

HAPPY
New Year

CPA FLIGHT LINES



Barbara Hoversten

Brian Beatty's freshly painted RV-7 coming in to KAPA.



Unusual Attitudes

By Marty Brophy, CPA President

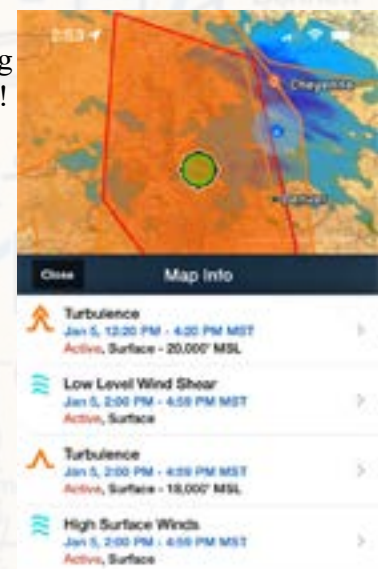
Happy New Year to you all! Let's hope we continue moving towards normalcy and away from Covid 19 in 2022! I think everyone is getting tired of this unwelcome and uninvited party crasher.

I opened this page in December with these words: "Is it just me, or have we had an Airmet Tango hovering over northern Colorado for the last few weeks?". So here we are, one month later, and darned if that Airmet isn't still hanging around, see attached Foreflight screen shots (the blue dot is me in north Fort Collins). And this one has had more than moderate low-level turbulence for the last week or so. A concerning feature is its low-level wind shear, not to mention the high surface winds. Recently, I started a left downwind for KFNL runway 33 with the winds 270 at 10 and it switched to 180 at 10G15 by the time I got to final. I was glad to have a very long, wide runway to put down on!

The 2022 AIM Glossary defines wind shear as "A change in wind speed and/or direction in a short distance resulting in a tearing or shearing effect. It can exist in a horizontal or a vertical direction and occasionally in both." However you define it, it can occur in storms or in great weather and spell serious trouble for small planes! And big ones.... IFR Magazine (my new favorite source for great aviation teaching) had articles on wind shear and related accidents in both its July and October issues and mentioned that "Eastern Flight 66, a Boeing 727, went down in a rainstorm at New York JFK airport, killing 113." It behooves us all to learn about how to predict, deal with, and avoid this hazard!

I asked last month for member reports of high counts of U.S. states landed in or taken off from. Only two responses so far. Frank Ladonne (a familiar voice to Flightlines readers) reports he and Jolene have done 39 states in their own plane "so far"... Keep up the quest, Frank! And Sandy and Roger Wickham are first to report having done all 50 and she reports "they were all fun"! Moving on to Canada or what, Sandy? Who else can share their stats?

Steady snow falling here now with very low visibility. I want those cold, blue skies and infinite visibility days back so I can enjoy some high lift flying without having to clean off bugs afterwards. Fly safe everyone and fly often! After all, wouldn't we all rather be flying?



A Tale of Two Lost Bonanzas

By Bill Marvel, the RV-14A guy

Like many pilots, I study light aircraft accidents with the thought that doing so may reduce the likelihood of having one of my own. So far, so good, but we all know that on any given day things can go south when you're dealing with airplanes, weather and terrain. The two examples I cite below had the same basic cause and took four lives, two in each airplane. Aside from that, they are unrelated.

Full disclosure – I have not taken the CPA mountain flying course and don't know if what I am about to recommend is mentioned in that course or not. But I learned to fly in Colorado 55 years ago and have spent a lot of time flying over and around the mountains of the west, from Colorado to the Pacific Ocean and from Cabo San Lucas in Mexico to north of the Arctic Circle in Alaska. Even if what I am going to suggest is mentioned in the CPA course, its value cannot be overstated. The fact is that aside from these two Bonanzas, many others have paid the price for not heeding it.



The first accident occurred in October 2020 after a departure from Telluride. On board were a United Air Lines pilot and a United flight attendant who had flown to Colorado from their home in Florida to be married. A look at Flight Aware reveals that while here, they flew the airplane locally several times, apparently just sightseeing. They had certainly viewed much of the terrain. For those not familiar with the Telluride airport, it is surrounded by high mountains (14,000 feet MSL) on the north, east and south, and sits on a mesa in a large, high valley or wide canyon, depending on how you wish to describe it. Telluride, at 9070 feet MSL, is the second highest airport in the country, topped only by another Colorado location, Leadville.

On departure that final day, they were presumably full of fuel and all their bags, which likely was not the case when they did the local flights. Their S-35 V-tail Bonanza was not turbocharged, so the additional weight of fuel and bags just made the climb out that much less spirited. After their normal takeoff toward lower terrain to the west, they did a downwind departure and headed east toward Florida. Long story short, the airplane crashed not far east of Telluride after what appeared to be a stall as it approached rapidly rising and much higher terrain. It did not burn but two fatalities resulted.



The second accident occurred in July 2021 after departing Aspen headed to Iowa. This one was a non-turbo A-36 Bonanza. Because Aspen was a lunch and fuel stop, it too was presumably full of fuel and certainly heavier on departure than it was on landing. Unlike the Bonanza at Telluride, the A-36 initially climbed near the airport, making two 360 turns to gain altitude. But when it finally headed eastbound, also toward high terrain, the airplane never managed to top it and crashed near Midway pass. Two more fatalities.



Government agencies will eventually issue reports on the suspected cause of both crashes. But regardless of their conclusions, no speculation is required to know with absolute certainty one major error both pilots made. In both cases the aircraft involved were climbing, heading toward high terrain and did not succeed in getting above it in time to avoid the accidents. To evaluate these tragedies, let's start by first rolling the calendar back a few years (maybe a lot of years!) to high school physics to consider what these pilots apparently did not.

Most of us have heard the terms potential and kinetic energy. In general, potential energy has to do with height and kinetic has to do with speed. Total energy is a combination of both. A 100 mile-per-hour fastball from a major league pitcher has a lot of kinetic energy, but since it is only a couple of feet above the ground, lacks much potential energy. But that same fastball, if thrown straight up by the same pitcher, loses all of its kinetic energy just before it starts down. But it has maximized its potential energy, with the amount depending on the height it reached.

In this example of the two components of total energy, we don't care what energy the baseball has but that does not hold true with our airplanes. Unless we are nearing the ground while landing, we want them in a total energy state that is both fast and high. How fast and how high depend on the airplane and terrain but nonetheless, we want it to have significant total energy at any given time because energy creates options for the pilot. Now, let's return to the two accidents. In both cases the airplanes were climbing, and that means their kinetic energy was lower than it would be in cruise. And both were approaching rising terrain, so their height above ground, and hence potential energy, was also reduced and becoming less the closer they were to the mountains ahead. In short, both aircraft were in low total energy states. A pilot can convert potential energy to kinetic by diving the airplane if there is enough altitude below it. And the pilot can also convert kinetic energy to potential by zooming upwards given sufficient speed. But when the aircraft has both low speed (low kinetic energy) and low altitude (low potential energy), it's headed for trouble – no exaggeration unless it is landing. A pilot always has the ability to reduce high total energy for something like turbulence. But with low total energy, one's options are greatly limited and at some point, like shown by these two Bonanzas, can become non-existent...

So what's the “bottom line”? In one sentence, here's your life preserver: Get to your cruise altitude and your cruise airspeed before you get to the high terrain you have to cross. The first thing I tell people curious about mountain flying is to definitely take a course in it as soon as possible and absorb all the information presented.. But if a person forgets everything else and can recall only one thing, let it be what appears above. As the expression goes, the life you save may be your own.

On the subject of mountain flying, check out the shout out to your CPA Mountain Flying Class in the latest issue of the Avemco On Approach Newsletter. Huge praise to Bill Standford and Bill Dunn and all who help the CPA put on the seminar every time.

[What I learned about Mountain Flying by Not Flying in the Mountains](#)

Sign up for one of our two upcoming classes in 2022. Check out the website for dates and registration information. [CPA Presents Mountain Flying Course](#)





Neil Ulevich

It seemed the ultimate Follow Me, a Chinese on a bicycle with paddles directing a US government 707 carrying a visiting congressional delegation to Beijing in 1986. Today the Chinese capital has what may be the most modern airport in the world.

Learn more about CPA member and Pulitzer Prize Winner Neil Ulevich [here](#).



[2022 Colorado Airport Directories & Aeronautical Charts are coming! Visit Colorado Division of Aeronautics homepage for information and to download your free copy.](#)



Ask the CFI

By Tammy Raines CFI

VFR Flight Following Basics- Why and How

VFR flight following is officially described as Radar Traffic Information Service in Paragraph 4-1-15 of the FAA’s Aeronautical Information Manual (AIM), which notes:

“Pilots receiving this service are advised of any radar target observed on the radar display which may be in such proximity to the position of their aircraft or its intended route of flight that it warrants their attention. This service is not intended to relieve the pilot of the responsibility for continual vigilance to see and avoid other aircraft.”

Flight following is an excellent tool for your pilot toolbox, especially on local flights with passengers and cross-country VFR. Unlike your handheld radio, your fancy noise canceling headset, and iPad with Foreflight, flight following doesn’t cost you anything.

Flight following provides several key benefits:

- Safety alerts
- Traffic advisories
- Limited radar vectoring
- Sequencing at some locations

How to Request Flight Following With the Airport

If you are flying out of a Class C or Class D airport, you can usually request flight following with the local ground control. Because flight following is voluntary, if the airspace is extremely busy, controllers may tell you they are unable to provide. You can find the ground control frequency in your Foreflight app or in the airport chart supplement.

Example (on ground at towered airport)

Follow the standard format, what you are, who you are, what you need:

You: “Palomar Ground, Cessna 9042 Quebec, with Request”

Ground Control: “ Cessna 9042 Quebec, go ahead”

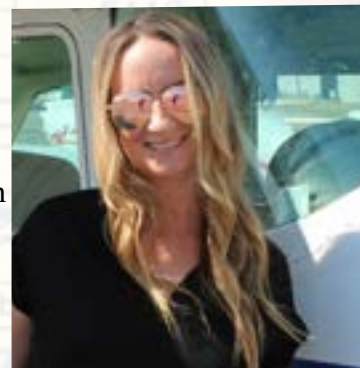
You: 9042 Quebec, is a Cessna 172, at Western Flight would like to request VFR flight following to Romeo Mike November.”

Ground Control: “9042 Quebec, remain clear of San Diego Class Bravo airspace, departure frequency 127.3, Squawk 1234”

You: “9042 Quebec, remain clear of San Diego Class Bravo airspace, departure frequency 127.3, Squawk 1234”

How to Request Flight Following From the Air

If you are already in the air, you can ask departure control or “center” for flight following. You can find this frequency on your chart or by referencing the departure control frequency on Foreflight. Always be courteous and polite, especially if you can sense the controller is very busy.



Example (in the air with ARTCC or TRACON)

You: "So Cal Departure, November 9042 Quebec: VFR, with request."

So Cal Departure: "9042 Quebec: Say request."

You: "9042 Quebec is SkyHawk, 5 miles east of Palomar, 2,500 feet. Climbing to 4,500.

Request VFR Flight Following to Ontario"

So Cal Departure: "9042 Quebec: Squawk 4231 and Ident."

You: (Set your transponder to 4231, press the Identify Button), and say "4231 and Ident, 9042 Quebec"

So Cal Departure: "42 Quebec: Radar Contact, 6 mi. East of Palomar, at 2,500. Traffic at your 11 o'clock, 4 mi. North Bound, Altitude indicates 3,000."

Try out the phraseology for Flight Following on the PlaneEnglish ARSim, under VFR > Flight Following. With three available lessons and tens of scenarios, you can practice this important and helpful service on many airspaces and airports and be comfortable and confident using it in the air.

[Send your questions to Ask the CFI.](#)
[Or send them to Newsletter@coloradopilots.org](mailto:Newsletter@coloradopilots.org)

Colorado Pilots Association Apparel
Get you order in now for your favorite pilot
Design your own CPA wardrobe and accessories.

Go to [Lands' End](#) today.



Do you have a special skill or want to volunteer to help your CPA? Let us know that you want to help!

[Email president@coloradopilots.org](mailto:president@coloradopilots.org)



SAFETY REPORT

Safety Rep: Mike Koscielniak

ZOOM PRESENTATION FOR MONDAY, JANUARY 24, 2022

The speaker for this session will be Mr. Don Johnson, Lead Docent for the National Museum of WWII Aviation, Colorado Springs, CO.

Mr. Johnson is a former US Air Force pilot as well as a former airline pilot.

UPCOMING PRESENTATIONS

For Monday, February 28, 2022, we have scheduled Mr. David “Shawn” Williams of the Denver office of the NTSB.

For Monday, March 21, 2022, we are trying to schedule Mr. Josh Pruzek, Northwest Mountain Regional Manager, AOPA.

Biweekly FAA Safety Briefing News Update

Weather Risk Assessment Simplified plus Webinars for January

Topic: Gain Confidence in Knowing if any of the Six Hazards have a Reasonable Risk of Affecting Your Flight.

On Monday, January 10, 2022 at 17:00 MST

Select Number:

WP01109291

Description:

In this 60 minute webinar, you will learn the more advanced skills of weather risk assessment within a Preflight Brief. Delia will demonstrate her method to clarify and add certainty to often conflicting weather information.

- Learn the top tools to identify each of the six hazards
- Learn the tool most pilots rely on—that is actually the LEAST reliable tool (and what to use instead)
- How to identify “invisible” hazards.
- Recognizing LLWS even when it’s not forecast.

This is our level 3 class for more experienced pilots, however, it can also benefit low time pilots.

Note: When you register you will receive emails from Easy Webinar or Fly-Rite. You can easily opt out anytime. Look for the “unsubscribe” link at the bottom of each email.

Click [here](#) to register today

Other webinars available to register for include:

Monday, 3 January 2022 - Weather Risk Assessment Simplified 3:00 PM PST/6:00 PM EST

Wednesday, 5 January 2022- Best Tips for Preflight Weather Brief 4:30 PM PST/7:30 PM EST

Thursday, 6 January 2022 - Preflight Weather Self-Brief: Basic 3:30 PM PST/6:30 PM EST

Sunday, 9 January 2022 - Best Tips for Preflight Weather Brief 8:00 AM PST/11:00 AM EST

Monday, 10 January 2022 - Weather Risk Assessment Simplified 4:00 PM PST/7:00 PM EST

Wednesday, 12 January 2022 - Preflight Weather Self-Brief: Basic 3:00 PM PST/6:00 PM EST

Thursday, 13 January 2022 - Best Tips for Preflight Weather Brief 4:30 PM PST/7:30 PM EST

Saturday, 15 January 2022 - Weather Risk Assessment Simplified 8:00 AM PST/11:00 AM EST



Make Your List, and Check it Twice — Top Tips for Winter Ice

As temperatures drop and precipitation falls, pilots have to face new challenges. To help, the FAA has put together a list of top tips for pilots operating in winter weather. So before your next flight, check out the list here: [Winter Safety List](#). Among the items covered are researching runway and weather conditions for your arrival airport, understanding the potential for icing conditions, and maintaining situational awareness in the airport environment, especially when snow could obscure some signage or markings. The list also contains links to several videos, articles, and other winter resources you can use to stay safe.

FlySafe — Aircraft Performance Monitoring

Pilots continue to have unreasonable expectations of their own personal performance, and the performance of their aircraft, which has contributed to fatal general aviation (GA) accidents.

The General Aviation Joint Steering Committee’s (GAJSC) working group on system/component failure (powerplant) suggests that reasonable performance expectations, based on realistic data from flight data monitors, can help forecast system/component problems before they reach the point of failure, resulting in safer flight operations. Read more about this important topic on our [blog](#) and check out a video presentation [here](#).

Picking Up STEAM

In the FAA Safety Briefing article “Picking Up STEAM,” author Susan K. Parson describes the kind of open communication and collaboration that has proven critical to keeping FAA training and testing materials relevant — and real — to everyone who operates in the National Airspace System (NAS). That includes efforts to create the Airman Certification Standards (ACS), a fundamentally enhanced version of the Practical Test Standards. ACS integrates the standards for what an applicant needs to know, consider, and do to pass both the knowledge test and the practical test for a certificate or rating and operate safely in the NAS. Read more about the FAA’s collaborative efforts with industry to improve training here: <https://medium.com/faa/picking-up-steam-4be51814aaee>. To view our entire new issue on STEM, go to medium.com/faa/pipelines-pathways-partnerships-a4280b08cc85 or www.faa.gov/news/safety_briefing.



Paul Gordon

Be sure and follow the Colorado Aviation Photography on Facebook for more great shots of Colorado Aviation in action.





Chris Swathwood

US Marine Corp MV-22 Osprey aircraft prepare to depart Denver International Airport after a presidential support mission.

Follow the Colorado Pilots Association on Facebook, Instagram, Twitter and LinkedIn.



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Colorado Pilots Association
PO Box 200911
Denver, Co 80220-0911
(303) 367-0670

