



CPA FLIGHT LINES



We're Off & Running!

by Bob Kinney, Chairman, Fly-in Committee

The 2020 fly-in season was off to a wonderful start on Saturday, January 11, 2020 when thirty stalwart CPA members met at the Colorado Division of Aeronautics at FTG to develop the schedule for this year's fly-in season. Shawn Kinney provided the tasty before-meeting, homemade treats and then the meeting was underway. Members gathered from as far away as Colorado Springs and Grand Junction. Once again, it was just like Christmas in January. Hosts unwrapped their plans for this season's fly-ins, they were discussed at length, and the schedule was set. The excitement was palpable as members reviewed the prospects for loads of fun at eleven association-hosted fly-ins over the upcoming flying season. Most of these events are of the medium to longer range variety, and a majority visit New Mexico this time around, however three members volunteered to plan shorter, one and two day destinations that should appeal to those looking for a closer venue. Please visit the website often & watch each issue of FLIGHT LINES to catch each fly-in as it's posted.

April: Why not challenge the weather gods just one more time? The fly-in season begins on April 25, with a one day visit to beautiful Saratoga, Wyoming for lunch at the Saratoga Springs Resort followed by time to visit the historic downtown area. Bob Kinney will host this short visit to warm members up to the upcoming fly-in season.





May: May begins with a flight down to, and I really mean “down”, as we visit Carlsbad Caverns National Park, New Mexico. A team of Bobs, Bob Stewart and Bob Venohr, will guide us to this southern destination on May 1 - 3.

Two weekends later, Rich Barclay is hosting a gathering at the unbelievably beautiful White Sands National Monument. If you’ve never visited this remarkable American treasure, you will not want to miss this fly-in!

June: The first weekend of June, fly-in veteran Jan McKenzie, has a great return trip to Taos, New Mexico planned. A three hour float trip on the lower Rio Grande river, the historic Taos Plaza, Rio Grande Gorge bridge and West Rim trail are all on the agenda.

Rounding out our June plans we’ll flight plan to Gallup, New Mexico on June 19 - 20 as Bill Gust leads us to the Navajo Code Talkers Museum, the Rex Museum, and the Gallup Cultural center. An optional visit to El Morro National Monument may be offered.



July: Member Leonard Gurule wants you to mark your calendars for July 11 & 12 to join him for a quick flight and overnight stay in Steamboat Springs to enjoy a bit of the annual Balloon Festival, tour the town, hike the Yampa River Core Trail and dine with CPA friends.



Later in the month, four days of Montana is on the slate for July 16 - 19 as Bart & Mary Jones guide us to the town of Dillon. The Beaverhead Museum, Lewis & Clark’s Lookout State Park, Bannack State Park, Elkhorn’s hot springs resort, the ghost town of Coolidge, a drive to Butte and fishing for those so inclined will pack this four-day-venture. I’m exhausted telling you about it.



August: How about a short trip to Rocky Mountain Metro Airport on the evening of August 29 to enjoy a potluck BBQ with your CPA friends as Bob & Shawn Kinney host members at this fly/drive in get-together. The party should be over in plenty of time for an early evening return flight to your home base.

Laurie Garrett has advised that she may plan a quick, August fly-in to Paonia, Colorado, but has had no time to do the planning as of this writing. Stay tuned to join your CPA friends for a quick “out and back” if she doesn’t get buried by all of her other CPA responsibilities.

September: The Big Bear California Airport Pilots Association and CPA member Ron Krohn have invited us to a “red carpet” event, promising an open bar happy hour and complimentary full course dinner with guest speaker on day 1. The list of activities is extensive for the following days, including a boat cruise tour of the lake, wandering Big Bear town, guided jeep tours, kayaking, and many other activities TBD.



October: CPA’s Bill Marvel is rounding out the season with one last 2020 visit to New Mexico with a bang! This will be a doozy! “A Blast from the Past and a Flight to the Future” is Bill’s title for this adventure on October 2 - 4. Landing at Truth or Consequences, we’ll travel by tour bus to the SpaceX Spaceport America for a tour on Friday. Following the tour we’ll fly back to Socorro where, on Saturday, we’ll visit the

Trinity Site, the site of the first atomic bomb test. It’s only open two days a year. Don’t miss it!



All in all, you will not want to miss these fly-ins as they all offer a means to marvel at the wonders this country has to offer. Who needs foreign travel when you can fly first class in your own airplane to destinations as varied as we offer? Watch the website under “Fly-in Events” for registration info and changes as they occur.



Contact Bob Kinney at flyins@coloradopilots.org with questions.



Brophy's Broadcast

by Marty Brophy, CPA President



As winter drags on, and preflight gets colder and colder, look at the bright side of cold weather flying. We get lots of lift, beautiful snowy mountains to look at, and (maybe best of all) we don't have to spend 20-30 minutes after each flight cleaning the bugs off! So, don't let the cold weather scare you off, go ahead and “slip the surly bonds of earth”.

I spent some time in the last month at the useful and informative web site of the Federal Aviation Agency, www.faa.gov. Lots of good flight training, safety, and regulation information there, including the Wings program which can save you money on insurance. But it also has pilot statistics compiled at the end of each year.

https://www.faa.gov/data_research/aviation_data_statistics/civil_airmen_statistics/. With a little crunching of their data, I found that as of 12/31/2018 (the latest data available), the 50 states, District of Columbia, and U.S. Territories had 590,448 pilots. And Colorado had 18,891 pilots as of that date, 3.2% of the total. The 3 highest pilot counts were in FL (10.7%), CA (10.5%), and TX (9.2%) for the curious out there.

Meanwhile, our Colorado Pilots Association has 670 current members, so about 3.5% of Colorado pilots. We would like to increase that! Encourage your friends to join us and take advantage of the benefits of being a CPA member, see our website <https://coloradopilots.org/> under “About Us” on the home page for a list of benefits.

And speaking of benefits, Education Chair and Delta Airlines captain Jeff Hinkle is finalizing updates to our scholarship program to help as many new pilots as possible complete their training. Keep your eye on the webpage for details of that very soon.

We are still calling all CPA CFI's! We need your info to keep creating a free registry of CPA members who are instructors looking for new students. Tell us your name and e-mail, what airports you work out of, if you are part of a flying school, what you can instruct (Instruments? Mountain flying? Multi-engine?...), what planes you have hours in, and whether you need the students to have their own planes or can provide one, and we will connect you to interested students in your area. Send your details to newsletter@coloradopilots.org and you are off the runway to new students!

The board of directors continues to try to find ways to add value to your membership. Please e-mail me at president@coloradopilots.org with any suggestions you have for that.



Pancake Breakfast Fly In or Drive In



First Saturday of every month @ 8:00 am - 11:00 am

Exploration of Flight, 13005 Wings Way Englewood, CO 80112

Join Wings Over the Rockies for monthly fly-ins featuring pancakes, planes and pilots! Pilots in command – fly in to receive free breakfast (passengers not included)! Admission Pricing: Adults – \$10.00 Seniors & Military – \$8.00 Youth (4-16) – \$4.00 Wings Members – Free Pancake Breakfast Pricing: Suggested donation Contact Keith Palmer for tie-down space.

KPalmer@WingsMuseum.org, 303.360.5360 ext 165. Pancakes will be served from 8:00 AM-11:00 AM. Regular gallery admission will follow from 11:00 AM-5:00 PM.

FOOD WITH A VIEW AT 9070 ALT Telluride Regional Airport - KTEX

San Juan Club located in the
Observation Lounge is now
Open for Lunch
11:00-14:00 Friday thru Monday
and on special request.





Tuesday, March 10, 2020 ● 7:30am to 6:30 pm

Colorado State Capitol
200 East Colfax Avenue
Denver, CO 80203

Join the Colorado Citizens for Space Exploration (CSE), Office of Economic Development and International Trade (OEDIT), Colorado Business Roundtable (COBRT), Aerospace States' Association (ASA), Colorado Space Coalition (CSC), Colorado Space Business Roundtable (CSBR) and Manufacturers Edge in coordination with our numerous aerospace partner organizations, for a day at the Colorado State Capitol.

Full Schedule at:
[aerospace_day](#)



Ask the CFI

By Rich Barclay, COMM, CFI, CFII, MEI, AGI, IGI, A&P, CSIP



This is a new feature of Flight Lines to help CPA members with any questions they have about flying, regulations, airplane systems, etc. Send your questions or comments to newsletter@coloradopilots.org.

QUESTION: How do you handle a restart of your engine when you stop for 3 to 4 hours in the cold winter months.

You stopped for the \$100 hamburger on a cold winter day, now it's time to restart. The oil should still be well above 32 degrees. Your fuel injected engine lines have cooled down so you may not have to worry about a hot start. If that's the case, just do your normal start and try to keep the RPM below 1000 for the couple of minutes. Check oil temp after the engine is running and be sure you are in the green range. You should never take off with the oil temp below the green. If the oil temp is not in the green, by the time you taxi to the active runway, the temperatures on the engine should be ready for departure. If not, let it warm up a few more minutes. The wings love the cold dense air, your engine oil not so much.

If you carry a blanket in your plane for survival or for back seat passengers to stay cozy, you could use it to help keep the engine warm while you are having lunch. Throw it over the cowl and close the cowl flaps. Color of the blanket is optional, pink or blue, depending.

I'm usually more concerned about the temperatures being too high and dealing with a hot start. If you have a door on the upper portion of the cowl, open it and let all that hot air out while you are having lunch. Open the cowl flaps to get the chimney effect going under the cowl. It really works great.

Get familiar with the hot start procedure for your airplane. Some POHs address it, some procedures just don't work. Find a procedure that works for you and use it. When starting a general rule is, if you crank over 10 blades and the engine does not fire, try a different procedure. Don't just run the battery down. If you have cranked for 2 minutes and didn't get the engine started, let the starter cool down 5 minutes. If you crank again with no results, double the cool down time for that \$500 starter.



QUESTION: Are there still TFRs around nuclear power plants?

Yes it is a 3000ft AGL and three mile TFR. No they are not marked on our sectionals, but it is your responsibility to avoid them. There is a TFR around ALL power plants. Prisons have a do not loiter statement on them. Limon and Canyon City prisons are a couple in Colorado. Large gatherings, like a Bronco game, Rockies game, Bandimere Speedway during the major events of 30,000 or more people also have a TFR of 3000ft AGL and 3 miles. Fire fighting events, floods and other natural disasters will have TFRs. If it is not published on my charts how do I know. Call Flight Service and ask for NOTAMs. Fore Flight and other online services publish NOTAMs. Do we spend the time reading them? I hope so! I’m old school and before I take a long flight, I call Flight Services. If you talk to them it is recorded, so in a potential violation situation, if you asked about TFRs it may help you. We all have ADSB now, like before, it is your responsibility to stay out of certain airspace. They know way too much about us now. Use flight following. It’s not your get out of jail card, however it helps. Be safe up there.

QUESTION: Can that large ring of keys in your ignition shut your mags off?

Yes, that heavy key collection, you have hanging there, in turbulence, can get bounced around and do an unwanted mag check for you. Keep your ignition key as a ring of one, maybe with a small fob on it. That long “remove before flight” fob may be hanging down in front of that all important boost pump switch. The extra weight of all those important keys we carry also causes wear on our ignition switch tumbler assemblies, In your car or aircraft. More great tidbits for life!

Send your questions or comments to newsletter@coloradopilots.org.

Questions can be to a CFI, to ATC, anything.

We will strive to get you an answer.

Carl Mattson reports with great sadness, “Lothar Klingmueller took his final flight up to Heaven on Wednesday, January 29th.” If you wish to reach out to his family, please contact me at newsletter@coloradopilots.org and I will share contact information with you. RIP Lothar. It was an honor to meet you, sir.

Laurie



PRESSURE PAIRS

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Who knew that comparing surface pressures around mountain ranges could result in accurate turbulence forecasts?

United Airlines did exactly this back in the 1960's, and developed a simple graph relating surface barometric pressures and winds aloft. In predicting turbulence along their jet routes, United and Northwest used this nomogram for many years.

Every pilot uses surface barometric pressure (as reduced to sea level) to set the altimeter. But not many aviators realize that comparisons of surface pressure are useful in predicting turbulence – especially when crossing mountain barriers.

Early in my flying career, in order to anticipate turbulence, I had begun comparing surface barometric pressures at airports up- and down-wind of mountain chains. I wrote Henry T. Harrison, a distinguished meteorologist who worked for United Airlines, about this practice, and discovered that United Airlines had been doing the same thing, and had made major studies of the usefulness of surface pressure comparisons.

Mr. Harrison mailed me several of United's Meteorological Circulars, on such subjects as “Forecasting the Mountain Wave at Denver, Colorado,” Circular No. 42 (1957); “Progress in Forecasting High Level Clear Air Turbulence,” Circular No. 52 (1961); and “Mountain Wave Exposure on Jet Routes of Northwest Airlines and United Air Lines,” Circular No. 60 (1966).

“Mountain Wave Exposure on Jet Routes of Northwest Airlines and United Air Lines” contains a chart (Figure 9) showing eighteen sea level pressure pairs over the western U.S. Typical pairs relevant to Colorado flying are INW-ABQ, FMN-TAD, FMN-DEN, GJT-DEN. Using pressure pairs, United identified the “great” mountain waves: the Denver complex, Alamosa complex, and other lesser waves, such as the Jemez wave northwest of Santa Fe, N.M., and created nomograms for use by forecasters.

United's forecasting nomogram involved “a simple pairing of wind speed between 10,000 and 20,000 feet perpendicular to the mountain with sea level pressure differences across the mountain. . . . This has the advantage of permitting pilots and dispatchers to make quick spot checks on wave potentials by examining only the hourly sequence weather and winds aloft forecasts.” (Circular No. 60, p. 11) (Emphasis mine.)

UAL Circular No. 60 also includes many pages describing all of the waves in the western part of the country. For example, under Jet Route 64, ALS-HLC, 38 ENE ALS, the report says: “One of the severest waves in the country. Airline incidents have happened here and a B-52 had its tail torn off in a mountain wave. LaVeta Pass is the center of most activity



although some waves start further back near Blanca Peak. The Sangre de Cristo makes a sharp bend to the E here at Blanca which, in effect, sets up a pair of mountain barriers. . . . Best detour is S via Albuquerque.” (p. 44) Jet Route 128, GUC-DEN, is exposed to turbulence that is “Part of the great Denver Wave complex.” (p. 47)

RLG-DEN, underlying Jet Route 56, specifically 35 miles west of Denver, is “The famous Corona Pass Wave. If not the strongest in the country, it is the one which produces more jet CAT PIREPS than any other.” (p. 34)

So, knowing that clear air turbulence over these routes has been evaluated for decades, what is a simple way for us to predict en-route turbulence as we wend our ways through the Colorado mountains? Try using pressure pairs!

As part of your weather briefing, note the surface barometric pressures at airports up- and down-wind of the mountain ranges underlying your route. Nowadays you can obtain nearly current surface pressures from numerous airports (it is important to note the time of the observation). If the pressure falls from west to east by at least .12 inch, and winds aloft are forecast to be westerly more than 20 knots approximately perpendicular to the range, you can anticipate a mountain wave and associated turbulence. For example, on a windy day, you may obtain startling information by comparing pressure at Granby or Kremmling with Boulder or Longmont. On such a day you wouldn’t want to be in the air near Corona (Rollins) Pass. Or use Alamosa/Trinidad, or Alamosa/Pueblo, to anticipate conditions near La Veta Pass.

This having been said, of course accurate turbulence predictions are much more complicated. Weather is microscale and so is turbulence. The pilot must be constantly aware of underlying terrain and how it contours and fragments the air above. The magenta line may be useful, but you need to be looking outside the airplane and imagining the winds beneath and above your flight. You should be aware of the structure of the skies above, which you can glean from the winds/temperatures aloft forecasts. Half a century ago, United and Northwest also included as one of the CAT predictors a lee-side elevation drop of at least 3000 feet from ridge crest to valley. And cloud observations? Rotor clouds, which look like tiny fracto-cumulus, are an immediate indication of moderate/severe turbulence. Most everyone knows about lenticular clouds.

However, as the saying goes, I digress. The main point of this note is that pilots, pre-flight and en-route, need to start comparing the surface pressures at the airports up-and down-wind of the mountains underlying their flights. Keep checking, as surface pressures often change rapidly and offer many clues. Relate the surface pressures to the winds aloft and you have a basic turbulence forecasting tool.

For more information about use of pressure pairs, please see my book, FLYING COLORADO MOUNTAIN WEATHER, which is available in its second printing at: <http://nighthawkpress.com/titles/flying-colorado-mountain-weather>



Volunteer opportunity

Let's Fly Now!

May 9th, 9 a.m.-12 p.m.

Colorado Air and Space Port at Front Range
CFO (formerly FTG)

Let's Fly Now is an opportunity for 99s and other volunteer pilots to share their passion for aviation and inspire a new generation to: EXPLORE the wonders of aviation; DISCOVER the magic of flight; and IMAGINE the possibilities for their future.

The Colorado Chapter of the 99s is hosting Let's Fly Now at Colorado Air and Space Port at Front Range Airport, KCFO (formerly KFTG). Let's Fly Now is a FREE introductory flight program offered by The Ninety-Nines, International Organization of Women Pilots; Friends of The 99s and other volunteers who will provide their plane, fuel, and time to take females of flying age on their first flight and show them the joys of flying. (Young ladies, young gentlemen, women and men will also be welcome for a first flight.)

We are looking for additional volunteer pilots. Sign up contact: Lydia Baldwin at LydiaHBaldwin@gmail.com

Deadline for pilots to sign up: April 1

This event will be a fun collaboration with local aviation enthusiasts and a joyful way to introduce youth to flying. We are looking for a few volunteers to support the event. In addition to pilots, volunteers will be needed to provide a pre-flight safety briefing; conduct safe escort of passengers to and from each plane; coordinate giving log books and certificates to passengers; and helping with the registration.

Volunteer contact: Lydia Baldwin. LydiaHBaldwin@gmail.com



COLORADO NINETY-NINES



Grand Junction -- uncovering the mystery...

By Bill Marvel

At the January 11 fly-in planning meeting I was approached by a member interested in flying to Grand Junction but hesitant due to its "bad reputation." Having been based here since moving to Colorado in 2006, and having been fully immersed in airport events afterwards, I wanted to offer some clarifications for others who may have the same concern.

In short, the problems that existed with the airport in the past are now largely gone. Yes, there was a federal false claims lawsuit filed against the airport years ago and I was one of the plaintiffs. We won that suit but prior to the hearing in federal court in downtown Denver, several employees, including a former airport manager, had been fired, a new airport board had been selected and construction of an airport building based on fraud was halted and in the next couple of months will be demolished. A lot has transpired here in aviation but the problems are past tense.



The only FBO at GJT is West Star, a great company with a huge presence here but definitely a jet and turboprop-oriented operation. They now own the self-serve fuel facility, previously owned by others and a source of problems due to that split ownership and use of facilities. Again, past tense. West Star employees are friendly and helpful and don't care whether you arrive in a Lear 35 or a Beech 35. (In fact, people in general out here are some of the friendliest I've met anywhere.) West Star's FBO facility is just downright beautiful. I

talked with them on January 12 for this article and can confirm there is no landing fee for any single or twin, that overnight tie down is \$15 daily for singles and \$25 for twins, both waived with a fuel purchase from either the truck or self-serve. Right now self-serve 100 octane is \$4.75 per gallon and by truck delivered to your airplane is \$5.90. They have a National Rental Car facility right in the FBO so getting around after landing is not a challenge.



Grand Junction is an interesting place as it is the largest city on the western slope but still has a small-town inferiority complex and is trying mightily to grow and prosper. The cost of





living is still much lower than in larger cities, we are surrounded by wide open spaces, have several nearby national parks, plenty of affordable hotels, restaurants and brew pubs and a riverfront that is rapidly expanding with new businesses relocating here from both Colorado and other states. The incredible Colorado National Monument is right next to town with its array of red rock canyons. Wineries abound to our immediate east in Palisade as does mountain biking to our west in equally nearby Fruita, where people literally come from foreign countries to experience it. Mike the Headless Chicken festival is an annual event

there as is Country Jam, which each sweltering June features top nationwide country singing talent and lots of beer drinking (as well as other stuff...) for several nights in a huge open field. We have nearby skiing, both downhill and cross country, and hiking and biking trails it would take a life time to cover. For 4-wheeling fans, the incredible Moab, Utah is only an hour and a half west and offers wheeling from basic to impossible in scenery the likes of which does not exist this side of the planet Mars.



So don't hesitate to fly here to visit and enjoy a Colorado destination where you are not priced out of the area as may happen in, say, Aspen or maybe Telluride. Marti and I moved here in August 2006. We arrived knowing exactly no one at the time and picked Grand Junction as a result of a national search for a place to retire following 35 years in southern California, which looked great in the rear-view mirror. We've been here for 13 years now and have no plans on going anywhere else – ever. The only downside is traffic. It used to take only 15 minutes to drive from one side of town to the other but lately that has been running about 20. Maddening.





TWEB and TIBS in Alaska Sunset As part of FAA efforts to modernize and streamline service delivery, Flight Service discontinued the Transcribed Weather Broadcast (TWEB) and Telephone Information Briefing Service (TIBS) in Alaska on Jan. 1, 2020. This will allow the agency to reallocate resources in ways that enhance services to users.

The TWEB was a continuous broadcast of aeronautical and meteorological information over a limited network of Very High Frequency Omni-Directional Range (VORs) and Non-Directional Beacons across Alaska. Flight Service created TWEB when there was a large demand for briefings to alleviate the workload of specialists and reduce wait times for pilots. A similar broadcast service, known as Hazardous Inflight Weather Advisory Service (HIWAS) is being discontinued in the contiguous United States (CONUS).

TIBS was a continuous telephone recording of meteorological information that pilots could access without going through a Flight Service specialist. Since the early 1980s, the broadcast allowed pilots to access weather information along the route of flight but did not satisfy the requirement to become familiar with all available information prior to a flight. TIBS was discontinued in the CONUS in September 2018.

With the advent of the internet and other technology, the demand for information from Flight Service specialists has declined. There are multiple other sources available for weather and aeronautical information, which are often presented in an easier to understand graphical format.

Radio Frequency Reduction Update

As part of efforts to modernize and streamline service delivery, Flight Service is in the process of decommissioning duplicate or redundant Remote Communication Outlet (RCO) frequencies, while maintaining at least 90-percent of the current coverage 1,000 feet above ground level. The FAA published a final policy notice ([go.usa.gov/xpjbq](https://www.faa.gov/xp/jbq)) to begin reducing the network of RCOs in August 2017.

Effective February 20, 2020 at 0001z, the FAA will issue Notices to Airmen (NOTAMs) for the final list of RCOs and VOR voice frequencies slated for removal, which will no longer be monitored. The FAA will realize estimated cost savings of about \$2.5M annually in maintenance costs alone, as well as a reduction in infrastructure costs of about \$40K per month. The completion of radio frequency reduction aligns RCO infrastructure with the decrease in pilot demand for inflight services and excludes frequencies designated for emergency or military use and those in Alaska. Please visit [faa.gov/go/flightservice](https://www.faa.gov/go/flightservice) to see an updated list of frequencies.

Extracted from FAA safety briefing, contributed by P. Camus



If you have a flying story to share with the Colorado Pilots community, please forward it to:



newsletter@coloradopilots.org

Other important email addresses:

Marty Brophy, President: president@coloradopilots.org

Bart Jones, Vice President: vp@coloradopilots.org

Laurie Garrett, Recorder: recorder@coloradopilots.org

Cindy Jewell, Treasurer: treasurer@coloradopilots.org

Website Questions: webmaster@coloradopilots.org

Fly-in Questions: flyins@coloradopilots.org

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