

The Mooney Flyer

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

August 2018



Features

Editors

Phil Corman
Jim Price

Contributing Writers

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

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A Beautiful Sight... Mooney Caravan at OshKosh 2018



All I see is a Budweiser



Well, It finally happened!

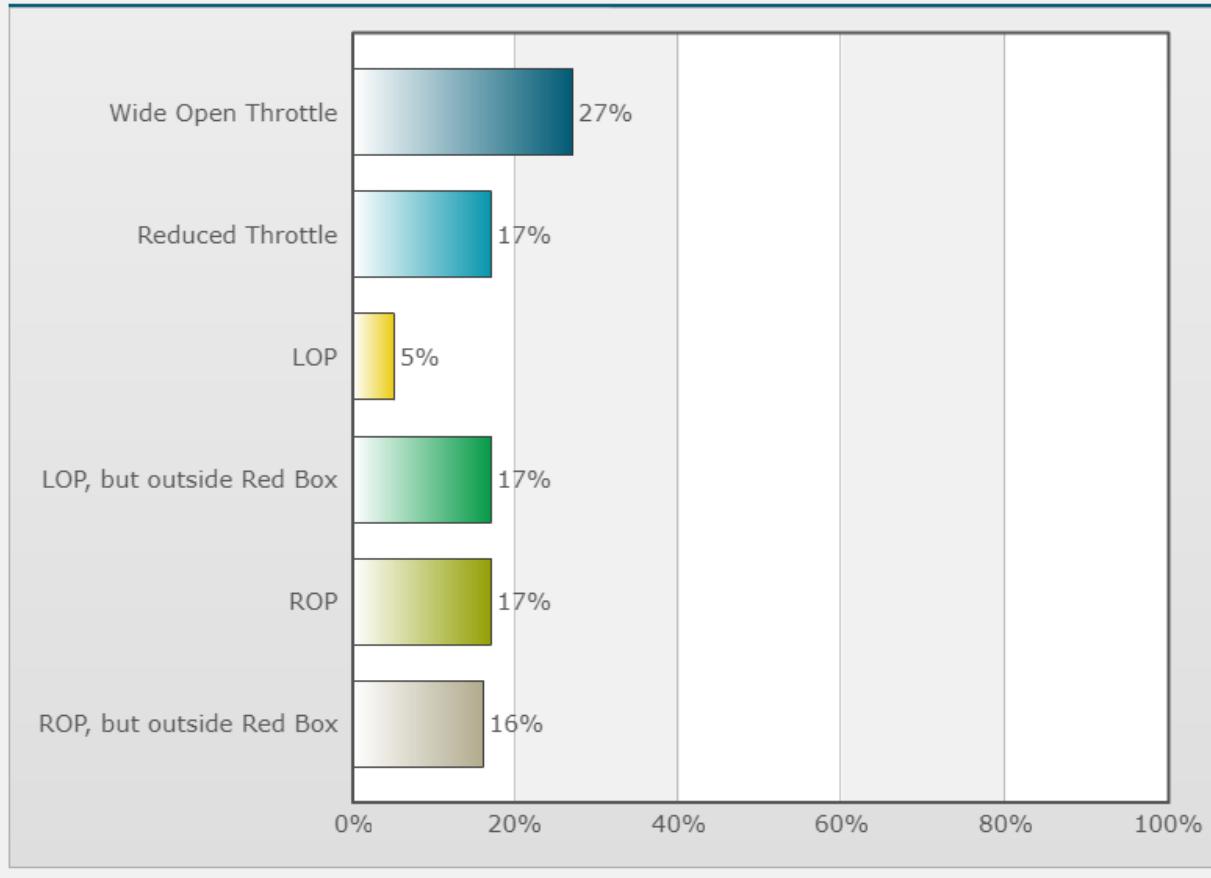


Caption this!

I fly my engine:

Poll created by [Phil Corman](#) on 06/04/2018

Poll Results



Next month's poll: "I get most of my Mooney info from:" [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](#) [M20K](#) [M20R](#) [M20M](#)



[CLICK HERE](#) for the most comprehensive list of Mooney Instructors in the US.

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PERFORMANCE CONVERSIONS

Airplane Eligibility	Prop Style	STC #
M20A-J	2 bladed Scimitar	SA0241CH-D
M20C, D, E, F, G	3 bladed	SA4529NM
M20J	3 bladed	SA4529NM
M20K	3 bladed	SA1505GL
M20R	3 bladed Scimitar	SA02004CH
M20R, S, TN	3 bladed Scimitar	SA03024CH
M20R, S, TN	3 bladed Composite	SA02482CH

McCAULEY
BLACKMAC

Airplane Eligibility	Prop Style	Part #
M20A-G	3 bladed Scimitar	PL60152
M20C, D, G	3 bladed Scimitar	PL60154
M20E, F	3 bladed Scimitar	PL60149
M20J	3 bladed Scimitar	PL60136
M20K	3 bladed Scimitar	PL60199
M20R	2 bladed	M20R241-01
M20R	3 bladed	M20R418-01
M20S	2 bladed	M20S239-01

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Lampson field (I02) will be closed temporarily for runway improvements in early August. Our friends at LASAR want to keep working on our planes during that time, so they are offering 10% off labor on any service if you bring your plane in before August 1. To take them up on this offer, call (707) 263-0412.

Aviation

FACTS



All the titanium used to build the SR-71 came from Russia.

SR-71 pilot and National Air and Space Museum docent, Buz Carpenter

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A NOTAM Story



Over 30 years ago, the Reserve F-4 unit at Austin's *Bergstrom AFB, asked me to give a Flying Safety presentation. The problem was, I didn't live in Austin; I was in the Detroit, MI area. The Texas Wing Commander agreed to provide the transportation. What a deal!!! A pilot would pick me up at Selfridge Air National Guard Base, Michigan, deliver me to Austin and then return me to Selfridge.

Saturday afternoon, the pilot, a Lieutenant Colonel, arrived in his F-4. As we were climbing into his jet, he told me that the plan was to fly to Barksdale AFB (KBAD) in Shreveport, LA for fuel and then on to Bergstrom. When we checked in with Shreveport Approach Control, the controller asked for our Prior Permission Required number, more commonly known as a PPR number. I heard some swearing over the intercom and then the Lt Col replied, "Sorry, I don't have a PPR number."

The controller replied, "Well, it's in the NOTAMs. State your intentions."

We decided to fly to Campbell Army Air Field (KHOP), in Clarksville, KY, Northwest of Nashville, TN. This was quite embarrassing for this guy. Everybody on the frequency knew that he had failed. I never said a word about it and tried to change the subject for I knew he was kicking himself over and over again.

*In 1990, Bergstrom AFB was officially closed and in 1999, it became [Austin-Bergstrom International Airport \(KAUS\)](#).

USD 04/042 LAS LAS VEGAS THREE DEPARRTURE
TAKEOFF MINIMUMS:
RWY 25L, STANDARD WITH MINIMUM CLIMB OF 375 FT PER NM TO 2500
T)
T INE,
T INE,
RWY T INE,
T INE,
T INE,
T INE,
T INE,
TEMP CRANE 3081 FT FROM DER, 1120 FT RIGHT OF CENTERLINE,
150 FT AGL/2380 FT MSL.

NOTAMs are meant to communicate the most critical flight information, using a system invented in 1920, with a format unchanged since 1924, **burying essential information** in a mountain of unreadable, and sometimes irrelevant gibberish.

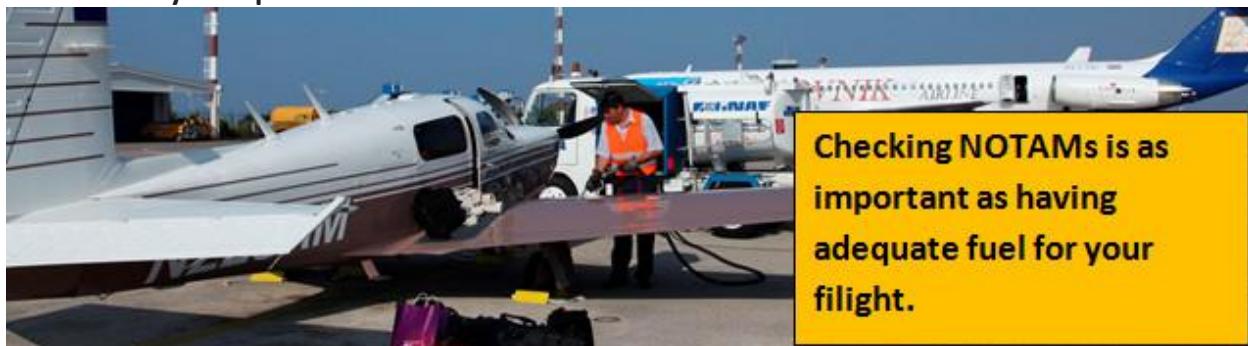
Yet, we press on and check the NOTAMs. In the process, sometimes we just don't understand what they are saying. Perhaps we'll just gloss over the NOTAM, hoping it's for some instrument chart that we won't use, or a taxiway that we won't need.



The AIM defines NOTAMs as “*Time-critical aeronautical information which is of either a temporary nature or not sufficiently known in advance to permit publication on aeronautical charts or in other operational publications receives immediate dissemination via the National NOTAM System.*” (AIM 5-1-3)

In other words, “This stuff is critical and you should read all NOTAMs. Missing a NOTAM might prevent you from finishing your flight or completing it as planned!”

Imagine how you would feel if you had to modify your flight while enroute because you missed or incorrectly interpreted a NOTAM.



Three reasons we should learn to understand NOTAMs:

1. Certain NOTAMS will prevent you from completing your flight as planned
2. How many people are you willing to inconvenience because you didn't read and understand the NOTAMs?
3. Forget to check a NOTAM and everyone who's listening to ATC and tower will know that you fouled up.
4. Understanding NOTAMs is a skill you will need throughout your life of flying.

Know what's Important – Big 5

OBSTACLE NOTAMS

We can almost always disregard the obstacle NOTAMs. Obstacles over 500 feet? Well, perhaps I'll take a look. Basically, unless they've parked the Eiffel Tower on both ends of the runway, I don't care.



ZULU TIME

Know when your flight will take place (the whole flight not just your takeoff time). Some NOTAMs are published several days before they start and they may not impact your flight at all. NOTAM time groupings starts big and goes small, starting with the year, then month, day, hour and then the minute.

SUMMA ONE DEPARTURE... DEPARTURE PROCEDURE. BAKER CITY TRANSITION NA EXCEPT FOR AIRCRAFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS. LAKEVIEW TRANSITION DISTANCE MEASURING EQUIPMENT REQUIRED EXCEPT FOR AIRCRAFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS, OLM VORTAC OUT OF SERVICE. 05 JUN 14:00 2018 UNTIL 12 JUN 03:48 2018 ESTIMATED. CREATED: 05 JUN 03:49 2018

Effective Jun 05, 07:00 PDT

Original NOTAM in UTC

SID SEATTLE-TACOMA INTERNATIONAL, SEATTLE, WA. HAROB SIX DEPARTURE (RNAV)... HOQUIAM TRANSITION GPS REQUIRED, OLM VORTAC OUT OF SERVICE. 05 JUN 14:00 2018 UNTIL 12 JUN 03:48 2018 ESTIMATED. CREATED: 05 JUN 03:49 2018

Effective Jun 05, 07:00 PDT

Expires Jun 11, 20:48 PDT

Foreflight translates into local time

Notice the date difference due to UTC.

Some iPad/Tablet aviation apps, like ForeFlight, translate the times and dates for you.

STUDY THE AIRPORT DIAGRAM BEFORE YOU FLY

Know where you're going on the airport. Compare the taxiway closures to the airport diagram. Sometimes, when the closures are all over the place, I'll print out a copy of the airport diagram and mark it up with closures.

WHAT DOESN'T APPLY?

Pilots that aren't flying IFR get frustrated with NOTAMs and half the NOTAMs don't apply to them. VFR pilots can disregard anything applying to: "OPD" "SID" "STAR" "IAP".

If you're on an IFR flight plan, but you don't have a GPS onboard, then you can disregard any NOTAM that applies to "RNAV."



LIGHTING NOTAMs

If you're on a day flight, you can disregard these NOTAMs. Sure, a PAPI might be out, but I think you will manage and skillfully survive the outage.

Which NOTAMs affect you the most?

1. Runway closures
2. Out of service runway lights (if you are flying at night)
3. Change to airport frequencies
4. The ILS is out of service (IFR flight)
5. Your planned taxiway or FBO ramp is closed
6. Runway conditions

Change is Part of Aviation Life

Our airspace and airports are continually in a state of change, so I hope that you check the NOTAMS every flight. Perhaps you don't check as much as you should, and you've been getting away with it . . . so far, so good. But, if you miss an important NOTAM, the consequences will sting and leave a mark. You'll then vow, "I'll never do that again."

Fly safe, Jim

TAKE YOUR TIME - PART 2

by Sam Lindsay, CFI / II / MEI, Mooney M20E "Matilda", Palmetto, Florida

The last time we gathered for some hangar flying, I discussed the importance of maintaining a stable airspeed on final in our slick winged wonders. However, I ran out of space and did not cover the most important aspect of the landing phase of flight. So this month, let us take a good long look at the final seconds of flight. Hopefully, the title will stick in your head the next time you are landing and you will walk away with a smile, or at least one corner of your grin heading skyward!

"Take Your Time" and "Hold it Off" are my favorite mantras when training the new Mooney pilot. We all know that a premature (i.e. too fast) touchdown in the M20 will usually result in a bounce, often followed by more bouncing, a go around, or the economically painful crunch. So when is the correct time to actually make the rubber meet asphalt, cement, or grass? The answer is very simple: When the wing stops flying, and the stall horn chirps, it's time to plant the tires. OK, let's not get crazy here. This is not true if you are 10 feet above the runway! Let's be less than a foot AGL.

I've always taught that the perfect landing occurs when the main wheels touch down at the same moment the stall horn chirps, with a vertical descent rate near zero. So how does one achieve this sometimes illusive feat? Well, the first ingredient is practice. There is no replacement for repetition when it comes to nailing your landing. The brain tends to repeat what it has seen multiple times, and landing a plane is a perfect example.

Now, the next thing we need to exercise is patience. This is really the golden ticket to a great landing. As you are cruising down the runway about a foot above terra firma with your throttle at idle, be patient, and hold the main wheels off the runway by progressively adding more and more back pressure on the yoke. Add too much, and up you go. Don't add enough pressure, and plop plop ugh.

Many students ask the big question: "How much back pressure do I need to place on the yoke?" The answer is to add just enough to hold the main wheels off the runway, and as the plane decelerates, remain just a foot above the runway, and continue to add back pressure until the wing stops flying. Remember, the part about patience (see above), and also the part about practice (also see above)? You cannot have enough of either when you are in search of the perfect landing. This final phase of landing may only take a second or two if you are coming in at minimal airspeed. On the other hand, it may take 5, 10 or even 15 seconds (gulp) to slow the plane down enough to achieve a good landing.

What factors will determine the length of this phase of flight? Airspeed on final is my number one consideration, followed by the throttle position, flap extension, aircraft weight, and environmental factors. So the next time you are shooting those pesky traffic patterns, try changing just one factor, such as flaps, and see just how much longer it takes to decelerate to a touchdown speed with partial flaps.



There is a big inventory of serviceable airframe parts, including wings for M20C, E, F, G, J, K & R models, empennage assemblies, fuselages, rebuilt controls, rudders, elevators, ailerons, flaps, cowls, engine mounts, landing gear and small parts.

Paul Loewen is offering them online, or by phone. The website is www.LoewensMooneySalvage.com, and he can be contacted in Lakeport, California at **707 263-0462** or by cell at **707 272-8638**. Email is PaulLoewen98@gmail.com. The used inventory is also still available through LASAR Parts at 707. 263-0581



The Mooney Maintenance Puzzle

Search Mooney's Service area for Service Bulletins (SBs) and Service Instructions (SIs) applicable to your model



Search the FAA database for Air Worthiness Directives (ADs) applicable to your model



Click here
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Mooney's 100
Hour Inspection
Guide



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Download and search
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Directive (AD) Log – all
models

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AC 61-98D

Updating Guidance On Flight Reviews

In many cases, the requirement to accomplish a Flight Review every 24 months, has degraded into a routine, let's-get-this-over-with-flight; hastily and superficially performed so a box can be checked.

April 30, 2018, in an effort to lower accident rates, the FAA released [AC 61-98D](#) to help beef up what pilots and instructors cover in their flight reviews. While it doesn't change the regulation and the minimum training requirements of [FAR 61.56](#), it does recommend where pilots should spend their time in the review.

Loss Of Control (LOC) – The Number 1 Cause of GA Fatalities

www.ntsb.gov/mostwanted

According to the FAA, **Loss Of Control** was the number one cause of GA fatalities from 2001 through 2010.

LOC happens when aircraft accidents result from situations when a pilot should have maintained (or should have regained) aircraft control, but failed to do so. Unfortunately, a LOC usually doesn't end well.

Pilot Proficiency and Loss of Control (LOC)



FAA studies show that **LOC** is most likely to happen to pilots who lack proficiency. Rusty pilots are more likely to have an accident – not necessarily on a clear, calm day – but when things don't go as planned. So what are the major **Flight Review** areas the FAA thinks pilots can improve upon? Here are three of the biggest problem areas.

1) Focus: Traffic Pattern Operations



time you're maneuvering, your risk of LOC increases. When you are maneuvering close to the ground, like you do in the traffic pattern, the risk level goes up.

Desired focus of the flight review and traffic patterns?

Departure Stalls

- **Flight instructors should** emphasize training that ensures that pilots of small single-engine airplanes depart in coordinated flight at the best-rate-of-climb speed (VY) for normal takeoffs, and maintain this speed to the altitude necessary for a safe return to the airport in the event of an emergency. **Flight instructors should** provide training that emphasizes the correct speeds at which light twin-piston aircraft depart the runway.
- **Flight instructors should** emphasize that a departure at the best-angle-of-climb speed (VX) is used for obstacle clearance and short-field takeoff procedures.
- **Flight instructors should** also emphasize the risks and potential consequences of climbing out at speeds less or greater than what is required for a particular type of takeoff.

The Impossible Turn

Flight instructors should train pilots of single-engine airplanes not to return to the field after an engine failure unless altitude and best glide requirements permit a safe return. CFIs should not routinely train pilots to make a 180-degree turn from a simulated engine failure while climbing. However, this training should occur at a safe altitude. A critical part of conducting this training is for the flight instructor to be fully aware of the need for diligence, the need to perform this maneuver properly, and to avoid any potential for an accelerated stall in the turn. It is essential for a pilot to know the altitude that will be lost in a 180 degree turn, in the specific make and model flown, if and when a pilot considers turning back to the departure airport at best glide. During the before-takeoff check, the expected loss of altitude in the turn, plus a sufficient safety factor, should be



related to the absolute altitude at which a turnback may be attempted. In addition, the effect of existing winds on the preferred direction of a turnback should be briefed.

[CLICK HERE](#) to watch a Video about a Mooney pilot who lost engine power and returned to the airport.

2) Focus: Unstabilized Approaches can Result in LOC

Flight instructors should teach pilots to reject an approach and initiate a go-around when the pilot cannot maintain a stabilized approach.

Here are the areas the FAA recommends for a stabilized approach in a GA aircraft, with minor deviations on final approach. (It's something you can practice on your next flight or flight review!):

- **Glidepath.** The airplane is on the correct flight path. Typically, the glidepath is 3 degrees to the runway touchdown zone (TDZ) (obstructions permitting).
- **Heading.** The airplane is tracking the extended centerline to the runway with only minor heading/pitch changes necessary to correct for wind or turbulence to maintain alignment.
- **Bank angle.** This should not exceed 15 degrees on final approach.
- **Airspeed.** The pilot maintains a constant target airspeed within +10/-5 knots indicated airspeed (KIAS), which is usually at, but no lower than, the recommended landing speed specified in the pilot's operating handbook (POH) / Airplane Flight Manual (AFM), approved placards/markings,

or 1.3 times the stall speed or minimum steady flight speed at which the airplane is controllable in the landing configuration (VSO), if not specified.

- **Configuration.** The airplane is in the correct landing configuration with flaps as required, landing gear extended, and the airplane in trim.
- **Rate of Descent.** Descent rate is a constant and generally no greater than 500 feet per minute (fpm). If a descent greater than 500 fpm is required due to approach considerations, it should be reduced prior to 300 feet above ground level (AGL) and well before the landing flare and touchdown phase.
- **Power Setting.** Appropriate for the airplane configuration and not below the minimum power for approach as defined by the POH/AFM.
- **Checklists/Briefings.** All briefings and checklists (except the landing checklist) are completed prior to initiating the approach.

3) Focus: Instrument Meteorological Conditions (IMC) – LOC



Flying in the clouds is difficult and confusing. When you are “rusty”, the stakes are even higher.

Vertigo or spatial disorientation has been a significant factor in many aircraft accidents. The common result when a non-instrument-rated pilot inadvertently continues flight into IMC is spatial disorientation and LOC. Pilots who are instrument rated, but uncomfortable, when it comes to flying on instruments, are also susceptible. Recovery from LOC in IMC can be nearly impossible without skills and competency. Additionally, instrument-rated pilots maneuvering in IMC who fail to prioritize pilot workload properly and use Crew Resource Management (CRM) or Single Pilot Resource Management (SRM) may become inattentive or distracted and lose situational awareness (SA), which too often can lead to LOC. The GAJSC determined that **pilots and flight instructors need to emphasize effective preflight planning and pilot proficiency to reduce the risk of LOC in IMC.**

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FAR/AIM 2018

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From Titles 14 and 49 of the
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Part 61
Tells you how
to get your
pilot
certificates

Part 91
Tells you how
to lose your
pilot
certificates

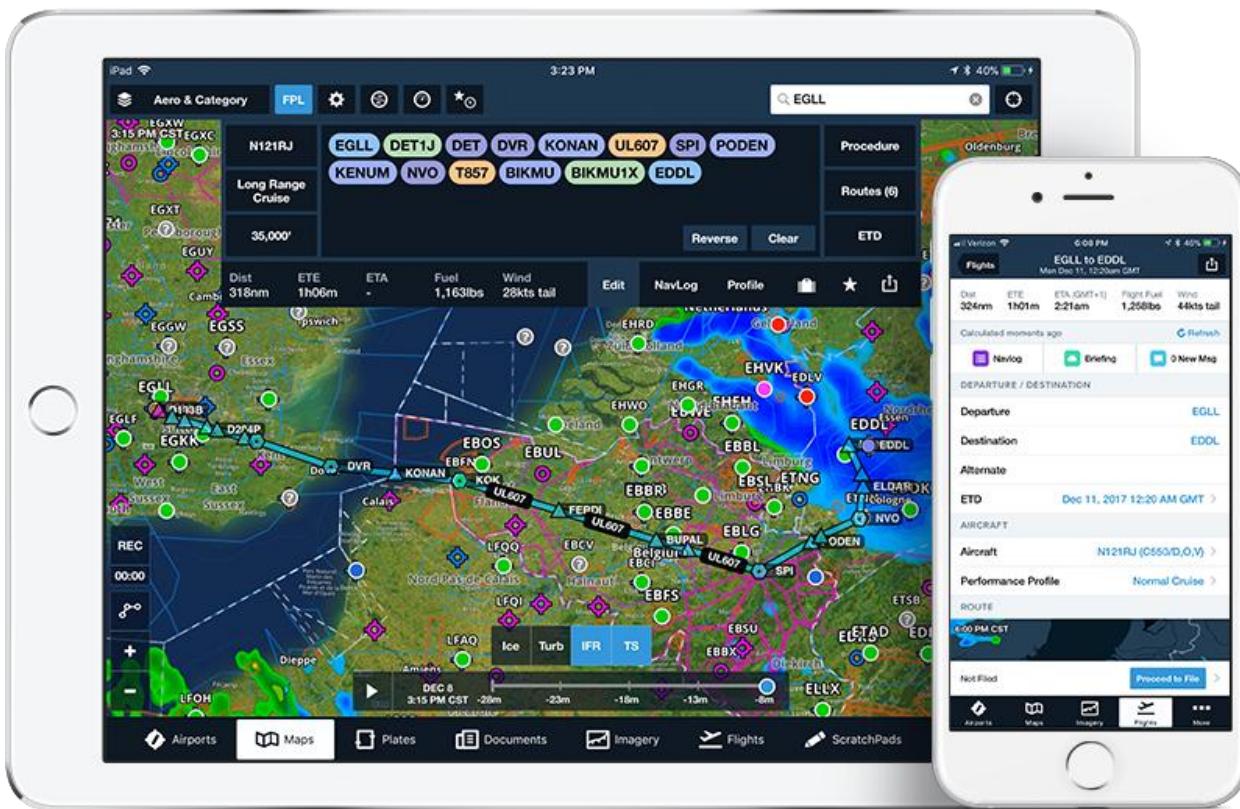
Federal Aviation Administration



Use your iPhone or iPad to file, open and close VFR Flight Plans

Filing a VFR Flight Plan can be a life saver. It's designed to let someone know that you'll be flying, your planned route of flight, and when and where you expect to land. Then in the unlikely event you have to perform an off-airport landing and are out of range of communications, rescue workers will know where to come looking for you.

Up until recently, you had to either call Flight Service or use the [Flight Service website](#) to file a VFR flight plan. Once airborne, it takes another call to Flight Service over the radio to open the flight plan. And then at the end of a flight, it takes one more call to Flight Service to let them know you've arrived at your planned destination.



Fortunately, today's iPhone and iPad apps make the entire VFR Flight Plan process much easier compared to past methods. The apps will essentially fill out the flight plan forms for you, and they're connected right to the Leidos Flight Service servers, allowing you to file VFR Flight Plans right from the app. Then when you're out in the airplane just before takeoff, you can use the iPhone version of the app (or iPad with cellular data) to open the flight plan. Closing it is just as easy after landing right from the app – no phone or radio calls to Flight Service required.



ForeFlight
Intelligent Apps for Pilots™

ForeFlight

1. After planning a flight in the Flights section of the app, press the Proceed to File button at the bottom right corner of the screen.
2. Verify the pre-populated flight plan form on the File screen, and press the File button at the lower right.
3. After receiving confirmation the VFR Flight Plan was filed, you'll see 3 buttons at the bottom of the Flights screen: Cancel, Amend and Activate.
4. After activating the flight plan, the green "Activate" button will switch to a Close function, so that you can easily close the flight plan after landing.

The screenshot shows the ForeFlight mobile application interface. On the left, a sidebar lists flight logs for January 3, October 2, and September 8. The main screen displays flight details for a flight from KVGT to TKPN on Jan 3, 2018, at 36,000' MSL. It includes sections for ETD (Estimated Time of Departure), Aircraft (N12064 C172/G), Performance Profile (Max RPM Lean Mixture), and Route (a map showing a flight path from KVGT to KBKL). A red callout box with a yellow border and black text contains a caution message about Stratus interference.

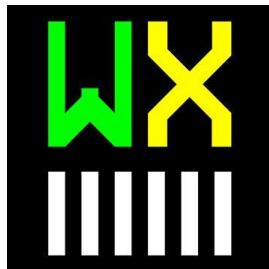
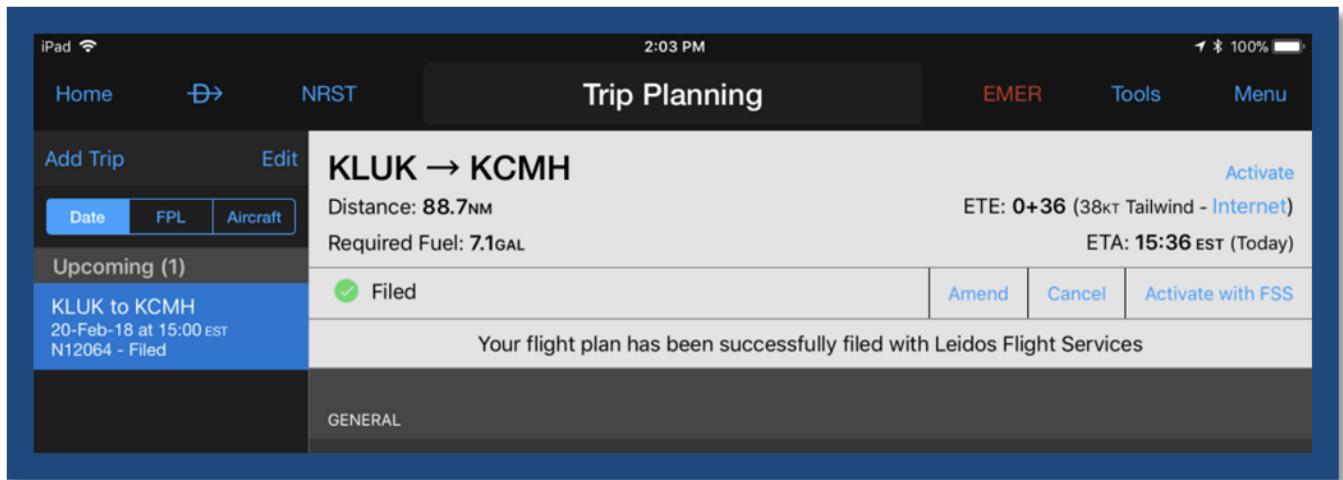
CAUTION

If Stratus is connected to the Apple device you are using for either Opening or Closing a Flight Plan, Stratus will block the Opening or Closing process. Turn Stratus OFF before Opening or Closing a flight plan.



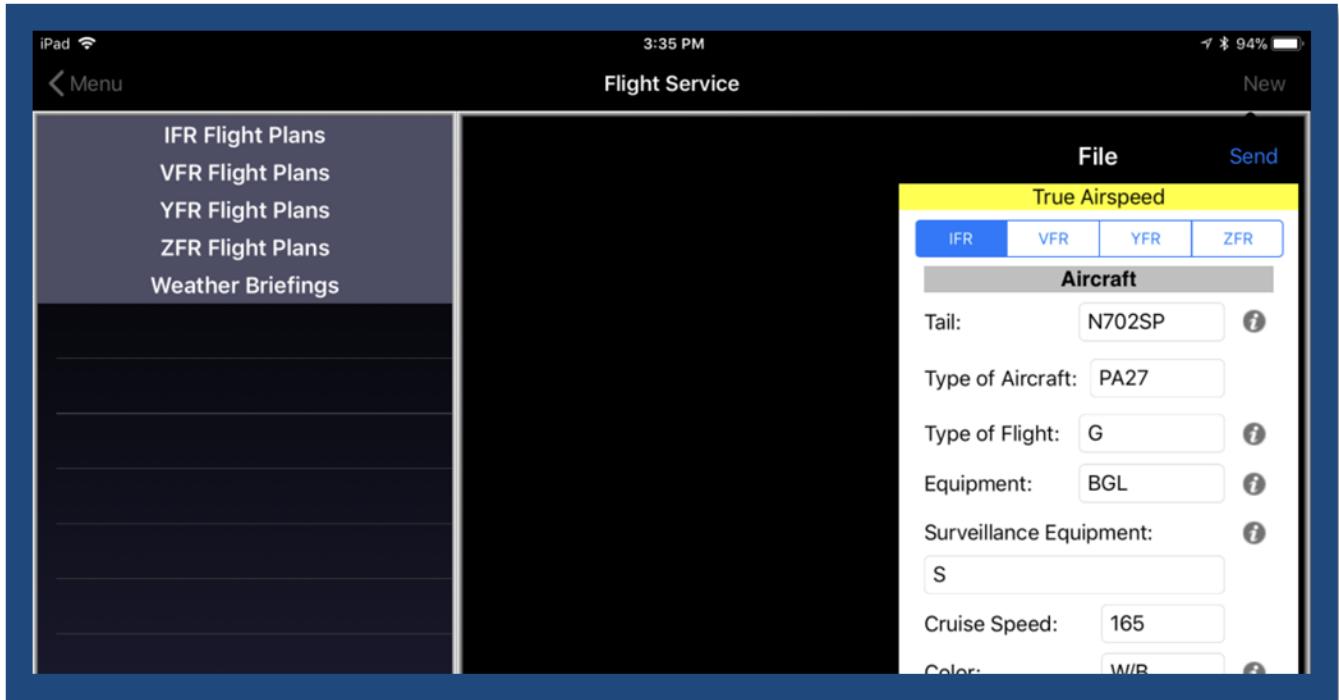
Garmin Pilot

1. Start a new flight in the Flight Plan section of the app, and then press the Create Trip button, located at the lower right of the screen, which sends the flight data to the Trip Planning section of the app
2. Verify the data in the fields, ensure VFR is selected as the Flight Rules type, and press File at the top right of the screen.
3. After the VFR flight plan is filed, you'll see the 3 action buttons at the top of the screen: Amend, Cancel and Activate with FSS.



WingX Pro

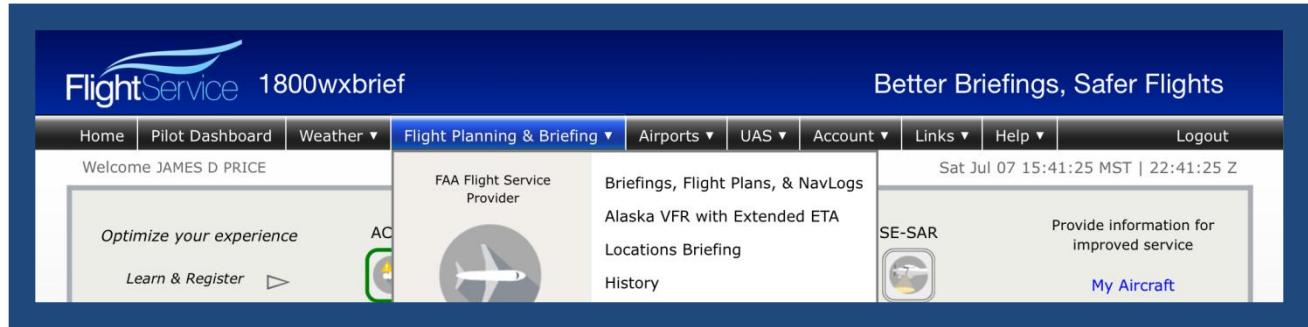
1. Select the Flight Service option from the home screen, and enter your pilot and aircraft credentials using the buttons in the lower right
2. Press the "New" button at the top right of the screen, select File Flight Plan, enter the flight details and press the Send button at the top right of the window.
3. Select the **filed VFR flight plan** from the list on the left side of the screen, and a pop-up menu will appear with options to activate, close or cancel a flight plan.



 **leidos** [1800wxbrief.com \(Flight Service\)](http://1800wxbrief.com)

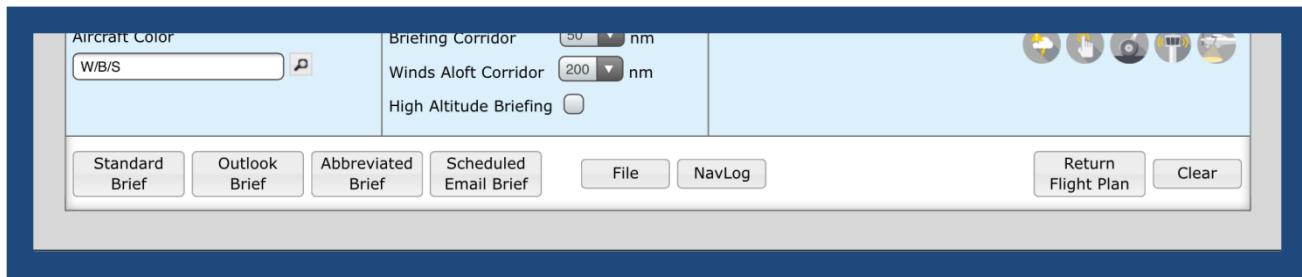
1. If you haven't already, set up an account, set up your aircraft
2. Click on the "EasyActivate EasyClose" button. If you don't see that button, click on "Pilot Dashboard". Here, you'll establish the mobile number you will use for texting.

3. Click on the “Flight Planning & Briefing” menu and choose “Briefings, Flight Plan &

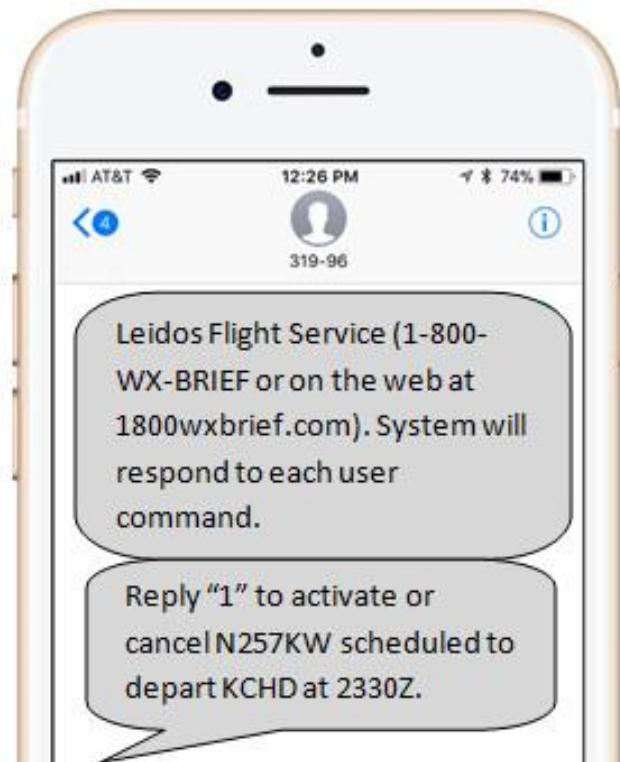


NavLogs”.

4. Fill out the applicable data.
5. Choose the briefing you want



6. When you’re ready, click the “File” button.
7. If you’ve already established the “EasyActivate EasyClose” option, Leidos will send you a text message 30 minutes before your proposed departure time.
8. When you want to open your flight plan, just reply “1” to that text message to **activate** your flight plan. 30 minutes before your ETA, Leidos will send you another text message. Just reply with “1” to that text message and your flight plan is now closed.





Send your questions for Tom to TheMooneyFlyer@gmail.com

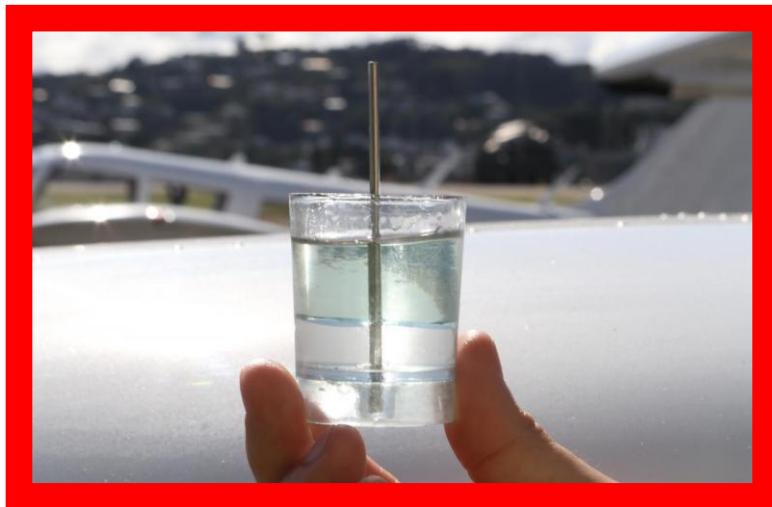
Question: Regarding water in the fuel tank... how much water can I safely sump before I should consult a mechanic? How often should I change the O-Rings? Should I use Rubber or Flourosilicate rings?

Answer: First, I'll will answer the O ring. You can only use the O ring that is specified in the Mooney parts manual, unless there is approval by the FAA on the replacement item you want to use. When we want to put anything on an airplane that is not in the aircraft parts manual, we have to get Field Approval from the FAA

How much water can you sump from a tank? I once recovered a Mooney. The engine had quit on takeoff and it was in a field, just off the runway. I sumped at least a quart of water from each tank. Now we know what is too much.

I want to expand on this and talk about water suspended in the fuel. This wasn't a Mooney problem until they built the 231 and then an engine quit at about 20,000 feet when water froze in the flow divider on top of the engine. It wasn't really figured out for quite a while, but the solution was to authorize the use of isopropyl alcohol in the fuel; it's authorized in the aircraft owners manual. This has also occurred in the Rocket converted 231s and in the TLS. These engines have the flow dividers mounted on top of the engines and are subject to very cold ram air. At 0 degree Fahrenheit and lower, the suspended water freezes and closes the fuel flow to the cylinders. Descending quickly will clear the flow divider. The problem was first discovered in the 1950's, when a B-52 on approach in North Dakota had all eight engines stop and the plane crashed. Water in the fuel had frozen, stopping fuel flow to the engines. The Air Force started using Prist in the fuel to solve this problem.

While rain is the most common source of water, there can be water from condensation and on rare occasion, water from the fuel source. Both of these are pretty rare. I would suggest that you should only get less than one cup. More than that and you should do some further checks. One last comment. Water is clear, so look for a blue tint. The owner of the Mooney I recovered said he had sumped his tanks and the fuel was clear. Enough said.



Water: Can't Live Without it – Can't Fly with it!

You don't want any water in your fuel tank.

On a training flight in Connecticut, a student kept getting water in the fuel sample. After multiple attempts, he got a clean sample so they tried to take off. The engine sputtered and quit on takeoff roll, so they drained some more fuel.

Would you do that? I'd be a bit curious and calling a mechanic. But, not these adventurous guys.

On the next takeoff, the engine quit just after airborne and they crashed! The NTSB investigation revealed a mix of water and fuel in the tanks. Investigators also learned that the fuel source at the airport had been contaminated. If you find water in your tanks, how do you determine how it got there and when is it safe to fly?

If you do find water in your fuel sample, how many non-water fuel samples does one need to see before it's safe? Is it one, two, three, four, or maybe five?

This is not a call to be made by a pilot. A certified mechanic should determine that the aircraft is airworthy.

**The
Mooney
Flyer
Quiz**



TFR ALERT

Recently, in a seven day period, 30 pilots stumbled into a Presidential TFR and triggered five intercepts. Are some pilots really that oblivious?



Question: During preflight planning, you discover that the your destination airport lies within the 30 NM outer ring of a Presidential TFR. Can you still make the flight?

Answer: YES, provided you are:

- On an IFR or VFR flight plan and
- “Talking and Squawking”.
(You must have a discrete transponder code and stay in contact with ATC at all times.)

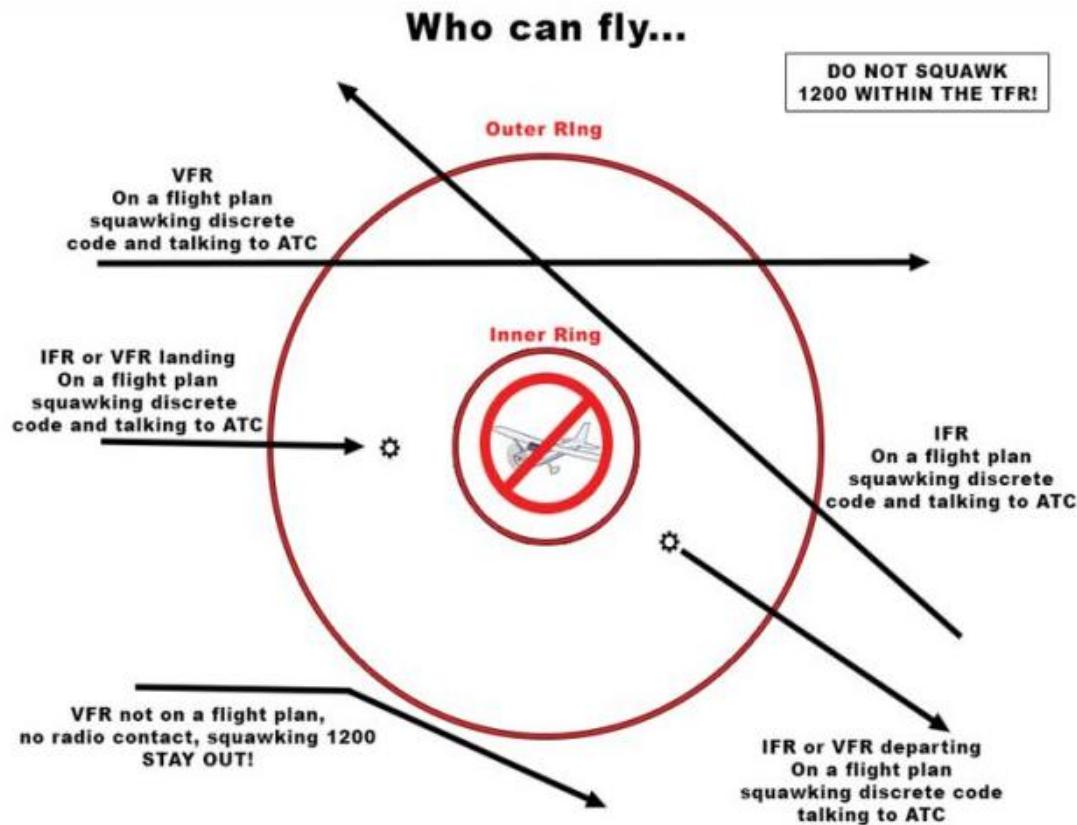
You should fly straight, level and predictable. Do not loiter.

Question: Who can enter the 10 NM ring?

Answer: Certain operations are allowed within the 10 NM ring. They are:

- Military aircraft supporting the Secret Service and the office of the President of the United States.
- Coordinated and approved law enforcement, air ambulance and firefighting operations must receive approval prior to entering.
- Regularly scheduled commercial passenger and all-cargo carriers.

NOTE: A TFR can be structured with a “cut-out” to allow operations into an airport that lies just inside the inner ring.



Vice-Presidential VIP TFRs

In the case of Vice President movement, TFRs normally consist of one or more **3 nautical mile rings** and no outer ring. These TFRs are less restrictive for GA aircraft, allowing access to aircraft that are on an IFR or VFR flight plan and in communication with ATC – (restrictions/procedures that are very similar to those in the outer rings of a Presidential TFR).

When an airport is contained within a Vice-Presidential TFR, airport operations are typically halted for a short period of time while the Vice President is at the airport or is departing or arriving. As a result, operators flying into an airport sitting under a 3 nautical mile ring can expect minor delays during the TFR's active times.

A **2016** report from the *Tactical Operations Committee* of the *Radio Technical Commission for Aeronautics* (RTCA), proposed a variety of ways to mitigate that risk. The report, entitled *Improving Graphical Temporary Flight Restrictions in the National Airspace System*, offered a set of nine best practices for pilots to follow during preflight preparation, and nine best practices for the in-flight period, to maintain TFR awareness.

These best practices include:

- **Check NOTAMs** before every flight—even short local flights.
 - Some TFRs, like the Bedminster, NJ VIP TFR, require prescribed [departure and arrival procedures](#)
- **Use online preflight resources**, such as those provided by Flight Service, that provide TFR graphics. They can be used for operational purposes if there is no disclaimer stating otherwise. An example is <http://tfr.faa.gov/tfr2/list.html>
- In flight, the pilot should be aware that there may be some “latency” when it comes to timely TFR information.
 - The FIS-B transmission interval for NOTAM-TFRs is 10 minutes, however, FIS-B radio stations alternate between transmitting the full text records and an empty NOTAM-TFR header, so it can take up to 20 minutes to initially acquire NOTAM-TFR text records. That means that Pilots can receive TFR changes as they are about to enter or have already entered a TFR.
- Pilots should **use flight following** in the vicinity of TFR airspace.



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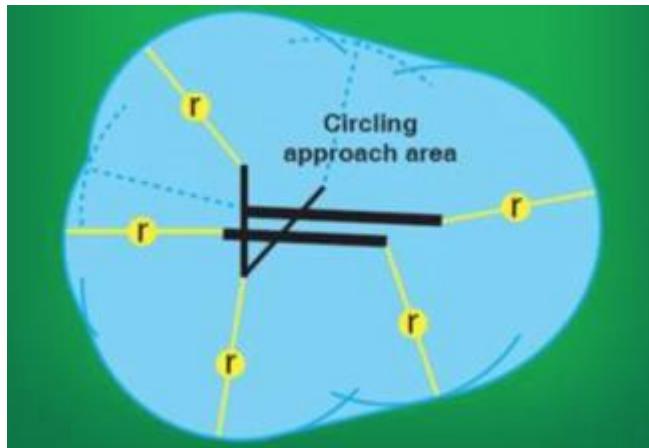
Controlled Flight into Terrain (CFIT) Video Numerous Great Lessons



HYH



FAA to Minimize Circling Approaches



The National Airspace System (NAS) is currently in transition to a "NextGen NAS". During this transition, the FAA is supporting both the Legacy NAS (NavAids) as well as the NextGen Satellite and GPS based NAS. As the GPS technology has introduced more and more RNAV approaches, this has doubled the number of approaches available. The complexity and cost to maintain the vast inventory of approaches, while expanding the new RNAV capability, is not sustainable. Therefore, wherever feasible, the FAA plans to

shut down circling approaches.

In early July, the agency [published](#) its selection criteria for deciding which approaches will be cancelled.

The FAA will keep some circling approaches so that pilots can receive and demonstrate circling procedures. In addition, the FAA will have a policy in place to be sure pilots are notified of the changes.

FAA Added New FIS-B Weather Products



Pilots that

are ADS-B In equipped should now have access to new weather data in their cockpits over the 978-megahertz (MHz) Universal Access Transceiver link. There are six new weather products: lightning strikes, turbulence, icing forecasts, cloud tops, graphical Airmen's Meteorological Information (AIRMET) and Center Weather Advisories. The new weather information complements the original 13 "baseline" weather products — including Next Generation Weather Radar (NEXRAD) mosaics, winds aloft and terminal forecasts — in the Flight Information Services-Broadcast (FIS-B) feed. Pilots now have access to the new FIS-B products when their individual avionics are updated. The capability and availability will vary based on individual ADS-B avionics, so please refer to your avionics manufacturer for details. For more information on ADS-B services and benefits, go to

www.faa.gov/nextgen/equipadsb/capabilities.



Pilots planning to fly their aircraft to Mexico must now be equipped with a 406 MHz ELT

Mexican authorities notified airports that the rule would take effect on June 30th, and pilots should be prepared for a possible ramp check upon arrival at Mexico destinations. The United States, Canada, and Caribbean nations are continuing without 406 MHz ELT requirements.

For owners who plan to stay in the United States, they could opt to invest in accident-prevention technology such as Non Required Safety Enhancing Equipment (NORSEE) as an alternative to spending similar amounts of money on a 406 MHz ELT, which is only effective once an accident has occurred.

ForeFlight Offers Sentry ADS-B which includes a CO Monitor

ForeFlight has unveiled **the Sentry**, a portable ADS-B receiver that shrinks the form factor while offering a full set of features that includes a carbon monoxide (CO) detector and alarm. The company also released Version 10.2 of its “integrated flight app” with new synthetic vision, logbook, flight planning, military, and day/night enhancements.

Like the ForeFlight Scout ADS-B receiver, Sentry is designed by ForeFlight and manufactured by uAvionix, but it adds features that aren’t included in the smaller \$200 Scout. Priced at \$499, Sentry is about half the size of an iPhone+ or Samsung Galaxy mobile phone and weighs 119 grams.

POWER & SPECS

The Sentry comes with a USB to USB-C charging cable and can use any standard phone or tablet charger that provides at least 1Amp. (Most chargers provide at least 2.1Amp).

With dual-band ADS-B “In” for delivery of ADS-B “In” weather and traffic information, Sentry also features a WAAS GPS receiver, AHRS (attitude sensors), an internal battery with more than 12 hours of endurance, and a CO detector and alarm.

Sentry allows up to five users, connected via Wi-Fi. The CO monitor provides visual and audible alerts on ForeFlight as well as on the Sentry device. A green light on Sentry indicates less than 35 parts per million (ppm) of CO, while yellow indicates between 35 and 50 ppm, and red lights up at 50 ppm, which also activates an audible alarm.

Sentry comes in a padded case and includes a suction-cup Ram mount. It can be purchased [online at Amazon](#). See the YouTube Video [HERE](#)

amazon (Qualifies for Prime)



Stratus 3 now Available, \$700 (Upgrade your Stratus 3 to a Stratus 3 and [get \\$200 back!](#))



More features at a reduced price
[See Sporty's](#) for more details

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What's New?

- Open ADS-B Mode allows Stratus 3 to work with other popular flight apps using the industry-standard GDL 90 protocol by enabling Open ADS-B Mode. Includes ForeFlight, Fltplan Go, WingX, FlyQ, iFly GPS, and others.
- Smart WiFi lets you use your 3G/4G LTE cellular data, without first disconnecting your Stratus.
- Auto Shut-Off saves battery life if you forget to power off your Stratus.

Never say “say again” again



Stratus Horizon Pro is a free app that delivers firmware updates to Stratus receivers, displays backup AHRS, and offers ATC Radio Playback when paired with a Stratus Audio Cable.

Radio Playback

Plug in and play back. You'll never have to say "say again" again when you use the **radio** playback feature. Plug in a [Stratus Audio Cable](#) to capture ATC communications for easy one-touch playback.



Radio Transcription (coming soon)

The premium version will include visual ATC text transcription. Similar to how "visual voicemail" works, the ATC communications (relayed via Stratus Audio Cable) will be converted into text format and displayed directly above the audio playback line, providing a visual assist for referencing previous audio clips.

Backup Glass Cockpit on your iPad

Stratus Horizon Pro displays a complete Attitude Heading Reference System (AHRS) for supplemental attitude information in your cockpit. Driven by a Stratus receiver, the AHRS feature will display a super responsive pitch and bank instrument on your iPad. It aligns itself automatically, so you can just turn it on and fly. This provides an excellent backup for emergency situations.

G5 as a Backup



Garmin's G5 electronic flight display can be installed as a legal STC'd backup to the G500/G500 TXi flight displays.

HIWAS may be on the Way Out

Since the early 1980s, the FAA has provided for pilots the Hazardous Inflight Weather Advisory Service (HIWAS), a continuous broadcast of weather advisories over a limited nationwide network of VORs, but this week the FAA said it wants to eliminate the service, which is less needed now. Pilots are asked to file comments on the proposal by August 22.



Evolution Max

Aspen Avionics introduced the Evolution Max flight display system at AirVenture 2018 on Monday. The Max has a new, brighter display, a faster processor and larger font options, all of which current Aspen owners can apply as upgrades to equipment they may already own.

The new products will retail for \$9995 in the PFD version and \$5495 in the MFD variant. Current owners can upgrade their Evolution series displays for \$2995.

[Watch the ProMax Video](#)





	<p>Contact Dave at daveanruth@aol.com or (352) 343-3196, before coming to the restaurant, so we can have an accurate count</p> <p>August 11: Lake Wales (X07) September 8: Winter Haven (GIF) October 13: Flagler (FIN)</p>
	<p>No Events</p>
	<p>Sep 7-9: Manchester, NH (KMHT) Oct 5-7: Owensboro, KY (KOWB)</p>
<p>MooneyMax Event</p>	<p>October 10 – 14: MooneyMax Conference and Clinics, @ Longview, Texas (KGGS) New Hilton Garden Inn and Event Center. MooneyMax Maintenance Seminar Don & Paul Maxwell and our staff, Mooney Caravan Formation Clinic, A fresh new list of seminar Speakers & Vendors, Tour of Mid America Aviation Museum tour, Saturday Night Banquet at The Lake Cherokee Country Club, Banquet Speakers The REAL Space Cowboys that are Mooney owners</p>
<p>Mooney Summit</p> 	<p>September 28-30: At Panama City, FL, CLICK HERE for details. September 27-29 2019: Mooney Summit VII on September 27-Sept 29. www.mooneysummit.com</p>


ForeFlight
 has done it again with V10.2

GLANCE MODE

The new Version 10.2 of ForeFlight adds a significant change for synthetic vision, a “glance” mode that allows the user to change the viewpoint to anywhere around the aircraft. ForeFlight’s glance mode lets pilots “look” around to either side, up or down, or even behind the aircraft when using SVS. Glance mode pops up with a touch on the iPad screen when SVS is running, and it remains active for at least six seconds without further input.

In glance mode, a field of view indicator shows where the view is oriented, and data elements disappear to keep the view uncluttered. The pilot can adjust the camera’s position by panning with a single finger or zooming in and out with two fingers. Touching an airport symbol in SVS now pops up an airport information box.

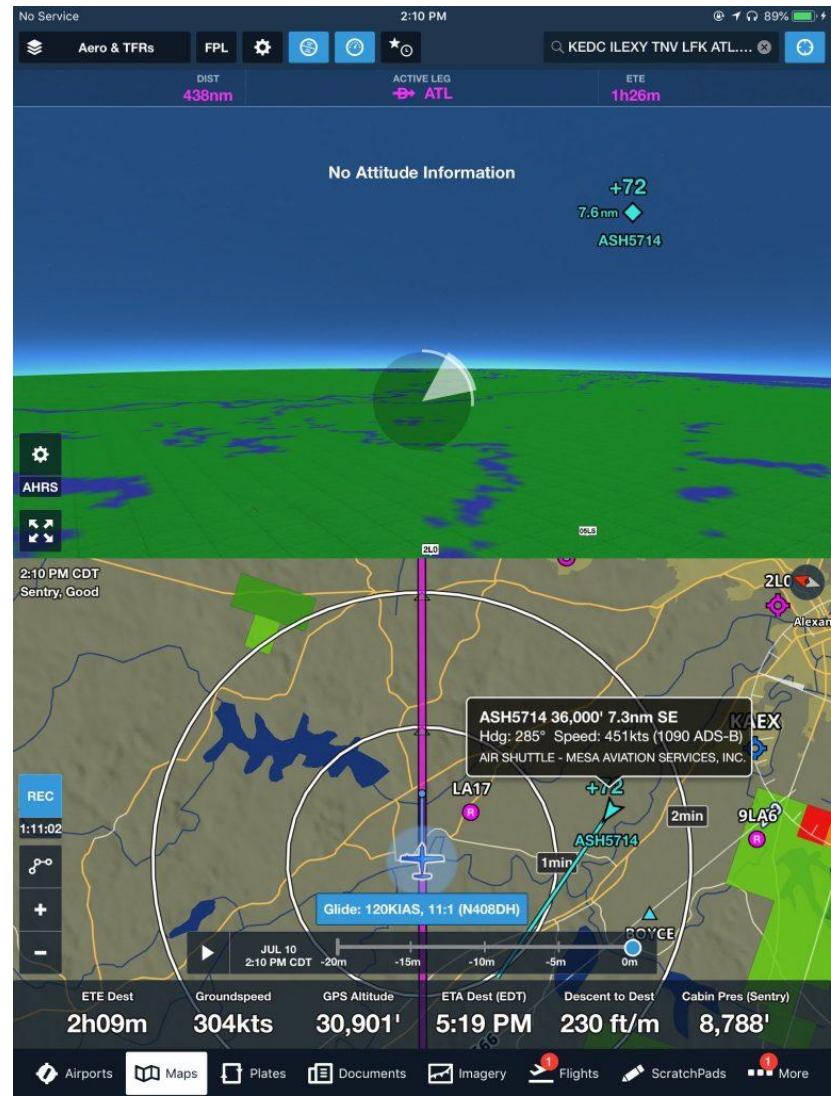
TRAFFIC IN GLANCE MODE

When connected to an ADS-B In receiver, glance mode will display traffic targets on the Synthetic Vision view, for traffic that is within 11 nm, and targets are scaled and sized based on proximity, growing larger as they get closer. The numbers next to each target show its horizontal and vertical separation, and an up/down arrow shows whether it is climbing or descending. If available, the target will also display a registration number or callsign.

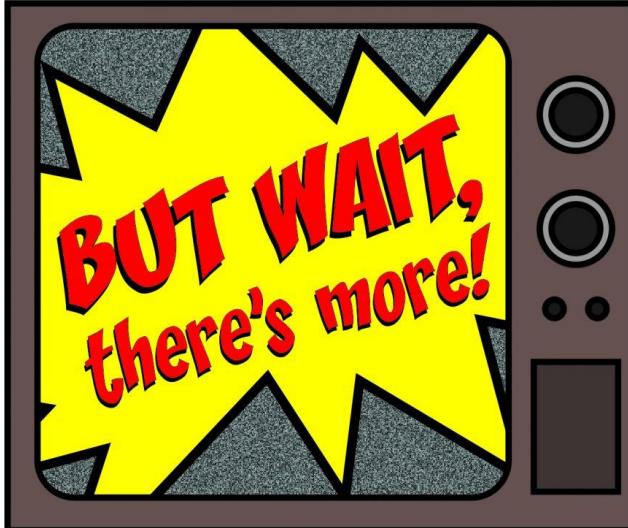
Note: Synthetic vision requires a Pro Plus subscription.

AUTO DAY/NIGHT MODE

The latest update adds a new global app



theme setting, to switch all the respective views to dark or light. You'll find this at the top of the main Settings screen, with options for Day, Night and Auto. When Auto is selected, the app will automatically transition between Day and Night at sunrise and sunset.



You can now enter multiple email addresses (separated by a comma), into the Email field at the bottom of the filing form to send flight plan information and updates from ATC, like expected route notifications, to fellow pilots or crew members.



TEXT MESSAGES FROM FOREFLIGHT & ATC

ForeFlight now sends SMS text messages in addition to emails and push notifications to provide updates regarding your flight plan, such as ATC rejections and flight delay notices, slot allocation messages, and overdue VFR flight plan reminders.

Select "Flights" at the bottom of the screen, select a flight and touch the new "Info" buttons. (There's an "Info" button for the Departure, Destination, and Alternate Airports). "Info" will allow you to view detailed information about your departure, destination, and alternate airports.

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Parts for Sale

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

For Sale

Bendix/King KX-165 nav/com, 12V, with rack, \$1600.

Electronics International SR8A4, 4 channel EGT/CHT, needs EGT probes, \$200

Both working when removed from my M20J

Mark Leuzinger, SIAI260@gmail.com, 909-720-2702

For Sale

1. **King KT76A Transponder (with tray).** Pulled from service in April 2018 during a panel update of my M20J. Works great. Asking \$275 plus shipping.

2. **King KMA-24 audio panel (with tray).** Removed from service April 2018 due to a panel update of my M20J. Works great. Asking \$200 plus shipping.

Mike Martin, 607.398.9009,



michael@polytest.org

For Sale: 1978 M20J**Price Reduced to \$120,000**

1978 M20J N201TM
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Model M20J - 200HP FI Serial 24-0388
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TTAF 4400

TTSMOH, SPOH, prop governor, "0" by Zephyr
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INSTRUMENTS

Garmin 430 WAAS
KNS 80 with second LOC/GS
Stratus ADS/B in, moving map, weather
IFR certified 3/16
KFC HSI
KFC 200 Flight director, coupled to Garmin 4300 3-axis, altitude hold
KY 197 COMM #2, flipflop
O/H electric DG 2016
BFG Stormscope
Davtron 811B clock, flight timer, stopwatch
4-Place Intercom + Music player
Electric Digital tach
JPI EGT CHT Fuel Flow



Contact: Claude "Sandy" Thomas
(770) 612-8221
mooney201@gmail.com

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**1983 Mooney M20J,
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\$37,000**

**Fast and efficient IFR cross
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for and in Hangar at John Tune (KJWN) airport**



Airframe: 3500TT, Engine: 1000 SMOH. Lycoming IO-360-A3B6 (two separate mags) Aspen Pro PFD. Garmin GNS530W, SL-30 Nav/Comm, Garmin X-ponder, Garmin Audio panel, KAP-150 Autopilot with Alt hold, Engine monitor with fuel flow interconnected with 530W, Garmin 396 with XM weather and XM Radio, Digital Tach, Strike Finder, LED Landing Light, Leather interior (6), Electric Trim. ADS-B Out Compliant & Stratus for ADS-B In. July 2018 Annual at Cole Aviation. (Mooney Service Center). This is a wonderful partnership situation with established LLC and Operating Agreement. I have never had a scheduling conflict.



**Contact me for more information.
John Saidy, 615-870-7955 or johnsaidy@me.com**



Are you a pilot who is looking for a hangar to rent when you travel? Are you a hangar owner that has extra space and would like to turn that space into extra cash by renting your hangar? DailyHangar.com is a new website that connects transient pilots with hangars for their planes. The website offers an innovative way to connect transient pilots who would like a place to hangar their plane for any period of time with hangar owners who have space to rent. The website is also an excellent way for FBO's and corporate hangar owners to get the word out to more pilots about the space they have available and manage their rentals in one convenient location. DailyHangar.com encourages hangar hosts to sign up and provide options for traveling pilots. Protecting aircraft from weather is necessary for all sizes and types of planes.

"DailyHangar.com offers hangar owners the opportunity to make money renting out their under utilized hangar space, and pilots the opportunity to efficiently book a hangar space to protect their plane from the elements," said Mark Euwema, co-founder of Daily Hangar and a pilot in general aviation for the past 40 years. "DailyHangar.com offers the FBO's and corporate hangar owners a easy way to make their openings known to a broader community of pilots. It's a win-win for both parties."

Designed for the traveling pilot and the busy hangar owner, the website allows pilots, while traveling cross country, to find a hangar that has been posted on the website and book that hangar for the period of time they would need it, according to Euwema. "All you need is a destination and Daily Hangar will give you available options of hangars in your area."

Once the pilot has chosen a destination several hangar options will populate as a place to hangar your plane for your stay. Pilots need only to filter through the options for size, dates of stay and amenities at the hangar to find the price and the perfect location for their plane.

If you are a hangar owner with some space to spare, there is not a cost to list your hangar on the site. Hangar sizes, specifications and amenities are put in by the hangar owners.

There are no upfront or membership fees for the pilot or the hangar owner, there is only a service fee once the hangar is booked.

"I want to change the mindset of the traveling pilot. There are more options than the outside tie downs. I believe there is a lot of underutilized hangar space at airports across the nation and DailyHangar.com is the solution that can connect both the hangar owner and pilot," said Euwema.

Whether you're a
Rusty pilot,
dreaming of
becoming active
again . . .

. . . or
you're a
proficient,
veteran



**Prepare
online
Free!**

