



PUTTING WINGS ON

YOUR DREAMS

VOLUME XIV

ISSUE 7

Submitted by Jim Hudson
Membership and Safety Director

TLAR

This acronym "That Looks About Right" surfaced in popularity with Captain Sully's Miracle on the Hudson landing. The term has been used in the past, and is often used in soaring, in fact it's in the Air Force Aviation Glossary [USAF Glossary](#).

TLAR, or flying by the seat of your pants is a skill every pilot should develop so one is able to make a quick decision and be able to recognize when something goes wrong or doesn't appear right.

I had the occasion to use this technique recently. I was taking off out of Cabin Creek I08, one of the more challenging BC strips, in N9989E and noticed my indicated airspeed was reading only about 40 mph. I'm usually so focused on keeping on the runway and climbing out over the terrain that I'm usually using TLAR anyway and didn't look at IAS until I was well into my climb.

I've been in and out of this strip nearly 100 times, so I know it quite well. It still was alarming

to see the airspeed below stall speed as I was climbing out. I was getting 1,000'/min climb in a welcomed updraft and glanced at airspeed when I first noticed it. I didn't get a stall warning, but still pitched down just to make sure (I've had the stall horn's fail in the past - another good reason to use TLAR).

I have several video's landing at Cabin Cr, but none taking off - I found this on YouTube that shows landing and taking off to give you an idea of why one might get a little pucker factor when something like IAS doesn't look right. [Cabin Cr Landing/Take Off](#)

Once I started to level off at cruise altitude, I was still only getting 80 mph IAS, yet the ground speed was normal around 125 mph. I really didn't worry too much about the IAS indicator the rest of the flight, but still was waiting for it to start reading correctly. Upon landing, I had enough seat-of the pants in C182's to know the normal power, pitch, and flap settings for landing.

One of the guys' I was fishing with had never flown into Cabin Cr. and thought this was a good way to remember the strip.



(showing the width of the runway with his body - not collapsing after landing)

I squawked the plane grounded, and the following day, this is what was found in the pitot tube. Looked like seeds, and bugs. We figure it was an accumulation that was jarred loose and partially blocked the pitot tube air flow.



The moral of the story is you shouldn't always trust your instruments, cross check, and use seat of the pants and TLAR to fly the plane.

Flying Magazine has a good article on this topic at:

[Flying Magazine TLAR](#)

As Jason Shappart and AOPA laments, “a good pilot is always learning” – that is part of the fun and challenge of flying.

Don't do anything Stupid.
Jim Hudson
Safety/Membership Director.

FAA Safety Team | Safer Skies Through Education

Wrong Runway Landings at BOI

Notice Number: NOTC7286

Boise International Airport (BOI), and as most folks fondly call, Gowen Field, is becoming increasingly busier as our

community grows. Unfortunately, there is also a growing negative trend in the number of runway incursions at the

airport. The incursions include; failing to hold short of runways, crossing runways without an appropriate clearance and

aircraft landing on the wrong runways.

In this FAA Team Safety Notice we would like to focus on the problem of pilots landing on the wrong runways at

BOI. Landing on the incorrect runway (the one which the controller did not give you the clearance to land on) is a safety

hazard and is most definitely happening more frequently. BOI has parallel runways that are only separated by 700 feet ,

10L (left) and 10R (right), as well as the opposite 28R and 28 L). While pilots are cleared to land on a specific runway by Air

Traffic Control (ATC) 10R for example, they end up landing on 10L before ATC can intervene (or vice versa).

The consequences of landing on the incorrect runway can be catastrophic. At a busy airport such as BOI, there are aircraft

constantly taking off and landing, vehicles and aircraft frequently crossing runways, as well as ongoing construction and

other important busy airport operations.

So what can we as pilots do to help reverse this trend and make the BOI a safer airport.

1. Do a thorough review of the airport before departure (preflight) and landing (arrival briefings). Be as

familiar with the airport as possible. Review the airport charts and layouts so you can better understand

ATC instructions which always seem to come pretty fast and furious.

2. Be sure and understand the ATC instructions given to you. Even flying a visual approach in VFR weather can be a challenge and the center of your focus.

Keep up with your situational awareness. Be sure you are actively listening to the ATC Instruction. Jot the clearance to land down on a pad and be sure and repeat the complete clearance to land back to ATC. If

you have questions in your mind about what

runway you are cleared to land on, even on short final, ask ATC again.

3. When flying the approach and again before you land, confirm that you are lined up on the proper runway. Be sure that you have clearly identified the L or the R associated with the numbers. Remember BOI also has fairly wide taxiways that parallel the runways also. This often adds to the confusion of which surface do I land on, especially for new pilots. And yes, we have had pilots land on the parallel taxiways also.

It will take all of our piloting skills to prevent runway incursions and avoid landing on the wrong runways. Operating aircraft at an ATC controlled airport is challenging for any pilot. It requires prior planning, constant situational awareness, effective communications with ATC, as well as focus on the proper things at the proper time. When operating at the BOI airport, we as pilots (and passengers too!) need to be aware of the challenges and hazards of flying at a busy airport with parallel runways. Let's all work together to make the Boise International Airport the safest airport possible.

August 2017

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Calendar of Events:

There will be no general member ship meeting in August.
 The next membership meeting will be September 26.
 08/10/2017 – Accounts due
 08/08/2017 - Board Meeting (Canceled)
 08/20/2017 - Accounts past due
 Saturday, October 7, – Plane Wash, Idaho Division of Aeronautics
 Aviation Safety Standown - Saturday October 28th
 October - Fall WX Class

- November - TBD

2017 - Calendar of events is available on the T-Craft website.

If you have any ideas for safety meeting presentations or would like to arrange a presentation, contact Membership/Safety Director Jim Hudson

The T-Craft telephone number is 208-546-4128.

Fuel Reimbursement

\$4.17 per gallon.

Price of Fuel May Remain Fixed

Over the past few years T-Craft was able to purchase fuel independently and store the fuel in the tanks of the FBO. The FBO has terminated that agreement and we will be buying our fuel from the FBO. We expected an increase in our fuel costs which would have resulted in an increase in the hourly cost of the aircraft. The new price charged by the FBO is in line with what we were paying prior to the change. We will keep you updated if there are any price increases.

Ratings

17 Student Pilots
 66 Private Pilots
 01 Recreational Pilots
 13 Commercial Pilots
 10 Air Transport Pilots
 32 Instrument Rated Pilots

BFR

John Baglien
 John Moen
 Dale Reese
 Preston Rufe

C182 Upgrade-Check Out

Russell Graves
 Mike Sheridan

Backcountry

Arden Hill - Level III
Ivan Sudac - Level III
Dave Lamoreaux - Garden Valley

SOLO

Logan Schwisow - Jason Hull CFI



New Members

Geoffrey Bik
John Moen
Buddy Snethen

Breakdown of Membership

Member Statistics:

107 Members
4 LSA only
12 on wait list.
42 Class I Members (40%)
65 Class II Members (60%)
08 Inactive (voluntary suspension)
10 Suspended (BFR/Med/Attend/Billing)
10 Social Members (non flying, not included in "Members")

New Ratings

Preston Rufe AMEL - Airplane Multi Engine Land

REMEMBER A SUPER EVENT

REALLY CLOSE TO HOME

October 14 and 15. Gowen Thunder Airshow, Gowen Field, Boise

T-CRAFT STATS*

The top three flyers for the month were:

Jon Miller 19.3
Lan Smith 17.4
Mike Eicher 16.4

The top three aircraft flown were:

4464R 59.7
13686 51.2
67375 39.7

The top billing aircraft were:

7593S 4,362
4464R 4,239
1891X 3,784

Attendance Policy

As you know, the club has an attendance policy that requires members to attend a club function within a 90 day period or their scheduling and flying privileges are suspended. The intent of the policy is to encourage participation, camaraderie and involvement in the club. One of the great attributes of our club is the involvement and participation of members. That's what has made our club strong from the beginning and continues to keep it strong, vibrant and growing today.

Like any organization there are a few outliers, who skirt around the edges of the policy, are forgetful and look for excuses for not meeting the attendance requirements. Some of these members are habitually late and some get upset when informed they've exceeded the limit. Fortunately, this is a small minority, but causes me, the membership director, lots of grief.

In the past I've sent out reminders, and given some breaks in the policy. However, going forward, there will not be reminders or exemptions to the policy.

I'll continue to track attendance after every meeting and when a member exceeds the 90 days, they will be notified that their privileges have been suspended and any future schedules will be canceled. If a member feels there is a valid reason they cannot fulfill this policy, a written request must be made to the board of director's approval for an exception. The club calendar of events lists club meetings and events most of which provide credit for attendance.

Board Meetings and some non-club sponsored events satisfy the attendance policy. Members are encouraged to attend and participate in board meetings for the latest updates on the status of the club.

If a situation presents itself where a member is unable to fly or participate in the club for an extended period of time, there is the option to go on inactive status. Inactive status requires the monthly dues of \$60/month, but not the use-it-or-loose-it flying charge. A member may petition the board to go on inactive status.

October 2017 Plane Wash

The T-Craft Board approved Jim Hudson's proposal that we have the October plane wash on Saturday, October 7, 2017. Several of the members had commented that they couldn't make the plane wash because of work. The board accepted the proposal and the plane wash will be Saturday, the 7th starting at 8:00 a.m. There will be a barbecue when the plane wash is completed.

COMMITTEE WORK

The committee headed by Member Ivan Sudac has sent out a poll to the members of T-Craft. Take time to answer the poll and provide such additional input as you would like.

Thanks to all of the members who give their time for the advancement of T-Craft. (Ed)

WingX VFR Free

CFI Free!, Military Free!, and VFR Free!

Thousands of Flight Instructors and Military Aviators have taken advantage of our amazing free programs: CFI Free! and Military Free!. We give Flight Instructors and Military Aviators WingX Pro7 subscriptions for free including WingX Pro7 and the Advanced IFR subscriptions - for free! This includes WingX Pro7 for iOS, WingX Pro7 for Android, and WingX Pro7 for Fire - you get all the great features of WingX Pro7. You can buy an Amazon Fire for less than \$50, so for about \$50 you can get an EFB including hardware and software - amazing!

Now that WingX Pro7 has the new FAA Airman Certification Standards (ACS) which replace the older FAA Practical Test Standards (PTS) for Private and Instrument pilots (and the PTS for the other

certificates and ratings), Flight Instructors are armed to take students through their training and have them be ready for their check ride.

What is the new VFR Free!?

VFR Free! is basically all of WingX with a few exceptions: VFR Free! does not include the IFR Low and High Enroute Charts, Approach Charts, Internet Weather, Synthetic Vision, and some other IFR-related functionality (subject to change).

For student pilots, VFR Free! will help reduce their training costs. We are very pleased to offer this free service and support general aviation trainees towards obtaining their certificates and ratings. VFR Free! is not limited to student pilots. All pilots can take advantage of this opportunity. VFR Free! is planned to be available this month (hopefully during Airventure).

How do I signup for VFR Free!?

Tired of all those complicated pricing models? We made it super easy.

There is no signup - there is no need to contact us. All you need to do is to buy the VFR Free! subscription from within WingX. As simple as that. Enjoy!

A 99 cent subscription fee applies. Why? Our intent was to make VFR Free! really free. However, there is no Tier 0 (free) pricing option for subscriptions. The next lowest price is 99c. We'll send all our proceeds for VFR Free! subscriptions to a charity that helps children.

[CFI Free! signup information](#)

FAA Safety Briefing Newsletter - Basic Med

The July/August 2017 issue of FAA Safety Briefing explores several key facets of the new BasicMed rule, which offers pilots an alternative to the FAA's medical qualification process for third class medical certificates. Under BasicMed, a pilot will be required to complete a medical education course every two years, undergo a medical examination every four years, and comply with aircraft and operating restrictions.

Feature articles include:

- Bring On BasicMed! - What The FAA's New Regulatory Relief Rule Means For You (p 8) (<https://adobe.ly/2u2hQXe>)
- Errare Humanum Est - To Err is Human (p12) (<https://adobe.ly/2toAmM5>)
- BasicMed One Departure Procedure - BasicMed Infographic Pullout (p16) (<http://bit.ly/BasicMedOne>)
- Your Top 20 BasicMed Questions - You Asked ... We Answered (p 18) (<https://adobe.ly/2smfIC9>)
- How to Defeat Dehydration – A Forgotten Risk to Flight Safety (p 25) (<https://adobe.ly/2s6Zhjg>)
- National GA Award Honorees - Top 2017 General Aviation Professionals Announced (p 26) (<https://adobe.ly/2u3Y1Pg>)

The link to the online edition is www.faa.gov/news/safety_briefing/. There you will also find new mobile-friendly links to each feature article. Be sure to follow us on Twitter - @FAASafetyBrief

HOURLY RATES

Our most recent fuel purchase was at \$4.17, \$0.67 higher than our previous rate of \$3.50. This has resulted in our rate to increase as indicated below.



N1227G
\$60.00



N67375
\$60.00



N4464R
\$71.00



N13686
\$73.00



N1891X
\$106.00



N9989E
\$112.00



N7593S
\$116.00

SQUAWKS

Report by James Eyre, Director of Maintenance Director.

7593S - Nothing to report.

9989E - Partial blockage of the Pitot tube. Cleaned out.

1891X - The CHT gauge was acting erratically. That was caused by a chafed wire running through the fire wall.

4464R - 100 hour inspection had been completed. The crank shaft seal was leaking the crank shaft was turning in the race. Those items were repaired. Maintenance replaced the left main and both brake linings.

13686 - Nothing to report.

67375 - Nothing to report.

1227G - Nothing to report.

Remember to report squawks on schedule master. The old clip boards for reporting squawks have been retired.

CARE OF YOUR AIRCRAFT

Please remember that after landing club policy requires us to clean the leading edges and the windscreen of bugs and foreign debris. There should be no need for any such requirements. As a matter of common courtesy we should leave an aircraft in a clean condition after we have flown it. We learned as early as first grade, if we create a mess, we clean it up. That's the grown up thing to do.

PLEASE, after you land, clean the bugs off the leading edges and windscreen. Then use the furniture polish on the leading edges.

Even though we don't need to pre-heat the engines because of warmer weather, always allow the engines to warm up before starting your run-up. That means temperature gauges should be in the green before the run-up. As DOM Jim always reminds us, if we take care of the engines, they will last a long time and serve us well.

MEMBERSHIP DUES

Effective February 1, 2016 membership dues were established at \$60.00 per month. At the Annual meeting this year membership approved continuing dues at the rate of \$60.00 per month. That rate combined with the low hourly charges for the airplanes made available because of the well timed fuel purchases and the great maintenance under the watchful eye of Maintenance Director Jim Eyre makes T-Craft the leader in high quality, low cost flying. Upgrades will not impact the hourly cost of flying an aircraft.

PLEASE REMIT PAYMENT IN FULL BY THE 10TH OF THE MONTH.

Your account will be PAST DUE if not received by the 20th and there will be a \$10.00 late fee. There will be a finance charge if your account is over 30 days past due and flying privileges will be suspended.

OFF FIELD FUEL REIMBURSEMENT

If you purchase fuel off site you will be reimbursed at the club rate per gallon, currently at \$4.17 per gallon. In order to get the reimbursement, send your receipt(s) to the club mail address to the attention of Reggie Sellers, or scan a legible copy and email to Reggie Sellers. DO NOT put your receipt in the club pouch, these are for Nampa fuel receipts only and your personal receipt will probably get lost.

Aviation Humor

After every flight, pilots fill out a form, called a "gripe sheet" which tells mechanics about problems with the aircraft. The mechanics correct the problems; document their repairs on the form, and then pilots review the gripe sheets before the next flight.

Never let it be said that ground crews lack a sense of humor. Here are some actual maintenance complaints submitted by pilots (marked with a P) and the solutions recorded (marked with an S) by maintenance engineers.

P: Left inside main tire almost needs replacement. S: Almost replaced left inside main tire.

P: Test flight OK, except auto-land very rough. S: Auto-land not installed on this aircraft.

P: Something loose in cockpit. S: Something tightened in cockpit.

P: Dead bugs on windshield. S: Live bugs on back-order.

P: Autopilot in altitude-hold mode produces a 200 feet per minute descent. S: Cannot reproduce problem on ground.

P: Evidence of leak on right main landing gear. S: Evidence removed.

P: #2 Propeller seeping prop fluid S: #2 Propeller seepage normal – #1 #3 and #4 propellers lack normal seepage

P: DME volume unbelievably loud. S: DME volume set to more believable level.

P: Friction locks cause throttle levers to stick. S: That's what they're for

P: IFF inoperative. S: IFF always inoperative in OFF mode.

P: Suspected crack in windshield. S: Suspect you're right.

P: Number 3 engine missing. S: Engine found on right wing after brief search.

P: Aircraft handles funny. S: Aircraft warned to straighten up, fly right, and be serious.

P: Target radar hums. S: Reprogrammed target radar with lyrics

P: Mouse in cockpit. S: Cat installed.

And the best one for last.

P: Noise coming from under instrument panel. Sounds like a midget pounding on something with a

hammer. S: Took hammer away from midget.



FROM OTHER SOURCES

[The Nine Most Used Aircraft Nav aids In History](#)

- By [Colin Cutler](#)

There are lots of ways to get around the globe. Here are 9 of the most used nav aids over the past 100 years.

1) GPS

Where would we be without GPS? Probably not going 'Direct To' many places. The first production GPS satellite was launched in 1989, and the 24th satellite was launched in 1994, making it a truly global system.



2) OMEGA

OMEGA, which became operational in 1971, was the first global radio navigation system. It enabled aircraft to navigate using very low frequency radio signals around the world. There were 8 OMEGA transmitters placed around the globe. The OMEGA system was shut down in 1997 due to the widespread use of GPS, but one of its stations in La Moure, ND, was converted to a US Navy submarine communication station.



[Wikipedia](#)

3) Loran-C

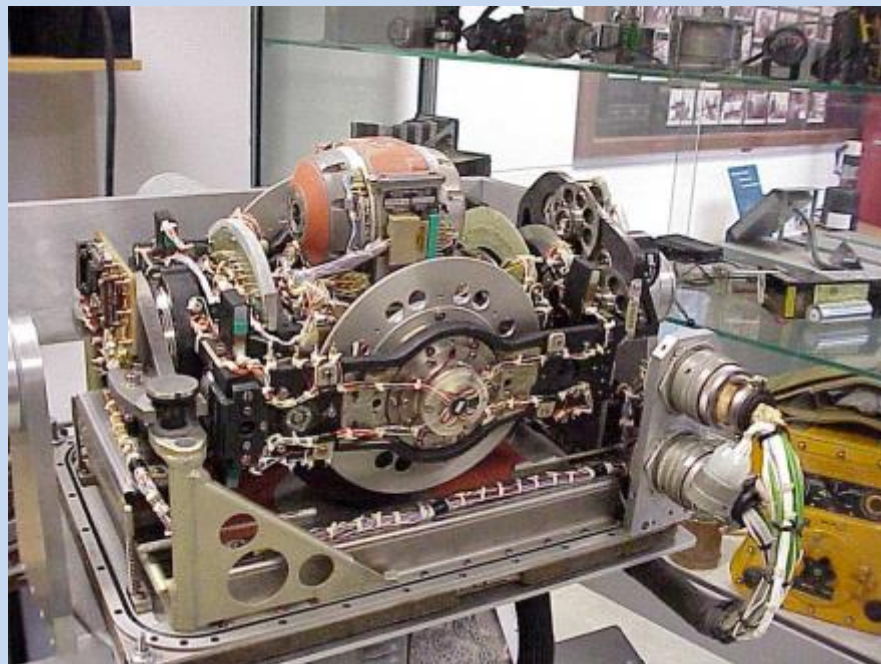
Loran-C, which gained popularity in the 1970s, used a network of land-based radio beacons to create a long-range and highly accurate navigation system. But its fate was sealed by GPS as well. While Loran-C is still operated, many stations around the world have been shut down, or are the process of being decommissioned.

[Wikipedia](#)



4) Inertial Navigation System (INS)

Originally developed for rockets, INS systems started to show up in the 1940s, with the German V2 rocket housing one of the first successful systems. Completely self-contained, INS systems use a series of accelerometers and gyroscopes to determine their position. In the 1960s, INS reached widespread usage in civilian and military aircraft for worldwide navigation.



[Wikipedia](#)

5) VOR

VORs were first used in the 1940s, and they're still one of the most common radio navigation system in the US. VORs quickly took popularity over NDBs with their distinct advantages: 360 courses 'TO' and 'FROM' the station, greater accuracy, and less interference.



[Wikipedia](#)

6) Decca Navigator

Decca was developed in the 1940s for ships, but was migrated for use by helicopters and other aircraft after WWII. Each Decca system used a 'chain' of 3 or 4 radio transmitters, achieving a range of up to 400NM in the day, and 250NM at night. But with limited range and range errors (especially at night), the final Decca chain was shut down in 2001.



jproc.ca

7) Non-Direction Beacon (NDB)

It's the navaid every student pilot loves to hate, but it's still used across the US. NDBs reached widespread usage in the 1930s. NDBs can have extremely long range, making them popular in remote areas, but their susceptibility to errors like night effect and shoreline effect make them less reliable than other modern navigation aids.



[Wikipedia](https://en.wikipedia.org/wiki/Non-directional_beacon)

8) Magnetic Compass

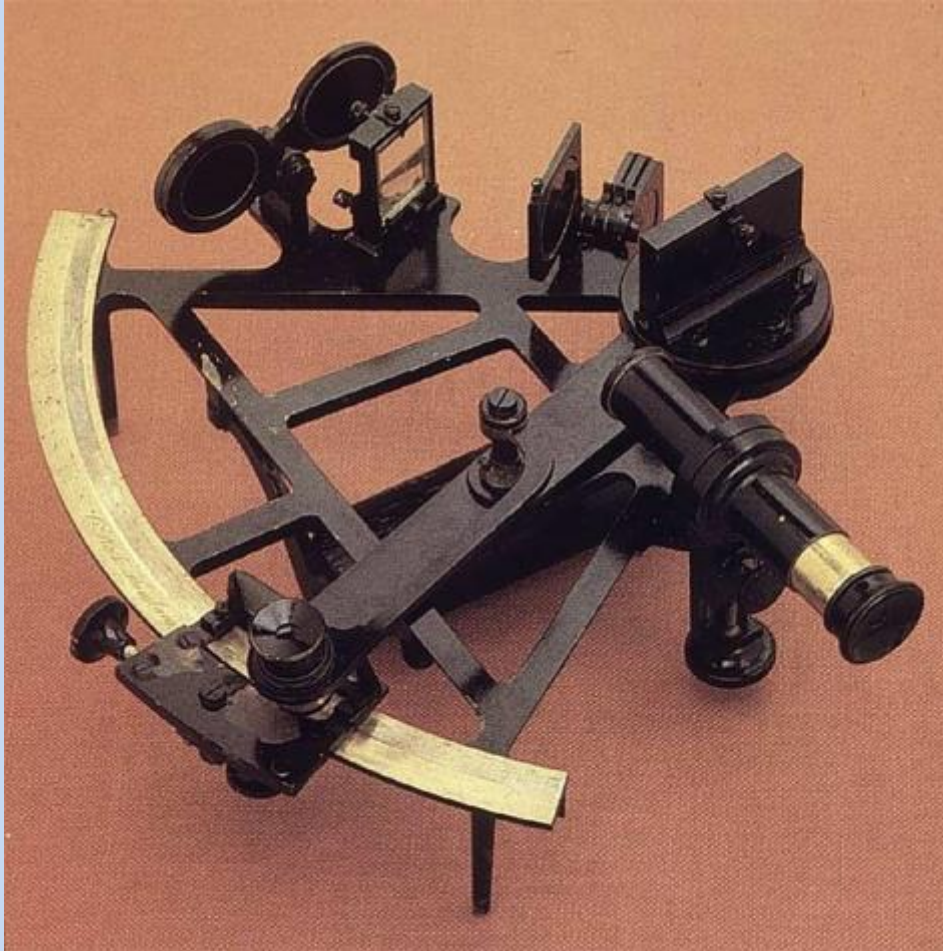
It floats around in every aircraft, and it's got quite a history. The compass was invented in China *sometime between 200BC and 100AD*. Pitch limits and magnetic dip cause reliability problems, but in straight-and-level flight, the compass is still on of the most reliable means of telling which way is North.



[Wikipedia](#)

9) Celestial Navigation

It's one of the oldest forms of navigation, and one of the first navigation aids used by transport aircraft. Celestial navigators use a device called a sextant to determine the angle between a known star and the horizon. By using the angle, plus the time it was measured, you can calculate your position.



[Wikipedia](#)

Believe it or not, the SR-71 used a computerized celestial navigation system as one of its primary means of navigating the globe. The system could lock onto as many as 11 stars at a time, even during the day, and could determine the jet's position with up to 300 feet of accuracy. That's not a bad thing to have when you're going Mach 3.



8 Tips For Flying Around Thunderstorms

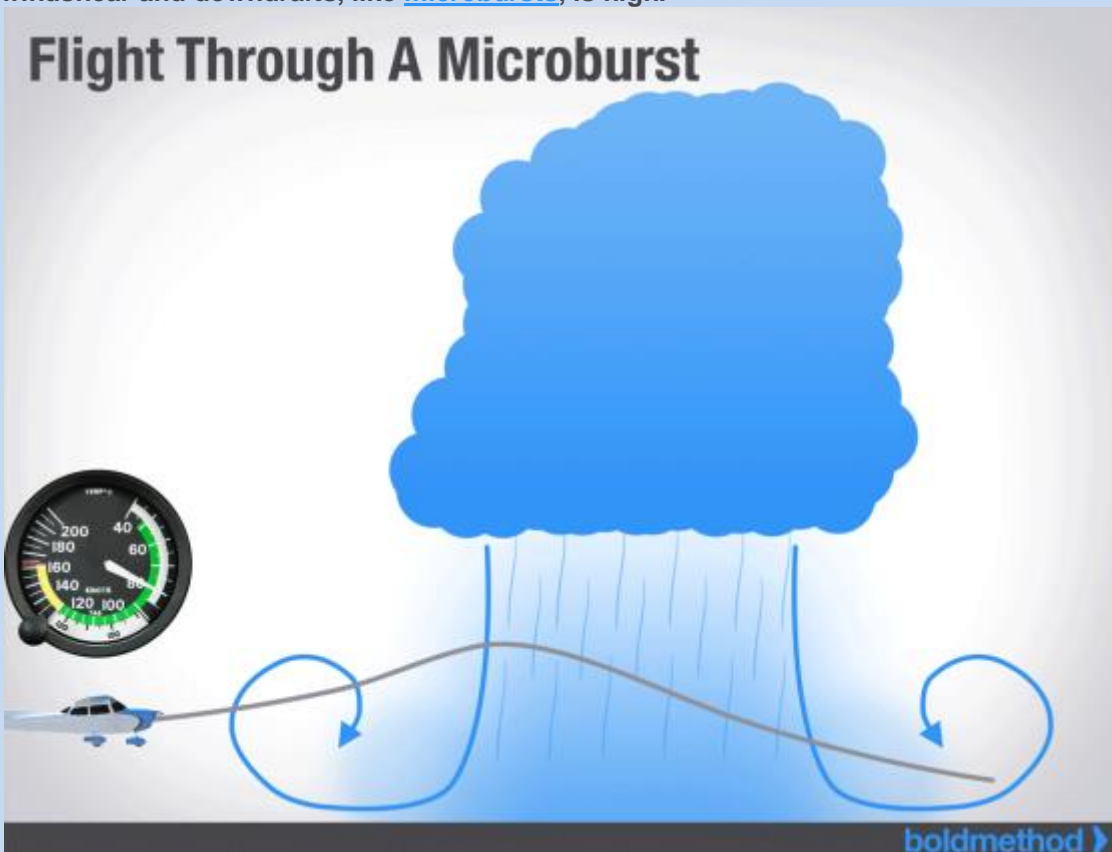
- By [Swayne Martin](#)

Summer is finally here, and so are the thunderstorms. Here are a few tips to keep you safe on your next flight.

1) If you see a thunderstorm with numerous lighting strikes, the updrafts and downdrafts inside it are likely to be extreme. Air moving up and down at thousands of feet-per-minute cause friction, resulting in lightning strikes.



2) Even when visibility is good, never fly below thunderstorms. The potential for extreme windshear and downdrafts, like [microbursts](#), is high.



3) The FAA recommends you fly 20 miles or more away from large, severe storms. Hail and severe turbulence can be found several miles away from visible storm cells.



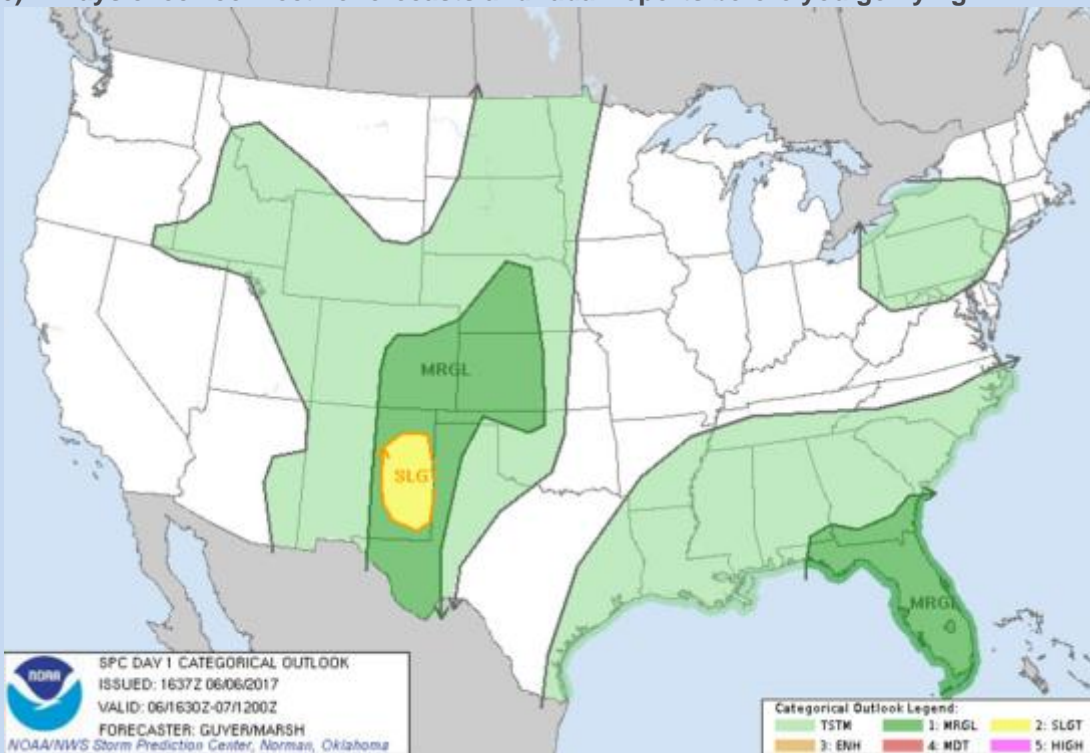
SwaynMartin

4) If you start to encounter turbulence, slow to V_a , or your manufacturer's recommended turbulence airspeed.

5) If you find yourself in convective weather with turbulence, focus on keeping the wings level. Slow below V_a and accept large altitude and airspeed deviations.



6) Always check convective forecasts and radar reports before you go flying.



Weather Service

7) If you want to avoid flying through hail, don't fly below the thunderstorm anvil.



Boldmethod

Landing is, without a doubt, one of the hardest things to do in aviation. Landing at night is even harder. And since it's the middle of summer and sunset is late, we all rarely get a chance to practice night landings.

With significantly fewer visual cues, you need to rely on your instruments and airport lighting much more during night landings. There are lots of different reasons your night landing can go badly (more than we can possibly list here), but these are 5 of the most common problem areas.

1) Black Hole Effect

When you're flying into an airport that has very few ground features and lights around it, you get the illusion that you're higher than you actually are. That's because the airport looks like an island of bright lights, with nothing but darkness around it.

Pilots tend to fly lower approaches into these kinds of airports, hence the name "black hole effect". The darkness sucks you in, and if you aren't careful, it can cause you to crash short of the runway.

Solution: use the PAPI or VASI lights, and use the ILS for vertical guidance, if the runway has it.

Dark, Featureless Terrain Around A Runway Results In Lower Approaches



2) High Intensity Lights

At non-towered airports, you control the runway lighting by keying the mic. 3 clicks for low intensity, 5 clicks for medium intensity, and 7 clicks for high (if the airport has it).

When you're trying to locate the airport, it's usually best to bring the lights up to high. But once you've spotted it, the high intensity lights can cause problems.

That's because when the runway lights are bright, you feel like you're closer to the runway than you actually are, causing you to fly a higher-than-normal approach. Why? Because when the lights are bright, you have the illusion that you're lower and closer to the runway than you really are, causing you to fly a higher glide path than you normally would.

But that's not the only problem with high intensity lights. As you approach your round out and flare, the lights can be blinding, making it very hard to see the runway itself. And when you can't see the runway, it's hard to make a good landing.

Solution: turn the lights down to low or medium intensity (3 or 5 clicks on CTAF) when you enter the pattern.

Bright Lights Can Cause A Blinding Effect During Roundout And Flare

Boldmethod

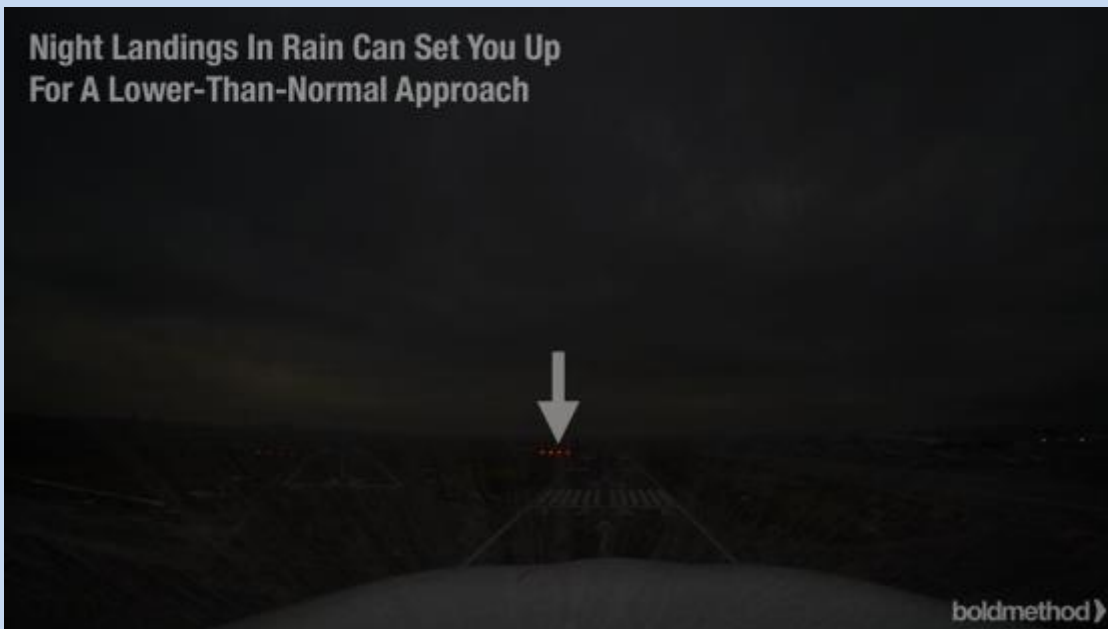


3) Rain

Landing in rain at night is a lot like the black hole effect. If you're landing in rain, you get the illusion that you're higher than you actually are. That means you could fly a lower than normal approach, getting you dangerously close to the ground.

Solution: use the PAPI or VASI lights, and use the ILS for vertical guidance, if the runway has it.

Night Landings In Rain Can Set You Up For A Lower-Than-Normal Approach



Boldmethod

4) Runway Width Illusions

We've all been there in the daytime, trying to land on an unusually wide or narrow runway, and being way off on glide.

The same problems happen at night too. If you're landing on a wide runway, you have the illusion that you're too low, and you fly a higher than normal glide path.

And if you're landing on a narrow runway, you have the illusion that you're too high, which can fool you into flying a lower than normal glide path.

Solution: use the PAPI or VASI lights, and use the ILS for vertical guidance, if the runway has it.



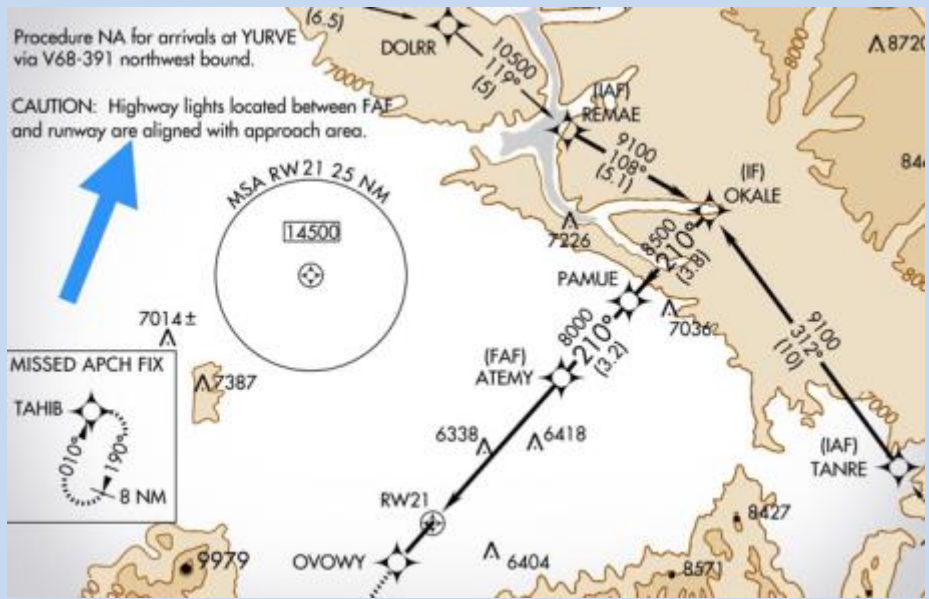
5) Locating The Airport, And NOT The Highway

Aside from all these problems we've already listed, just *finding* the airport can be a challenge.

Some airports, like Cortez, CO, have brightly lit highways near them. And believe it or not, the highway can be pretty easily mistaken for a runway or approach lighting system.

If you find yourself lining up for a highway instead of the runway, you're going to find yourself with all sorts of problems, from being too high or too low, or getting dangerously close to terrain and unlit obstacles.

Solution: zoom in on your GPS, or load an approach to verify that you're lined up with the runway. Look for the airport's rotating beacon, and change the runway lighting intensity. All of these will help you verify you're pointed at the runway.



Using VASI/PAPI, And The ILS

Almost all lighted runways have a glideslope system, whether it's visual, electronic, or both.

When it comes to visual glideslopes, PAPI and VASI systems are the most popular ones out there.

For PAPIs, you want to see two red, and two white. (Remember the saying "two red, two white, just right"?) And for VASIs, you want to see red over white ("red over white, just right").



Boldmethod

If the runway has an ILS, that's even better. By dialing up the ILS frequency, you'll have electronic guidance all the way down final. This is a tool you can use even if you aren't instrument rated. Have an instructor show you how to find the ILS frequency, and how to dial it up. When you combine it with a PAPI or VASI, you'll have a combo of the best guidance for a safe night landing.

If The Runway Has An ILS, Use It



Boldmethod

Making Safer Night Landings

Landing is tough, and landing at night is even tougher. Poor lighting and precip around the airport can leave you low, and brightly lit airports can leave you high.

By using visual and electronic glideslopes to back yourself up, you can easily overcome these illusions. And with a little practice, your night landings will be every bit as good as they are on a bright, sunny day.