there is another plane or vehicle on the runway, duh – Go Around. An animal near the runway, Go Around. Not lined up on short final, probably go around. If you porpoised, go around (or risk a prop strike and engine tear down). We think if your approach is not stabilized, you should go around. Stabilized means the proper descent rate, proper airspeed, etc. If your airspeed is too high based on weight, you could float into the next county. If you are too fast, you could make a bad decision and force your Mooney to land. A good adage to remember is that "No Mooney will lift off or touchdown until the proper airspeed is reached."

Psychologically, some pilots feel that initiating a go around is some kind of failure; a chink in their pilot armor. At The Mooney Flyer, we feel that making a decision not to go around when the situation warrants it, is a chink in the pilot's armor. Go around and put five more minutes in your logbook. Your Mooney, you and your passengers will benefit.



Why do we Try "The Impossible Turn"?

The vast majority of the time, trying to get back to the airport after an engine failure is NOT the correct decision. Yet every year, we see fatal accidents, often the result of a stall/spin. We all know Mooneys don't recover from a spin at any altitude.

So why do pilots try it? The answer is, because they think they can. The other driving factor goes something like this: "If I can get back to the runway, I can save my Mooney". This is not correct thinking. When your engine fails you, your first three priorities are: Survive, Survive, Survive. Adopt the attitude that the moment your engine fails, your insurance company owns it. Your job is the survival of all those on board. So why try "The Impossible Turn"?

In the vast majority of the cases, you should be looking for the best place to land within an arc of 30^{o} left to 30^{o} right of your current heading. You probably do most of your departures at your home airport. It's smart planning to already know the best places to land should you experience an engine failure on takeoff. You will save precious time if this is already known. If not, check out the departure end of a destination airport when in the pattern to land. When taking off from South Lake Tahoe (TVL), flying south, it appears that you are confronted with inhospitable terrain in every direction. (Yes you are! You are flying in the Sierra Nevada mountains). There is a golf course off the departure end of the runway. Sweet… But you have to know it is there beforehand, or you will lose precious time and perhaps an opportunity to land there.

If you are above pattern altitude and the winds are supportive, you can try turning back. Do you know how much altitude you will lose in a 210^{o} degree turn? If the engine quits completely, do you know that you MUST aggressively push the nose of your Mooney down? It will stall quickly if not. Go try all this with an instructor at a safe altitude and you will be surprised. Remember, you are expecting your instructor to pull the power and so you're ready. When you have an engine failure, you will not be expecting it. As a result, a few bad things will happen. First, you will subconsciously deny the problem for maybe 1-2 seconds (Bad!). Then you will start to think, instead of instantly reacting with an aggressive nose down. After all, engine failures are rare and we are not anticipating them.

Why do we fly VFR into IMC Conditions?

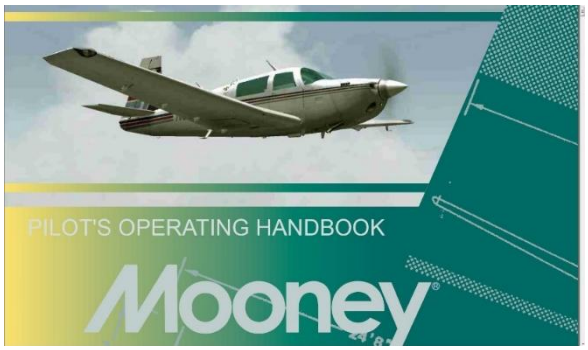
This is a great question, because for a VFR pilot who enters IMC (Instrument Meteorological Conditions), the time before impact is measured in only a few minutes. Nevertheless, year in and year out, we read about this. Why? We all were taught the correct response. Execute a standard 180^{o} standard rate turn and get back to VMC (Visual Meteorological Conditions).

Again, there are two primary reasons for not doing the correct and simple response. The first is that pilots believe that the **IMC is a temporary phenomena**. Perhaps it's a cloud and I'll pass through it in a short time. Or, by climbing or descending, I can get out of the IMC condition. Have you ever descended towards an airport, and the weather you see is dismissed as haze. Have you thought, "I can see the ground, so this will be over in a few minutes"? However, we know that statistics tell us otherwise.

A second reason is a variation of **"Get-There-Itus".** We are on a flight plan and if we divert, turn around or land, we will not get to our desired destination. **Get-There-Itus** is often a terminal affliction. The good news is that it can be cured without medication, diet, or exercise.

If you do enter IMC, and are not IFR certified, there's only one response: Execute a standard rate 180^{o} turn and rely solely on your Attitude Indicator, Turn Coordinator, Altimeter, and Airspeed Indicator until you're back in VMC.

Why don't we Always Use Checklists?

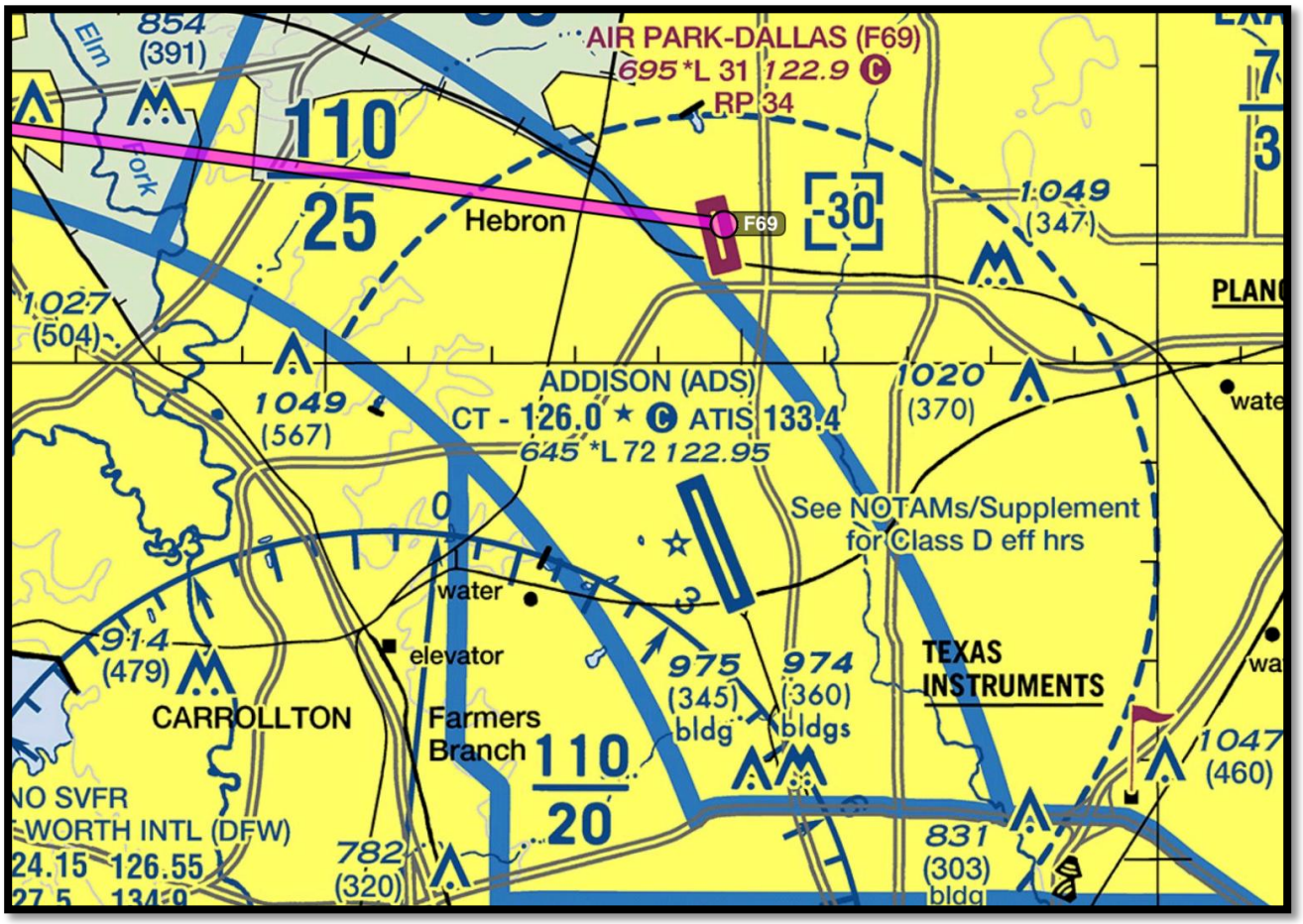


After owning a Mooney for years, we really do memorize many of the pre-flight checklists, and normal operating procedures checklists. But there is a big "Caution" sign out there, because when a pilot is distracted from his/her normal operating procedure, things go wrong! It might be a distraction in the pattern such as traffic. Without having a checklist, the pilot is taken out of their standard procedure and can forget things. The number one cause of gear up incidents is a distraction to the pilot. This can be fixed with adherence to Checklists. We don't do checklists every time? Why not? We thrive on redundancy. Why not back up our memories and avoid distractions with a checklist all the time.

In addition, what about Emergency Procedures? Because we hopefully have never needed them, we probably aren't on top of the contents of the Emergency Checklist. We recommend making a one-page Emergency Checklist on the back of your pre-flight check clipboard. Use the POH Checklists. Now they are at your fingertips. Using ForeFlight is also good, but paper is more reliable in an emergency.

Be the Best Mooney Pilot you can be…

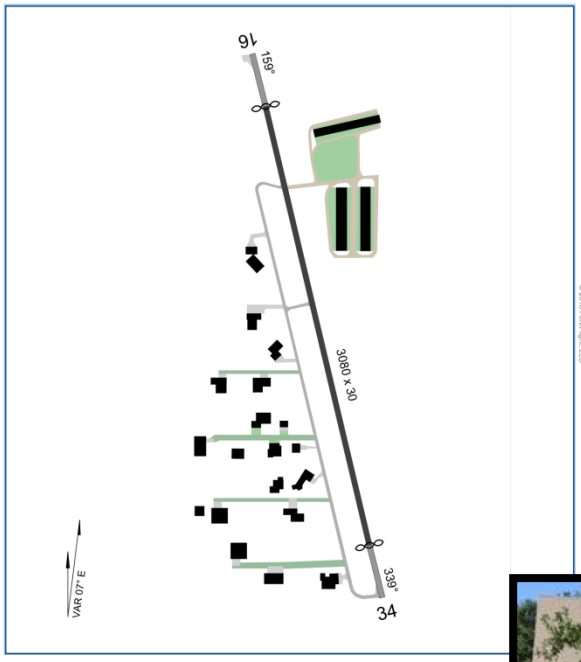
Accident: M20F Go-around at Dallas Airpark (F69)



May 1, 2016

The pilot utilized DUATS to obtain a preflight briefing for his VFR flight from Lubbock Executive (F82) to Dallas Airpark (F69). Clear skies prevailed throughout the flight.
Because F69 does not broadcast weather, approaching F69, at or about 10:45 am, he listened to the Addison (KADS) ATIS, which reported winds from 010 degrees, at 12 gusting to 24 knots. Depending on the gust, this would be a 6 to 14 knot crosswind.

A few miles from F69, Addison Tower directed him to switch to F69's Common Traffic Advisory Frequency (CTAF).



The pilot lowered the gear and flew a right traffic pattern for runway 34. The aircraft was "over the fence" at 85 mph.

The pilot explained that in the flare for landing, "I was crabbing and had the right wing low. When the right tire came back up off of the runway, I made the decision to go-around and try again. The throttle was advanced, the plane veered to the left and I was not able to regain control of the plane and flew through a fence on the left side of the runway where the plane came to an abrupt stop."

Both the pilot and passenger had minor injuries. The airplane sustained substantial damage to both wings.

The National Transportation Safety Board determined the probable cause(s) to be:

The pilot's failure to maintain directional control during the aborted landing in gusty wind conditions.

Go-Arounds

So what goes wrong during go-arounds? There isn't one single factor, but it often comes down to too many distractions, and not flying the airplane throughout the entire go-around.

There's no "right time" to go around, but in almost all cases, the earlier you go-around, the better. That's because the closer you are to the runway and the obstacles around it, like runway lights, runway signs, other aircraft, and fences, your chances of hitting something increases.

The Go-Around Procedure

Don't be startled!

Fly the airplane throughout the entire procedure and don't let it fly you.

- As your RIGHT hand smoothly advances the throttle to takeoff power, remember that the left yaw will increase. Therefore, your RIGHT foot should be doing its job; **keeping the aircraft on the runway centerline**.
- Trim as necessary, reducing pressure on the control wheel while you target **Vx**.
- If the flaps are down, retract the flaps to takeoff position – trim as necessary.
- Quickly glance at the VSI to ensure that you have a positive rate of climb, then . . .
    - Retract the landing gear – trim as necessary
    - Retract the flaps to UP – trim as necessary
- If you are clear of obstacles, target speed is now **Vy**.
- Climb to pattern altitude and try again.

If you'll practice a go-around every month, when the need for a go-around occurs, the startle factor will decrease significantly and the go-around procedure will be ingrained in your mind!
Fly Safe,
Jim

1)Navmonster Relaunch

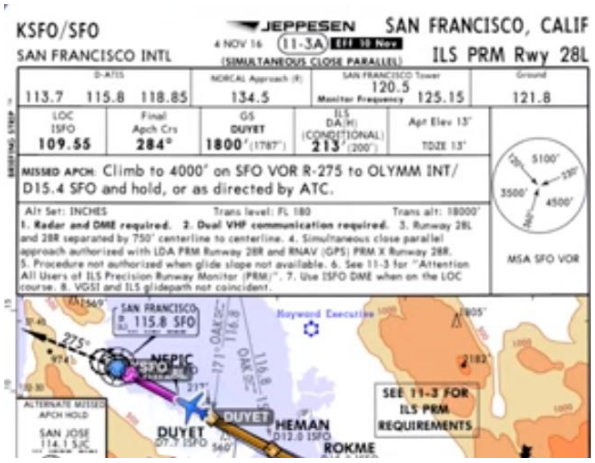
NavMonster, a free web-based application offering flight planning, weather, and airport airspace resources, has relaunched its website, along with a new, free app in the Apple store.

"As one of the early online general aviation weather and flight planning services, the NavMonster team is excited to restore this free service that lets pilots make the go/no-go decision due to weather quick and easy," said Manager Glenn Chiappe. "We had such an outpouring from previous users to bring back our product and we want to ensure we are consistently delivering better than ever." READ MORE

2) Introducing Scout

Scout is an affordable, pocket-sized dual-band ADS-B receiver for inflight weather and traffic on ForeFlight.
Only **$199** and available at Amazon.com.
To learn more, CLICK HERE See the Video

3) ForeFlight's Jeppesen Chart Option - $200/yr



Popular aviation subscription services merge to provide pilots with a powerful mobile solution.
The option allows ForeFlight users to view Jeppesen's departure, arrival, and approach charts within ForeFlight.
Once linked to ForeFlight, Jeppesen's charts can be viewed in multiple locations, such as the "plates view", the "airports view" or the "maps view". FAA charts will continue to be available, but Jeppesen's charts become the default for pop ups, such as taxi diagrams. To learn more, CLICK HERE

4) ADS-B Out Equipped?

Keep it on

FAR 91.215(c) allows that a transponder may be turned off in limited areas outside of controlled airspace.

However, 91.225(f) states “each person operating an aircraft equipped with ADS-B Out must operate this equipment in the transmit mode at all times.”

This means that while ADS-B Out may not be required in certain airspace until 2020, those who have already equipped must keep it turned on in all airspace.

5) Garmin Unveils Retrofit Autopilots for GA Aircraft

Garmin has introduced the GFC 600 and GFC 500, solid state attitude-based (AHRS-derived) autopilots for fixed-wing general aviation aircraft. The GFC 600 and GFC 500 incorporate a number of safety-enhancing technologies, including Electronic Stability and Protection (ESP), underspeed protection, overspeed protection, Level Mode, Flight Director (FD) and more, according to company officials.

The GFC 600 autopilot is intended for high performance piston single/twin-engine and turbine aircraft that have a wide range of aircraft speed and performance characteristics, while the GFC 500 is intended for less complex piston single-engine aircraft.

Built upon the performance of the GFC 700 autopilot, the GFC 600 and GFC 500 provide pilots with advanced autopilot capabilities at a lower price.

Not yet certified for the Mooney. Read more HERE

6) PS Engineering Enhancement

PS Engineering has enhanced two of its flagship audio control panels, the PMA450A and PMA8000G. CLICK HERE FOR MORE

7) Lycoming Mandatory Service Bulletin

Lycoming has issued Mandatory Service Bulletin 632 that requires owners to check their engines for connecting rods that contain bushings that do not meet Lycoming Engine's specifications within the next 10 hours of operation.

The bushings were manufactured between November 2015 to February 2017.

The Service Bulletin opens with a warning to owners: "You must complete the Required Action in this Service Bulletin. If you do not … and the connecting rod bushing moves out of place, the connecting rod can fail and cause un-commanded structural engine failure."

The Service Bulletin contains a list of engine serial numbers that may be affected. It then explains what needs to be done to correct the situation.

The company estimates the work to correct the problem could take 12 hours for a four-cylinder engine and up to 20 hours for an eight-cylinder engine. **Sadly, Lyc will not pay for the labor.** CLICK HERE for more information

8)

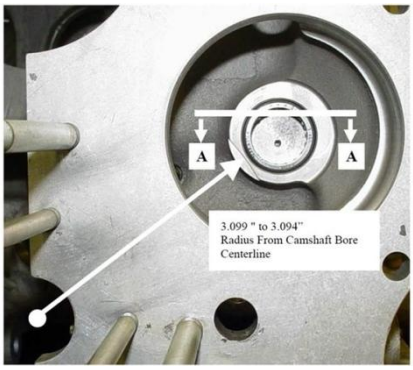
Summer ELT Promotion on the ELT 1000 with a ResQLink Personal Locator Beacon or a $75 Gift Card. Offer ends October 21st, 2017. CLICK HERE FOR MORE INFORMATION

9) Garmin's New UAT - $1,795

For mandate-compliant **ADS-B Out** (Jan 1, 2020), Garmin announced the **GDL82** UAT device. This is a small two-piece (remote box and GPS antenna) Universal Access Transceiver (UAT) with **built-in GPS**. It's intended for a streamlined installation because it integrates with the aircraft's existing transponder and the transponder antenna system.

Gamin announced, "This is a minimally intrusive ADS-B Out solution that avoids the cost and effort of modifying the instrument panel and is a turnkey, budget-friendly solution that's important to many aircraft owners."

10) Continental's Revised Camshaft Bulletin

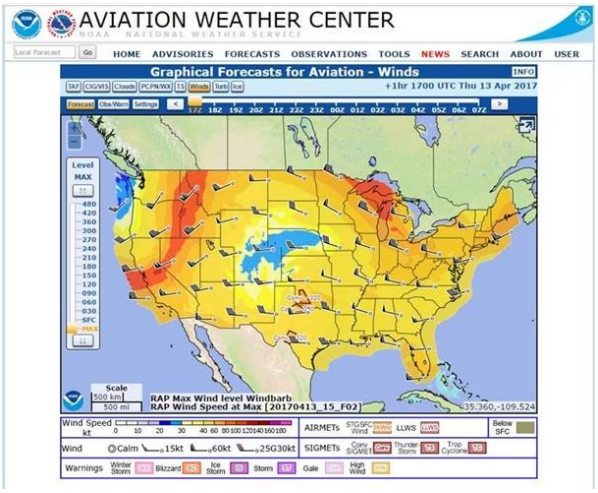


Continental Motors has published "far less onerous and costly" methods for owners of aircraft with Continental IO-520/550 and some IO-470 engines to deal with possibly faulty camshaft gear teeth compared to a controversial procedure the manufacturer put forward in a mandatory service bulletin published in March. CLICK HERE TO READ MORE

11) Garmin's New GDL 52/51

The **GDL52** is Garmin's flagship satellite data receiver, (to be released in the 4th Quarter of 2017), with an expected price of **$1,149**. Both the portable and panel-mount GDL 52 models can receive SiriusXM weather and music, as well as subscription-free traffic and weather via Automatic Dependent Surveillance-Broadcast (ADS-B). The **GDL 51** is available NOW and priced at **$649**. It's not an ADS-B receiver, but it can receive SiriusXM weather and music. With the purchase of either the 52 or 51, you can apply for a $200 rebate (pre-paid debit card) from SirriusXM. (Offer good through Dec 31, 2017). Both the GDL 51 and GDL 52 can feed data by wireless or wired connections, and each is compatible with the Garmin G3X touchscreen display, along with *aera 660*, and *aera 795/796* portables. The GDL 51/52 models can also connect wirelessly to mobile devices running the Garmin Pilot app, (iPad or Tablet). CLICK HERE TO READ MORE

12) NEW, Graphical Weather



Graphical Weather display will replace the Area Forecast in October. CLICK HERE TO READ MORE

13) Dynon Goes Certified!

On the pre-opening day of AirVenture 2017, Dynon Avionics surprised early showgoers with a new program allowing the installation of its popular Skyview HDX EFIS system into certified aircraft. Initial approvals cover the Skyhawk and Baron lines, but Dynon's Michael Schofield said that approvals will be expanded to other models.

The Skyview is a complete EFIS system, offering a primary flight display, multi-function display with moving map, ADS-B In and Out options, traffic and transponder and a backup D10A electronic gyro. For the time being, Dynon's comm radios are not included in the package, but Schofield said they eventually might be. The real eye opener is the price: about **$20,000** installed, to include an autopilot with limited envelope protection.

In this AVweb video (shot at Oshkosh), Schofield said the HDX will allow owners to rid their airplanes of vacuum systems in favor of the proven reliability of glass panels. CLICK HERE TO READ MORE

14)

Approved for Installation in Part 23 Aircraft Under NORSEE (Non-Required Safety Enhancing Equipment)

Authorization

CLICK HERE FOR MORE *smartPlane* INFORMATION

15) FlyQ InSight - FREE

FlyQ InSight is the new, 100% free, absolutely amazing augmented reality aviation app for the iPhone and iPad. Using just the camera in your device, it magically overlays live video with markers showing the position and distance of nearby airports! Never have trouble finding airports again, even in poor weather or night flying! Watch the video or read more about it.

If you already have FlyQ Pocket on your iPhone or iPad, simply open the App Store on your device and go to the Updates tab. You'll see an entry for either ***FlyQ Pocket*** or ***FlyQ InSight***. Click **Update.** Yes, FlyQ InSight is the new name for FlyQ Pocket so it includes all the same features as in FlyQ Pocket, such as detailed airport info, weather, fuel prices, airport diagrams, flight planning, etc.

If you don't have FlyQ Pocket, go to the App Store on either an iPhone or iPad (or both) and search for ***FlyQ InSight***.

16) Garmin's D2 Charlie

Garmin has introduced the D2 Charlie aviator watch, a timepiece that boasts global navigation information, moving maps and a host of connectivity options.

A moving map incorporates key landmarks, such as airports, Navaids, roads, bodies of water, cities and more, offering improved situational awareness, according to company officials.

Dedicated direct-to and nearest buttons along the side of the bezel allows for navigation commands.

When the D2 Charlie is paired with Garmin Connect on a connected mobile device, customers can view weather radar on top of the map display relative to flight plan information. To access local weather radar, pilots can press and hold the direct-to and down buttons.

CLICK HERE TO READ MORE

17) FlexAlert Annunciator - $700

The FlexAlert Multifunction Annunciator "Certified Legal". Utilizing Non-Required Safety Enhancing Equipment (NORSEE), the FAA has issued blanket approval to install this product with nothing more than a logbook entry, as long as you leave the original indicators in the aircraft.
FAA policy established in 2016 to facilitate installation in certified aircraft of
About 60 aircraft will make a gear-up landing in a given year, and many of those are attributable to pilots not noticing or misinterpreting alerts and indicators. In some aircraft, the critical warning lights are far from the pilot's field of view.
Shipments are expected to begin Aug. 1; the first units being sold for an introductory price of $699. After routing one wire per function to the back of the unit, the installer flips a series of tiny dip switches to configure annunciations. Typical installation time is about four hours.
CLICK TO READ MORE See the *Approach Aviation* Web Site HERE

ForeFlight
Intelligent Apps for Pilots™

Pack for Your Flight

"Packing" ensures that you have VFR and IFR charts installed for all the states involved in your trip)

Click here to see the video.
(40 seconds)

Checklists

Click here to see the set up video.
(4 minutes)

Work it — it's made to use! Ruggedly constructed the Mooney Master is built to take it whether you're flying from finished runways or ranch strips. Go into and out of private strips with ease in the Mooney Master.

The wide rugged landing gear smooths out rough runways with knee action that swings back — walking over obstacles with ease.

Forget high winds — set your brakes and with the Mooney's low wing profile the Master stays put.

The Mooney Master has a built in quality that gives you an extra measure of confidence for long cross country trips or 'round the pattern training.

PHOTOS BY TONY LINC

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

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

MAPA Safety Foundation
MooneySafety.com Mooney Pilot Proficiency Program

September 8-10: Frederick, MD (KFDK)
October 6-8: Es Moines, IA (KDSM)

August 25-27: LASAR Fly-In. Friday 6pm BBQ & Live Band, Saturday Pancake Breakfast, Free Mooney Inspections by LASAR, Maintenance Classes, and 5-10pm Taste of Lakeport. Sunday Breakfast. CLICK HERE for all the details.

LASAR
Fanatically Mooney. Exceptionally Fast.

Sep 29-Oct 1: **Mooney Summit** – Panama City (KECP) Registration opens this summer at: www.MooneySummit.com

Other Notable Fly-Ins

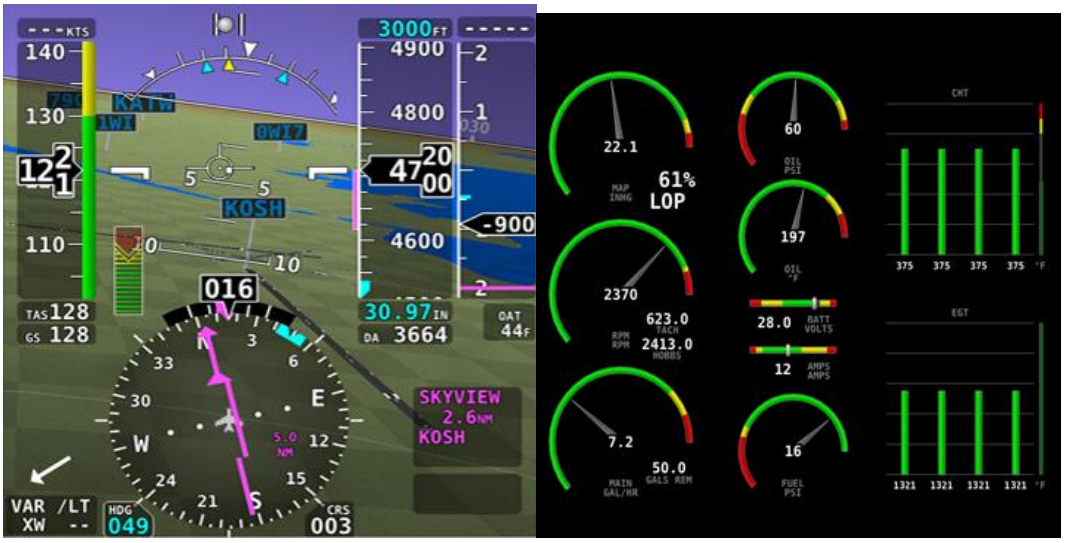
AOPA Regional Fly-Ins
September 8-9: Norman, OK, **October 6-7**: Groton, CT, **October 27-28**: Tampa

October 13-14: CalPilots EXPO – CalPilots will be hosting its first EXPO in Paso Robles (KPRB) beginning with a Wine & Food Reception with AOPA President Mark Baker, Seminars, Aircraft Exhibit, Exhibitor Hall, Pancake Breakfast, Cheesteak Lunch and more. Go to www.CalPilotsEXPO.com for details. Mooney Flyer Co-Editor Phil Corman is hosting this, so all Mooneys that come are free!

DYNON SKYVIEW HDX EFIS

Finally, there is an exciting new EFIS system available and from a manufacturer that has been selling to HomeBuilts for years. It's the Dynon Skyview HDX EFIS System and it does almost everything.

First, it allows you to eliminate your vacuum system; always a plus. It is six things all in one. 1) Primary Flight Display, 2)Engine Monitor, 3) Traffic & Weather, 4) Autopilot, 5) Mode S ADS-B OUT Transponder, and 6) Flight Planner & Mapping system. And this system is not just for VFR. It is fully IFR certified. The only problem for us Mooniacs is that there is not an STC for Mooneys yet, but Dynon says that is coming.



The HDX is also compatible with the Avidyne IFD Series and the Garmin GTN/GNS Series. Dynon expects to receive STC and PMA approval for the Cessna 172 and Beechcraft B58 Baron shortly.

CLICK HERE for Dynon's report.

Mooney Instructors Around the Country

Arizona

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

Jerry Proctor (CFI, CFII), Sierra Vista, AZ/Ft Huachuca KFHU. MAPA SF member/instructor. I have owned an M20K and M20M. I now own an Acclaim (TN). Flight Reviews, IPCs, and proficiency. jprocmooney@gmail.com

Ken Reed (CFI, CFII, MEI, ATP), Tucson, AZ. 520-370-3693. Owns M20K and has previously owned an M20C, M20F & M20M. **Note**: I only instruct in owner's airplane ***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

Rod von Conta, Oakland. CA. (510) 541-7283, Rod@vonairventures.com. Over 8,000 hrs. ATP, CFII & Gold Seal. Garmin (incl G1000) training. Ferry flights and Transition training. Set record in a Mooney**.** (Set the record for flying from Oakland to the wastelands of the Mojave Desert - and back again - in a single-engine plane [M20J]).

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.

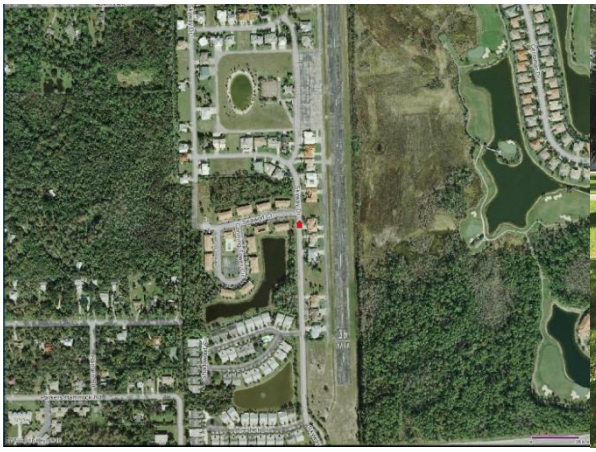
LASAR Used Parts Sale on eBay

Click Here to shop

USED MOONEY PARTS

Big inventory of used and rebuilt airframe parts. Wings for M20C, E, G, J & K, empennage assys, fuselages, controls, rudders, elevators, ailerons, flaps, cowls, engine mounts, landing gear & small parts. Call Loewen's Mooney Salvage "LMS" at 707 263-0472 or cell 707 272-8638. E-mail PaulLoewen98@gmail.com

Unique Air Park 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

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: 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

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