



July 2023 Newsletter

New Mexico Pilots Association

NMPA operates exclusively for charitable, educational, and scientific purposes for promoting general aviation, aviation safety and education, and pilot camaraderie; preserving airfields and airspace; and to engage in any activities permissible for nonprofit corporations, organized under the laws of the state of New Mexico.

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**NMPA's Ken Summers
Leaving OSH**

The Editor's Log

by Lanny Topping



© Sunny Skelch

Living the dream in N 60 BF....

Lanny's fascination with flying began in childhood. Lack of uncorrected perfect vision kept him out of a USAF flying suit. So, he served as a Tactical Controller. At least he got to talk to pilots every day. After a year overseas helping with airstrikes, refueling and so on, he was assigned to Cannon AFB – Clovis, NM. He joined the Flying Club, got his ticket in 1970 and has been flying when circumstances permitted ever since.

Good News...and Bad News

On the good news front, Cliff Chetwin was recognized at AirVenture as one of three national Volunteers of The Year! This on the heels of NMPA's Ron Keller being recognized by the national Recreational Aviation Foundation for his work in keeping NM backcountry strips available to pilots. What a crew we have here despite being "one of our 50 is missing" territory!

And more from AirVenture – this month's cover photo was by happenstance when NMPA's Joyce and Art Woods caught NMPA's Ken Summers getting ready to head home from Oshkosh.

On the bad news front, Devyn Reilly – a nationally-known pilot– lost her life when her T-6 Texan went down in a lake near Oshkosh while AirVenture was in progress. Devyn, was the eldest among 13 children of Bruce Collie, the former San Francisco 49ers star and Super Bowl Champion. Devyn, along with her husband, Hunter Reiley, who was also present at the airshow, operated a flight training school in New Braunfels, Texas. She was a certified private pilot, earning her certification in 2017, and held an ardent passion for aviation. She felt proud to represent the history of female aviators by flying historical aircraft. She was lately pursuing training to become a commercial air pilot and had been accepted into the Air Force reserves with the aim of flying refuelers.



Estancia Valley Scenes...

- Salt Lakes wet from recent rains...no stranded planes visible (that's a good thing!)
- Estancia International is a much better landing alternative...
- Windmills line the mesa to the south...

Upcoming Events

NMPA Members can login and post any aviation events on the [Events calendar](#).
Or send announcements to nmpa@nmpilots.org
and we'll post for you!



August 12 – Board Meeting

NMPA Board meets at KGNT (Grants Municipal) at 9 am

August 19 - [Mystic Bluffs Fly In \(NM56\)](#)

REGISTER NOW! for a Colossal Breakfast Plate and camping weekend! If camping Friday or Saturday night, please contact Perry Null.

September 1-3 - [Gila Regional Fly-in at Reserve, September 1-3, 2023](#)

Register Now! Save the date for the annual Gila Regional Fly-in at Reserve Airport (T16). If you want a motel room, BOOK NOW! Join your fellow pilots from multiple states for this hallmark event.

September 16-17 - [Light Sport Repairman in Albuquerque / EAA179 sponsored](#)

This is the 16-hour class for all light sport airplanes and allows someone who completes the course to be able to sign off on condition inspections for their LSA. Go here for details -> <https://eaa1306.org/2023/04/03/light-sport-repairman-workshop-coming-to-albuquerque-eaa179-sponsor/>

September 16 - [Magdalena Breakfast & Lunch Fly-in 2023](#)

Join is at the Magdalena Fly-in! Free shuttles to town for your shopping enjoyment! Drive ins welcome also!

September 22 - [Mountain Flying Clinic \(Sept 22-24\)](#)

NMPA's annual 3 day clinic with 1/2 day of ground school Friday and Saturday afternoon and optional mountain flying with an experienced mountain CFI Saturday and Sunday morning. 2-3 hours of pre-work will be required. Available seats may be limited depending on ground school location. Details, registration, and fees available by early August.

September 23 - [Land of Enchantment Fly In \(KAEG\)](#)

Join NMPA at the Albuquerque EAA Chapter 179's annual fly-in at Double Eagle II Airport (KAEG).

Be sure to check the NMPA Website (www.nmpilots.org) for updates to any and all events.

Click on links for more information.

Here is your NMPA

John Lorenz, President



John Lorenz is a 6000 hour CFII, MEII, glider, and sand-lot acrobatic pilot. He has given over 2000 hours of tailwheel instruction. During the day he is a consulting geologist.

Advocacy, Mystic Bluffs

I'm writing in the Albuquerque terminal, en route to Arkansas and Oshkosh. My connecting flight was cancelled, so I suddenly have 6 hours of "free time" to make use of. There are fewer ticketing, baggage, and weather hassles flying commercially so I'm glad they invented the 737, but there's no romance in it. I'll pick up the repaired Bird Dog in Arkansas and go North, and then I can wallow in romance.

Rumor: The Reno Air Races are moving to Las Cruces.

Flying in August: Mystic Bluffs Fly-In and Breakfast. Please register so they can calculate food quantities for their Great New Mexican Breakfast. Come land at one of the most scenic locations in our state with some great folks who appreciate aviation. The runway is dirt, but it's well cared for, just mind your dusty prop blast during runup. Campers are welcome.

Advocacy has been Active: NMPA has lent our name, again, to AOPA's effort to add an amendment for guaranteed reasonably-priced transient parking on ramps to the FAA re-authorization act. Unfortunately, the amendment got cut from the House version of the bill, but there's still the Senate. Please consider sending in your personal opinions (see the *Call to Action* on the NMPA website).

More significantly, we, specifically Board Member [Lauren McGavran](#), have done the research and are providing input into a National Park Service proposal to ban air-tour flights over Bandelier National Monument. Our position is that they're banning something that barely exists, and that once they start this the camel's nose will be in the tent and 1) we'll never get that airspace back, and 2) they may consider banning *all* flight. Tilting at windmills maybe, but as hockey great Wayne Gretzky said, "You miss 100% of the shots you don't take." We'll post the final NMPA position letter on our website.



Flight school being conducted outside my kitchen window recently. Interestingly, birds require a lot of practice learning to fly. Some of these guys missed their first couple landings on the posts before they got it right.

Also, Ron Keller, on behalf of NMPA and the good pilots at KTCS, asked ATC to reconsider the length of the 3-day TFR they established for the recent 30-minute Virgin Galactic flight. Their response was a noncommittal “Duly noted,” but we’ll bring it to their attention again next launch: repetition keeps the bureaucrats awake. Finally, BLM is wanting to restrict aviation access to BLM lands, stay tuned.

Influencers: What the hell are “Influencers”? The internet seems to have given us a group of self-proclaimed experts, even in the field of aviation, some of who’s slim claim to expertise is amplified by the electronic megaphone. Has this given rise to a perceived equivalence between real and vicarious flight experiences? In the quest for a greater audience of followers, some of these influencers peddle thrills and extremes which are unrealistic, and which are good for neither the image nor the professionalism of aviation. Choose carefully when picking someone to follow online; loud and frequent posts don’t make someone an expert.

“Simplicate and add more lightness.” Motto of aviation designer William Stout, Stout Aircraft



A boy and his airplane. Larry Shapnek, Mountainair Fourth of July Flyover. Photo by Harv Martens

Advocacy

by Laurie McGavran



Laurie has always thought that flying would be lots of fun and took the opportunity that retirement presented to get a Sport certificate. The altitude restrictions were a bit onerous in our mountains, so she soon upgraded to a Private certificate. She owns a Cessna 172RG with 3 other people. She feels that a good partnership is the best way to own a plane! She enjoys gaining skill as a pilot, mountain flying, local sightseeing and photography and likes the sky view of places she has explored on foot. Unpaved strips beckon - someday!

Aviation Tourism over Bandelier at Risk



Bandelier National Monument is continuing to formulate its Air Tour Management Plan (ATMP). NMPA is submitting comments. ATMPs or Voluntary Agreements are required by the Air Tour Management Act of 2000. Basically, if an air tour operator wants to conduct tours over any units of the National Park Service, he must apply for a permit. Then the FAA and the NPS must create an ATMP or a Voluntary Agreement that specifies how the tours are to be conducted. The area covered is the boundary of the Park unit plus 1/2 mile outside the boundary, including any Indian lands in that area. I don't know why Indian lands are called out specifically; perhaps there are issues with dictating what can and cannot happen over non-federally managed land?

There is one air tour operator who operates over Bandelier - Southwest Safaris. It is a one pilot operation (I think the only employees are the pilot and his wife) and it has been operating without any complaints since 1974. Initially, last fall, Bandelier had created a plan that put serious restrictions on the operator but allowed him to continue to fly over the Monument. Then the planners solicited more comments and got negative reactions from various Indian Pueblos. To summarize these comments, the Pueblos feel that any aircraft flying over their ancestral lands are intrusive and disruptive to their connection to the land. So, in round 2, Bandelier proposes prohibiting air tours over the Monument, below 5,000' AGL.

Our stance is that the EA is flawed and that the prohibition of air tours over Bandelier is unnecessarily restrictive. There is a great deal of information in the Environmental Assessment (EA) and related documents. An EA must offer at least one alternative, so it has at least three conditions that it analyzes. There's the "No Action" alternative (1), the "Preferred" alternative (2), and another alternative that they have considered (3). I have spoken with the tour operator (Bruce Adams) quite a bit so that I can understand how he operates and what he needs. NMPA argues that a Voluntary Agreement would be preferable to an ATMP. It would be easier to implement and more flexible. The EA doesn't consider a Voluntary Agreement, which is one flaw in the document.

(continued next page)



Bandelier Air Tours at Risk - continued

We feel that the quantitative data presented (noise and air quality) do not show that Alternative 3 would have much, if any, reduction in impact over Alternative 1. Alternative 3 is unworkable for the tour operator. Hence, Alternative 3 isn't a good alternative for inclusion in the EA. We also feel that the data don't support that the tours have a large enough impact that they need to be changed, though the "No Action Alternative" is off the table so there's no point in suggesting it. There are, on average, 2 tours per week. The time over the Monument lasts from a couple of minutes to maybe 10 minutes, tops. The noise level above 35 dBA (a whisper) ranges from 0 to 5 minutes. The noise level above 52 dBA (a quiet conversation) can last up to a whopping 30 seconds! The loudest noise of 58 dBA is only that of a conversation. The main arguments that Bandelier is using are qualitative ones - seeing an airplane, the feeling that the tourists are watching the people on the ground, and the desecration of the air above the sacred sites. There's no arguing about feelings.

The ATMPs are being implemented in many places. Where NPS land abuts Indian lands, the prevailing Plans are prohibiting air tours. Bruce has been told that he cannot fly over Canyon de Chelly, even though he lands at Chinle and his clients take Indian guided tours of the Canyon. Voluntary Agreements are being implemented in places like Lake Mead, so they are a viable option. We fear that banning air tours may be the start of banning all flight over these areas. Taos Pueblo, anyone?

The documentation is available at <https://parkplanning.nps.gov/projectHome.cfm?projectId=103440>. The Appendices contain most of the data. Comments will be accepted until August 11. Consider commenting if you feel strongly about this issue. They only accept substantive comments, so comments like "We don't like this plan" will be rejected. NMPA is pushing for a Voluntary Agreement; the proposed alternatives are unworkable for the tour operator. We feel that the EA is inadequate because Alternative 3 is not "real", the EA doesn't address the possibility of a Voluntary Agreement, and the Noise analysis relies on a model without recent or complete "on the ground" measurements of sound. Alternative 3 doesn't feel "real" because it doesn't (in our analysis of the EA) noticeably reduce the impacts over the current status and it is unworkable for the tour operator. It doesn't seem to have been offered in good faith.

Around the World Five times in 14 Days

by Arlan Schmitz



First day on line training

Editor's Note: NMPA member Arlan Schmitz left his thriving large-animal veterinary practice to follow the dream of flying commercially. When not at the controls of a Boeing 747 he flies a beautiful Cessna 185 to parts far and wide including the NM Back Country.

A colorful assortment of characters, we are basically flying, long-haul truckers. The 747 is after all an 18-wheeler with wings.

The Italian First Officer behind me jokingly calls "clear prop" as we push back and the Captain commands "start 4"

It has been a fascinating career change, most remarkably catapulted after meeting the right Captain at the right time in Oshkosh.

With a good attitude, a will to learn, and good stick and rudder skills there are incredible opportunities in aviation now and in the foreseeable future. "I need turbine time." The Captain turns and points to a widebody jet, "Well this is a turbine!"

Back to work next Saturday. Excited to see where we go.

We almost always fly with a flight mechanic and a loadmaster. The flight crew may consist of a Captain and one to three First Officers and sometimes we have two Captains and two FOs.

Last month we flew to Incheon and did several JFK - Anchorage runs. Ended the trip flying into Utah empty to pick up a load. Utah was interesting. We had to fly around in various circles as the controllers worked with an F35 emergency. Finally, we got in after almost having "bingo" fuel, in which case we would have had to divert to Salt Lake. The plane is quite amazing to fly, but tricky "like landing a God damn kite" when she is empty. Landing heavy is different story. Takeoff is swift. A big payload and with a heavy load of fuel she'll still climb at 6000 fpm.

I hope to get back Europe. Have been to several places in China, they like our lobster. Bahrain, Leipzig Germany, Rzeszow Poland - a beautiful place with lots of aviation and American companies like Lockheed and P&W. Of course, Incheon and Hong Kong and Honolulu.

Surprisingly, the beaches in both LA and New York are very nice.



Full moon over Alaskan Coast



Sunrise somewhere

Honolulu was great since I ended a trip there on a day off and "had" to wait an extra day to catch our next plane back to LAX. We get a '1 and 7', a day off seemingly random once or twice a trip. Sometimes getting stuck is ok as was the case with a crew that went duck hunting on their way into Leipzig. We were supposed to fly that plane back but spent a couple days as they flew in a boroscope and then tended to AD's that now had to be done because the plane was delayed getting back. We had an ordeal getting there. Flying from Anchorage to Cincinnati, unloading and reloading for Germany. Our plane had electrical issues and after the mechanic pulled out seats and panels and radios and much cussing, said "guys we're not going out on this plane". We unloaded again, unloaded and re-loaded another plane with our cargo only to have hydraulic issues on that plane, pulled some parts off the "other broke piece of shit" and got That plane going and left for Germany something like 3am, but made it in time for Breakfast at the Leipzig Westin. And then went to bed!

On the long hauls I do quite enjoy sleeping on the plane, the bunks are nice and especially in a little turbulence, kind of rocks you to sleep. Oh, and Pratts, they kind of groan like you're in the bowels of a diesel ship. The GEs are much smoother, but don't eat birds as well. Don't get the wrong idea, our planes are actually very-well maintained. A mechanic stays with each ship for a 20-day tour of duty. As flight crew, we hop around from plane to plane going to 5-star hotels. Drinking cold beers at the end of a long run while mechanics deal with routines and various gremlins. These planes literally don't "turn off" for weeks. And sometimes the electronics get a little glitchy having been on for days on end.

A buddy from my training class and I had great fun renting mopeds and attempting to surf in Hawaii. A Captain on one of our legs just got back from Wake Island and he was very excited that he got to land there. I really want to get checked out on some South America runs hauling mining equipment and bringing back gold and roses. Some challenging mountain flying and very limited ATC. So far have hauled everything from horses to lobsters, Toyotas to Mercedes, dogs to lithium batteries, ammo and expensive electronics and a lot of "boxes".

I did my line check from Anchorage to Kennedy. We got pretty worked over going into Kennedy between weather, holding (we hardly ever do holding) traffic, and we actually had a real "RA" - resolution advisory - where the nav display advises/guides you in avoiding hitting someone. And landing on the short runway with gusty crosswinds and windshear. It was fun, with a great Captain: he called his buddy in Michigan on the Satellite phone when we flew over the gravel pit he was working. We see a great deal of the world and this beautiful country, which is why I am currently in West Virginia on a motorcycle trip. " ..hey look at those great roads down there!.."

See you soon, Arlan



747-400F in Leipzig, Germany



Rental car in Honolulu



Bahrain



Seoul
Korea



Leipzig,
Germany



Victoria
Harbor,
Hong Kong

Addendum from Arlan: I don't want to sound cavalier. It is precise flying with standardized flows, call outs and procedures. A Captain said, "..are you having fun?", "oh Yes!" I replied, "good, 'cause if we operate safely, by the books and do our job, then it should be fun as well. That's why we do this" We spend weeks spent learning systems and late nights in the simulator. Many hours debriefing. And soon back again for more continuing qualification training. It was "fun" going to Kennedy that day, but serious. Conditions that warranted keeping you head on a swivel and alert to the hazards ATC might throw at you. The Captain well advised me that was a challenging check ride and going forward "get experience but let the Captain land in conditions like this and build up your experience".

NMPA Leads the Way ... again!



NMPA's Cliff Chetwin at
EAA's AirVenture 2023



Cliff Chetwin

2023 EAA Volunteer of the Year Recipient

- **July, 2023** — The 2023 EAA Volunteers of the Year have been announced, and this year's winners highlight why and how AirVenture is possible. This year, there are three Volunteer of the Year recipients: Cliff Chetwin, Sandy Zorn, and Robert McLaughlin. The recipients were honored at a ceremony on Sunday afternoon at Volunteer Park.
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- **Cliff Chetwin** grew up in upstate New York, near present-day Syracuse, and attended the College of Forestry at Syracuse. He worked as a police officer in Washington, D.C., during the Vietnam War and was an officer in California when he and his wife moved there. After that, Cliff received a job as a ranger with Pinnacles National Monument, and then he attained his private pilot certificate and an instrument rating and flew recreationally. In 1982, Cliff transferred to Carlsbad Cabins National Park in New Mexico. He was chief ranger and then regional aviation manager. He got involved with EAA while still working with the park service and spoke about major political issues within the aviation world. He helped create the International Federal Partnership, which is in Hangar D. Cliff is also a volunteer chairman at AirVenture and is on the government host team for Sean Elliott.
- "It is awesome to be recognized by one's peers. I hope I can stay at the same level for a lot more years to justify having gotten the award this year," Cliff said. "I think of awards like this as an award for what we now expect you to do in the future. So, I got to figure a way to keep it up."

Backcountry Beat

by Ron Keller



Ron Keller flies a C-182 and has been involved in aviation for the better part of his life. Ron retired from FAA Technical Operations in 2011 and has stayed busy ever since, including working for the New Mexico Aviation Division, and currently serves on the NMPA Board of Directors and as Co-Chair of the NMPA Backcountry Committee. Ron is a Recreational Aviation Foundation Liaison and serves on the New Mexico Airstrip Network Steering Committee.

Dog days...

Yep, we are now in those dog days of summer. And as of this writing, several wildfires, caused by lightning, have sprung up near Negrito and Rainy Mesa. And a TFR to go with it all. I'm glad I was able to drive to both airstrips on July 15 before things got too hectic. I did replace the windsock at Rainy Mesa because the old one was torn and faded, having been in place since 2020. When I pulled in there, a couple of USFS fire trucks were parked off the runway. They had an observer watching a new fire just a short distance away.

As I was driving over to Negrito, I stopped at the South Fork swimming pool to take a photo. It is just a couple of miles from Rainy Mesa, and since the temperature was 97°, I was sure tempted to jump in. Upon my arrival at Negrito, I noticed a couple of areas of smoke to the ENE.



Backcountry Beat, continued

These turned out to be the Divide and Hay fires. As I was watching, conditions became right to form a smokenado at the Divide fire, and I took a photo before it dissipated after a couple of minutes.

After tending to the toilet and checking on the runways, it was time to head home. Speaking of runways, I always try to submit a PIREP on the NMPA website under Forums/Resources/PIREPs-Airfields.

The Gila Regional Fly-in will be coming up shortly. This year will be extra special with a celebration of our partner, the RAF, having a 20th anniversary. The RAF will be donating something, though I don't know what it is yet. Registration is required and open until August 29th, so we know how many dinners to order. Come and join your fellow pilots, backcountry or not, and musical instruments and talent are most welcome.

Until next month,
Fly Safe and Often!
Ron

Safety Briefings are available on the NMPA website for all the [Gila USFS Airstrips](#). Note that some require prior permission – just a phone call.

Another great resource, is [www.Airfield.Guide](#), thanks to the Recreational Aviation Foundation (RAF)



Round And Round We Go



Mountain Flying

by Cliff Chetwin



Cliff is a retired National Park Service pilot and a Master/Gold Seal CFI with over 40 years experience flying in the Rockies, Sierras, and Alaska. He currently lives in Kremmling, Colorado and owns a Superhawk.

Most general aviation pilots consider the circle to land maneuver as something to ignore except maybe on rare flights in IMC. This is especially common perception in planning a mountain flight since most pilots are rightfully leery of mountain flying in IMC or even marginal VMC. Thus, if we're not going to fly when an IFR approach of any kind is probable, which is usually pretty sound ADM when dealing with the big rocks, why worry about circle to land?

What inexperienced mountain pilots fail to realize is that a version of circle to land is actually quite common in the mountains. No, not the stabilized (hopefully) instrument approach to one runway and then maneuver to land on another one. I'm talking about an entirely VFR maneuver but one that is easily as hazardous as the IFR one. Due to surrounding high terrain some mountain airfields cannot be approached with the standard downwind, base, final, keep the field in sight at all times traffic pattern that we are all familiar with. Some such as Ruth, California or my home field of Kremmling (when approached from the south) require approaching via one valley and then circling into another valley where you won't even see the field until on short final, all under VFR conditions of course but with all the inherent risks of the traditional circle to land approach.

How hazardous might this be? The NTSB notes that since 2008 there have been 17 fatalities resulting from the highly regimented IFR circle to land instrument approaches. NTSB does not categorize mountain accidents under what are essentially similar conditions as circle to land events, so we don't know how many mountain airport VFR approaches has similar negative results but there is a high probability that some of our mountain airfield accidents were the result of this kind of maneuver.

Even a couple of untimely departures from our aviation ranks raise the NTSB concern level and 17 fatalities is a high attention getter. To help call attention to the problem, and hopefully raise pilot safety awareness the NTSB has released a new Safety Alert, SA-084, Circling Approaches: Know the Risks! While aimed at the IFR community a great deal of the Safety Alert is equally applicable to VFR conditions we often face with mountain airports. The applicable parts of NTSB's summation of the problem can be summarized as:

- Circling approaches can be riskier than other types of approaches because they often require maneuvering at low altitude and low airspeed during the final segment of the approach, increasing the opportunity for loss of control or collision with terrain. These risks are heightened when conducting circling approaches in marginal or reduced visibility conditions and increased focus is required.

- While circling approaches might be necessary to accommodate terrain obstructions, are advantageous due to wind or other obstruction conditions, or perhaps are required due to a TFR, pilots often do not evaluate the risks of these approaches before executing them, which can result in unstable approaches. Circling approaches often do not

Mountain Flying (cont.)

allow for stabilized approach safety criteria to be met. Approaches are best fully stabilized by 500 feet height above terrain in visual meteorological conditions (VMC) and in the mountains where conditions often change rapidly as you descend, working on becoming stabilized even higher is advisable.

So what can we do to improve our safety margin? NTSB recommendations applicable to us in the mountain environment include:

1. Fully understand the risks involved in performing a circling approach and use sound judgment if deciding to even attempt this approach.
2. Consider your personal experience and limitations and the performance capabilities of your aircraft when planning the execution of the circling approach. Weather, runway configuration, and your aircraft's current position, altitude above the terrain, density altitude, and indicated airspeed should also be considered.
3. Acquire recurring, scenario-based training in realistic environments that includes circling approaches that don't reveal the airfield until base leg or maybe even on short final. Practicing these approaches routinely will increase your proficiency and make you more comfortable performing them when needed. A good flight simulator with accurate terrain graphics is a good tool for this.
4. If your planning indicates you should expect to perform some sort of a circling approach, conduct a comprehensive pilot's briefing that specifies when the circling approach will begin, descent altitudes and locations, what you expect to see at each point, desired airspeeds, aircraft configuration, and go-around criteria and procedures. Use of Google Earth to armchair the approach is a great tool before you're actually faced with getting around the real rocks.
5. When conducting a circling approach, try to remain at or slightly above the eventual pattern altitude until the aircraft is continuously in a position from which a descent to a landing on the intended runway can be made at a normal rate using normal maneuvers. Be proficient in spot landings since you may not have much time to work things out once you actually see the airfield.
6. To ensure the stabilized approach criteria are met while conducting a circling approach, it is imperative that pilots continuously monitor the airplane's altitude even though flying in VMC.
7. Investigate if the mountain airfield has a circle to land instrument approach. This will give you information as to safe altitudes at various points as you maneuver close to the airfield. Have a copy of the IFR circle to land approach with you for reference; if not instrument rated consider learning how to read an approach plate.

Until next month, enjoy the mountains and fly safely.

Obscure and Scenic New Mexico

by Jeff Gilkey



Jeff Gilkey has been flying his Aerotrike Cobra (ELSA, weight shift control) since 2004. He has logged over 2200 hours on cross country adventures into nearly every corner of New Mexico, with many extending into Colorado, Arizona, Utah and Texas. For more information, visit his YouTube Channel at <https://www.youtube.com/user/jeffttrike>

Trinity Test Site (sort of)

This spring, I saw a trailer for the movie “Oppenheimer.” It included a scene of a jeep racing across the desert, probably scouting locations for the Trinity Test site. The mountains in the background looked very familiar. Could they be the Manzanos, east of Belen, and the low spot on the horizon Abo Gap?



Oppenheimer Film Trailer



Oppenheimer Film Trailer

I saw another clip a few weeks ago which included scenes of the Trinity Test site and its iconic tower.

Those were definitely the Manzano Mountains in the background.



Wide open spaces east of Belen

In late July, as the fierce high-altitude winds began to ease off, I took a flight out to the Manzano foothills in search of Trinity film location.

When I crossed Rio Grande and looked east, I realized I had a lot of area to search. I made a few passes over the wide open spaces at the base of the mountain and found nothing. This was getting boring and mountains were calling to me, so I set aside my search for a while.

I climbed up near the flat-topped mesa of Bosque Peak, played around the north end of the Manzanos circling Mosca and Guadalupe Peaks, then turned south to fly along the ridgeline.



Over Bosque Peak

Conditions were perfect, not a puff of wind or thermals. Once the evening thunderstorm season begins, it is like this nearly every morning. I played around near south Manzano Peak for a while, then started to descend the mountain. I played around a small fin of rock next to a rock cabin at the base of the mountain (latitude 34.64486, longitude -106.49527) before turning west for my home airport at Belen.



Descent from South Manzano Peak



Trinity Test site location from film "Oppenheimer"

I was staring directly ahead as a tall tower slowly came into view. I had stumbled across the Trinity Test sight from the film by dumb luck.
Mission Accomplished.



Oscura Mountains

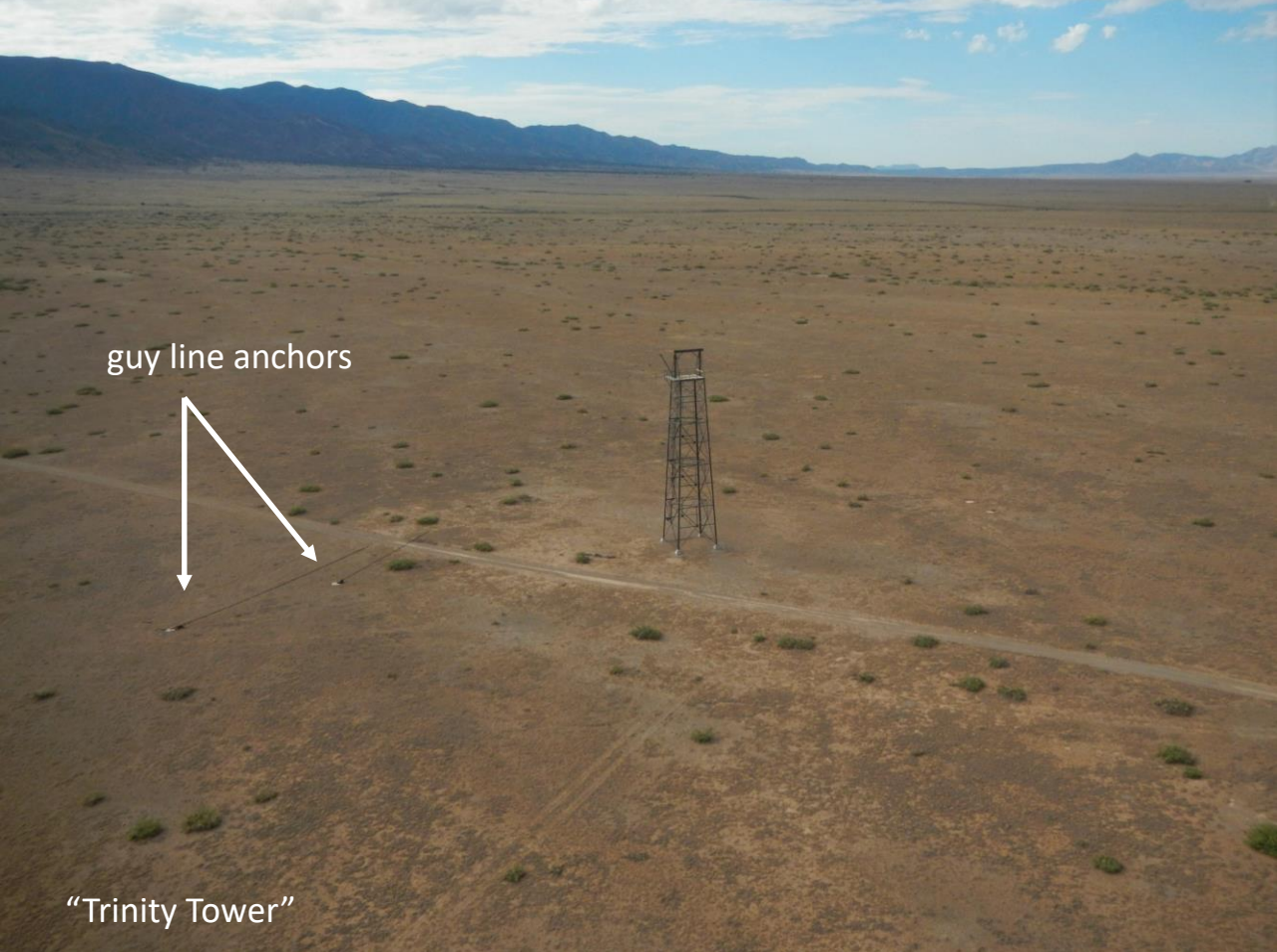
Mockingbird Gap

Google Earth View of the actual Trinity Test site

Image Landsat / Copernicus

Google Earth

They film crew did a good job finding a spot that resembled to true Trinity Test Site location. The Oscura Mountains and Mockingbird Gap mirror the Manzano Mountains and Abo Gap from the film site.



guy line anchors

“Trinity Tower”



The “Bunker”

The location of the tower is at latitude 34.6553, longitude -106.5623. The shack at the top of the tower is missing now. I also found a bunker set about ½ mile SW of the tower. I have no idea how long these structures will last. If you want to check out this place, head over now.

Be wary of guy lines on the north side of the tower and stay clear of airline traffic, which often overfly this area at high altitude. Military traffic from KAFB often fly through this area at low altitude.

FLY SAFE

Remember as “Pilot in Command”, you are ultimately responsible for the safety of your passengers and aircraft. Proper planning with respect to the weather, terrain clearance and traffic hazards is critical to having a safe and enjoyable flight.

As the CFI sees it

by John Lorenz



John Lorenz is a 6000 hour CFII, MEII, glider, and sand-lot acrobatic pilot. He has given over 2000 hours of tailwheel instruction. During the day he is a consulting geologist.

Flight Reviews: You Get Out of Them

What You Put Into Them



I've been giving Flight Reviews for something like 27 years and only once had someone object, and surprisingly strenuously, to the plan. Kinda caught me up short the other day.

The FAA provides a circular and even a PowerPoint file that give guidance on how to conduct a Flight Review, but in fact they allow a CFI significant latitude in how to do it. At a minimum a review must consist of one hour of ground review and one hour of flight review, and pilots are expected to be able to fly to the standards of the certificate (private, commercial) they hold.

To jump-start the hour of ground review I typically provide a study guide for pilots to consider before we meet and ask them to be prepared for a discussion starting with those topics. I don't collect and grade the study guide, it's not a test, but it asks about important every-day flight topics, subjects that pilots should and in fact are required to know, and which they surely learned during their primary flight training even if they have forgotten them. And that's where the review comes in, the ground discussion reminding the pilots of things they once knew and should continue to remember (basic but easily forgotten stuff like what documents pilots must produce during a ramp check). The study guide also supplies references for each of the questions (FAR number, sections of the POH, etc.) so the pilot doesn't waste time deciding where to find the answers but still has to look them up. The internet makes this easy. And I ask the pilot to come prepared to fly the basic flight maneuvers to the Airman Certification Standards. A little study and some practice are in order, and yeah, it takes a little time and effort.

FLIGHT REVIEW ENDORSEMENT

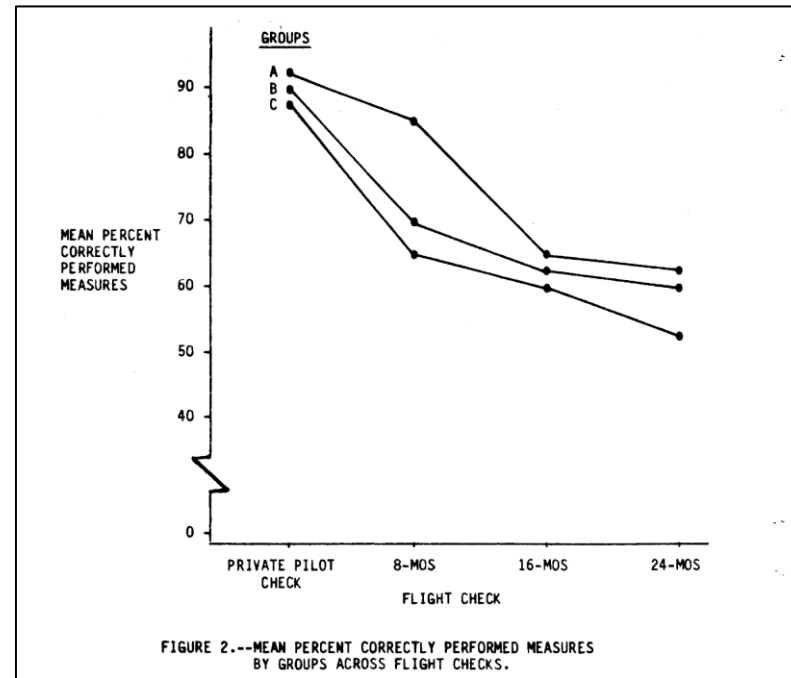
I certify that (First name, MI, Last name) _____,
(pilot certificate) _____, (certificate number) _____,
has satisfactorily completed the flight review required in §61.56(a) on (date) _____.

The official verbiage for a Flight Review. Simpler notations such as "Flight Review satisfactory" displease the FAA.

But this pilot objected, stating that I was unfairly putting him through another private pilot practical test, that for his previous Flight Reviews his instructor just flew around with him for an hour. He apparently expected me to do likewise. My response, that study and practice to bring him up to the standards he met when he took that test would be beneficial, were not met with favor. Granted, few of us pore over our POH at night or practice stalls for the fun of it, but the private-pilot practical test should not be the peak of your flying skills and degree knowledge. And if in fact your flight skills are rusty, we just do a little practice to get you up to snuff and *then* sign off the Review, as always. Nope, wasn't going to happen, and we parted ways before we even started, both of us happy to have it end there.

So why Flight Reviews anyway? They weren't always with us, starting only in the 1960s or 1970s (the internet is surprisingly vague). Turns out flight skills and knowledge deteriorate over time, especially if not used regularly. In 1983, the FAA and Embry Riddle put out a nifty study documenting the rapid deterioration of unused skills and knowledge, *Private Pilot Flight Skill Retention: 8, 16, and 24 Months Following Certification* (see <https://www.tc.faa.gov/its/worldpac/techrpt/ct83-34.pdf>). Pilots who fly for a living get tested and refreshed regularly, and the safety of the airline industry reflects it. But many GA pilots fly irregularly and infrequently. You worked out exactly how much weight you could carry safely in your airplane once, do you still know? You had the engine-out procedure memorized for your practical test, do you remember it, or more importantly, could you run through it successfully under the pressure of a real emergency? Can you still safely fly turns around your friend's house so he can take pictures, and do you remember the minimum legal altitude to do so in case a neighbor complains to the FAA?

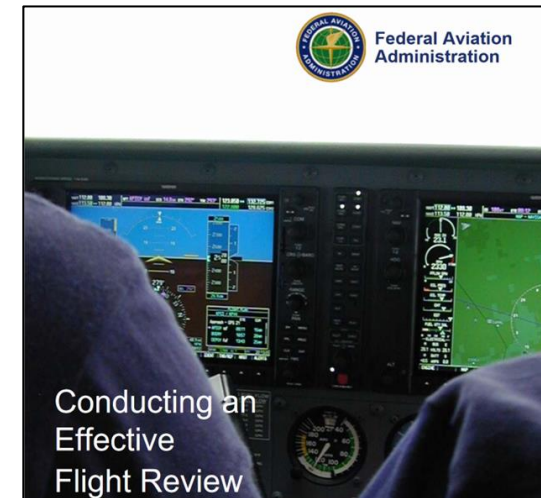
Yeah, a Flight Review is a pain, but it is also an opportunity. And considering the potential liability instructors have when they sign one off (the FAA and relatives have both been known to come after the instructor if someone prangs due to incompetence soon after a Flight Review), it behooves an instructor to do reviews right, and to document them as such. Don't ask your instructor to short-change you by pencil-whipping one.



Degradation in under-used flight skills with time, from 1983 the FAA-ERAU study.

The instructor isn't making this stuff up.

https://www.faa.gov/flight_review/gslac/library/documents/2006/Oct/6578/Conducting%20an%20Effective%20Flight%20Review%20Dec05.pdf



Tech Corner

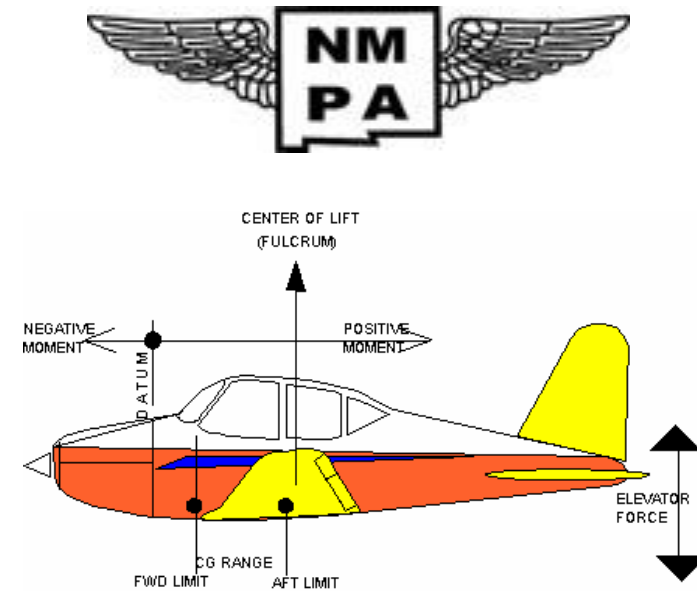
by Will Fox



Center of Gravity

You just finished building your experimental “Goes Like a Bat Out of Hell” (GLBOH) homebuilt airplane, had it inspected, and are ready to fly it. The inspection went really well but the inspector had some confusing question about how you calculated the Center of Gravity (CG) for the plane. You didn’t want to tell him that you never did understand that whole C.G. thing very well and that you found a spreadsheet on the Internet and plugged in what you thought were the right numbers. Instead, you told him that you had worked with an EAA Technical Counselor, and he helped you figure it out. The inspector didn’t need to know that you wouldn’t ask that know-it-all TC for the time of day, let alone help figuring out your CG. Well anyways, the CG has to be about in the right place because you followed the plans pretty much. In fact, you made a few improvements, like putting the battery on the firewall instead of in the baggage compartment so you would have shorter battery cables and save some weight. You also put in a larger engine with a constant speed propeller for better performance. Your GLBOH was going to be a rocket ship.

So, the time has finally come to fly your bird and you begin your takeoff roll. The GLBOH really has some acceleration plus a lot of P-factor from that big engine. You are halfway down the runway and drifting to the left when you haul back on the stick expecting the aircraft to leap into the air. But it doesn’t. You look at your airspeed indicator and it shows that you have more than enough airspeed, but the GLBOH just won’t part the surly bonds of earth. You look back up and realize that you are almost out of runway and going way too fast to stop. You have to get this bird flying, so you really haul back on the stick hard and the GLBOH staggers into the air just as you pass the departure end of the runway. That big engine keeps accelerating the aircraft though and pretty soon you are able to relax your death grip on the stick and trim out all that back-pressure you were holding on the stick. You fly around for a while to get the feel of the airplane, but don’t do any slow flight or stalls because you never liked doing that stuff and besides the GLBOH is supposed to go fast not slow. The airplane is flying pretty good but needs a lot of up trim and is flying slower than you expected. You decide to come back in for a landing and on final approach realize that you are going way too fast. You pull the power completely off and as the GLBOH starts to slow down, you start trimming like crazy to keep the nose up.



The Center of Gravity of an aircraft has a certain range defined by the Forward and Aft Limits. Violating those limits can lead to an uncontrollable aircraft.

You run out of trim, so you have to hold the nose up with the yoke and you are still going pretty fast, but you figure too fast is better than too slow. As you fly over the numbers on the approach end of the runway, you start your flare, but the nose doesn't seem to want to come up. You now have the stick all the way back, but it is too little and too late and the plane hits hard, first on the nose, then the mains. You get on the brakes hard because you are going pretty fast and manage to get the plane stopped on the runway just before the end. What is that funny smell? Oh, it's the smell of sweat and smoking hot brakes.

What just happened? You probably guessed it, The CG was too far forward as a result of the "improvements" the builder made. Also the builder did not really understand how to figure out where the CG was for the aircraft and as a result took off with it well forward of the forward limit. The forward CG limit of an aircraft is typically determined by making sure that, at the forward limit, the elevator has sufficient authority to allow the aircraft to achieve its design stall speed. As the aircraft is loaded forward of this point, it becomes increasingly difficult to hold the nose of the aircraft up and maintain level flight as it slows down. A CG forward of the forward limit also makes the aircraft more prone to a [tailstall](#) under tailplane icing conditions and this can result in an uncontrollable pitch down of the aircraft. The aircraft will also require considerable nose up trim at normal cruise speed resulting in greater trim drag and a lower cruise speed. Let's see what happens when the CG is behind the rear CG limit.

It is a beautiful day and you decide to fly a few of your friends up to Denver for a weekend trip in your V-tail Bonanza. You were planning on your wife and another couple going along, only to find out that they want to bring their kids along as well. You wonder a bit about the CG but then figure that those Beech engineers wouldn't have put six seats in the plane if it couldn't carry six people. As you taxi out for takeoff, you notice that the nose wheel steering is a bit sensitive, but attribute it to the fact that the nose wheel strut is fully extended. You begin your takeoff roll, and as you approach rotation speed the aircraft suddenly leaps off the ground into the air at a much lower speed than normal. The stall horn blares at you and you push the nose over and notice that the controls seem lighter than normal and a bit sensitive. As soon as you get some altitude, you turn the plane over to the autopilot because it seems to fly the plane much better than you can. A couple of hours later you begin a descent into Denver and turn off the autopilot since it has developed a gentle oscillation in pitch. The aircraft begins to pitch up and as you push forward on the yoke, the aircraft pitches down so aggressively that your wife's purse floats towards the ceiling. You pull back on the yoke and the controls are so sensitive that the aircraft pitches nose up and you feel yourself sinking into the seat from the g forces. This is getting out of hand way too quickly. You fight for control of the aircraft, but you are not sure who is going to win. Every movement you make on the yoke seems to be an overcorrection and you are chasing the airplane.

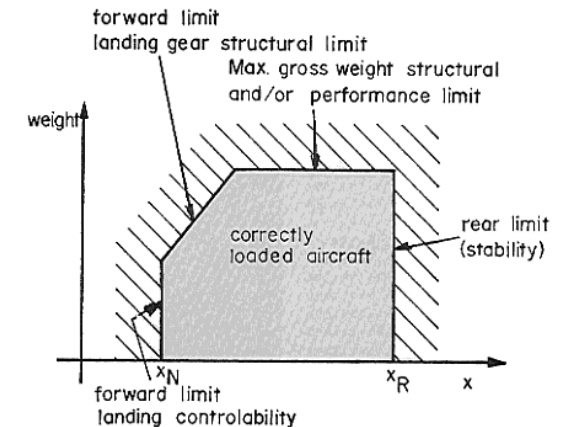
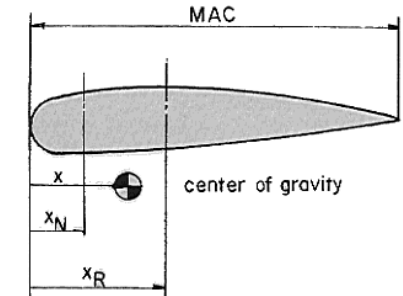


Figure 13



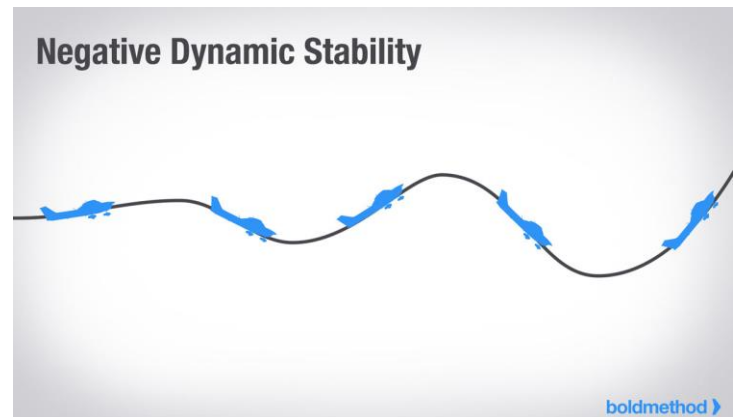
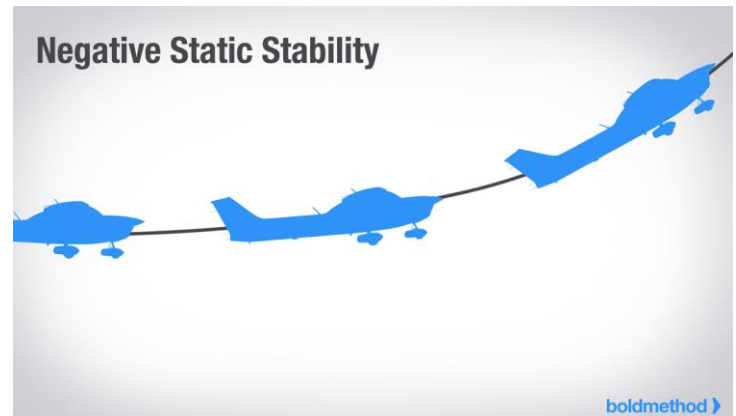
This picture shows an example of the allowable center of gravity envelope and how it is defined by control and structural factors. A too far forward CG may result in excessive loads on the nose gear or a tendency to nose over on a tailwheel aircraft.

instead of flying it. As you start to panic, you try pulling the power and dropping the gear in the hopes that that will help. This seems to improve things a bit, at least enough that you can get control of the aircraft back. You radio the airport and tell them that something is wrong with your plane and that you need to land immediately. They clear you to land on any runway and somehow you manage to get the aircraft on the ground in one piece. As you exit the plane and look at your wife and friends, you realize just how close you came to not finishing this flight in one piece. What the heck happened?

The Bonanza was loaded outside the rear CG limit. This is easy to do on many Bonanzas. The six seats in later model V-tail Bonanzas were more of a marketing ploy than a real capability. In this case, because of the passengers in the rear seats, the aircraft CG was behind the aft limit and was very close to its neutral pitch stability point during the takeoff, and that made it sensitive in pitch. During the flight to Denver the CG moved even farther back. In the Bonanza the fuel is carried in front of the spar, resulting in a rearward shift in CG as the fuel is consumed. This caused the aircraft to develop a slightly negative pitch stability. This did not become apparent to the pilot until he turned off the autopilot. Negative pitch stability resulted in the aircraft wanting to diverge from the trimmed condition, rather than to return to it when flown hands off. Reducing power and dropping the gear helped to move the CG forward, slow the aircraft down, and decrease the sensitivity of the controls, allowing the pilot to regain sufficient control of the aircraft so he could land it. The rear CG limit is often set based on where the neutral stability point is for the aircraft. Aircraft designers want to make sure that the aircraft maintains positive static and dynamic stability with the rear-most CG, so the rear CG limit is set so that it is well forward of the neutral stability point. This is one of the criteria used to set the rear CG limit, another one is the ability to recover from a spin which I will cover in a future article.

These stories are based on actual experiences that pilots have had. I hope they are helpful in letting you understand the implications of flying your aircraft outside of the recommended CG limits and encourage you to develop a better understanding of why it is important to know where the center of gravity is for your aircraft.

Fly safe.



An aircraft that is not within the rear CG limit may exhibit negative static stability or negative dynamic stability or both. Courtesy of the [Bold Method](#).

CFI Resource List: A Member Benefit for Students and CFI's

NMPA Certificated Flight Instructor Resource List updated 3-28-2020
NMPA members who are CFI's and who would like to be listed here, or who need to modify their information, please contact John Lorenz at johnlorenz@geoflight.net



Instructor: Suzanne Azar

Contact: email suzanneschmeckazar@gmail.com

Primary areas of instruction: *Private, Commercial, Instrument, Multi-engine Instrument*

Airports you instruct at or will travel to: *El Paso, TX, Santa Teresa, NM, and Las Cruces, NM*

Do you have access to an airplane for instruction and if so what kind: *Cessna 172 and Cessna 182*

General summary of experience: *I have been a pilot since 1980 and a flight instructor since 1984. Among my many students I taught both of my daughters to fly. I have flown numerous air races through the US, Bahamas, Hawaii, and Canada. I hold a commercial pilot's license and am rated in single engine, multi-engine, glider, and seaplane, with an instrument rating. I fly a Lancair IVP a pressurized, retractable, high-performance composite experimental as my personal aircraft, and instruct in Piper and Cessna singles. As a Multi-engine Instructor, I have flown many aircraft from the 1956 Apache to a 690B Rockwell Commander turboprop. I also hold licenses as basic and advanced Ground Instructor and have earned the FAA's "Gold Seal" flight instructor license.*

Instructor: Mike Dellas

Contacts: (505) 699-7297, captrellas@aol.com

Located at Santa Fe (KSAF)

General summary of experience: *Currently flying for AAL, experience in Aeronca Champ to a Twin Beech D18/Douglas DC-3 and aerobatic planes such as Citabria and Decathlon, owned and operated a Luscombe, C-180, and C-310 including instruction over 45 year flying career.*

Instructor: Scott Burnett.

Contact: email ssburnettnm@gmail.com

Single and multi-engine CFI teaching in the student's aircraft. Specializes in tailwheel and Maule check-outs, private instruction, and ferry flights. Located at Mid Valley (E98)

Instructor: Peter D Murphy, contacts peterdenismurphy@gmail.com, 505-946-7777. CFII MEII LSP. Flight Design CT

Instructor: Diane de Souza - Taos - contact info is dyeingtoweave@gmail.com

"Information about these CFI resources is provided for the benefit of our CFI and student members. The NMPA and its officers do not endorse any of these resources. We urge all members, CFIs and students, to use good communication skills and show respect in all of our engagements with other members."