



February 2024 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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February Cover

Timing is Everything.... The dragon shadow caused by the sunlight through this stark Monument Valley landscape is amazing. See more on page 16!

The Editor's Log by Lanny Tonning



Living the dream in N 60 BF....

New Energy is Changing the Landscape



Changes in energy production are creating new landmarks across New Mexico and around the nation. Reference points are always useful to pilots. As towering smokestacks give way to massive solar and wind farms, another set of points is becoming available. At least for daylight VFR bug smashing. Along with the watt plantations and amp orchards, new transmission lines to get all these volts into the grid are also popping up. While the giant wind turbines are plainly visible from ground level, the photo voltaic installations out in the wide-open spaces are something you have to get high to really see just how many are already in place...with lots more on the way. Whether these facilities can eventually meet the base load needs of the country as more and more things become electrified is a question still to be answered. Small inherently safe localized nuclear generators like those used by military installations in areas where fossil fuels aren't practical ... like the Arctic Circle...might be coming our way to keep the lights on when the sun isn't shining and the wind isn't blowing. Time will tell. Meanwhile, we'll have solar panel fields and turbine farms down below to help us know where we are while we are up above.





From left to right – wind farm south of Estancia -solar farm west of Mid Valley Airpark, Los Lunas – Ivanpah reflector solar power tower west of Las Vegas, NV

Upcoming Events

NMPA Members can login and post any aviation events on the <u>Events calendar</u>. Or send announcements to <u>nmpa@nmpilots.org</u> and we'll post for you!



Upcoming Events

February 16-18

Buckeye Air Fair, KBXK

AOPA Fly-in at the Buckeye Air Fair. The City of Buckeye has arranged shuttle transport to select hotels - see AOPA link below.

March 2

66th Cactus Fly In - Casa Grande, AZ

See full schedule including Fri 3pm reception and Sun AM donuts/coffee til 9am. No charge for FlyIn aircraft. Register pre-1957 aircraft for judging. April 12-14

Truth or Consequences Weekend Fly-In (KTCS)

Fri - Sun, Bring your tent! Spot Landing Competition, Awards, Food Trucks, Vendors, Saturday Open House. See link for details.

April 20

Sacaton/Rain Creek work party

Save the dates! A work party is being planned for April 19-21, 2024 at Sacaton/Rain Creek (NM16) in order to pour a concrete stoop for the new vault toilet. These dates are tentative subject to USFS availability. Watch for further details.

Click on Links for Details

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.

Meetings, Mud, and Membership



Meetings To Know About: The NMPA Board of Directors will hold a quarterly meeting on Saturday Feb 24th at 0900 in the conference room on the second floor of the Bode Aviation building at Double Eagle airport. As always, all are welcome to attend, participate in the discussions, and suggest topics for discussion. Coffee and donuts! Fly in and have lunch above the FBO, or participate via Zoom (see information on the NMPA website).

Earlier, on February 6th, several of us will be taking the struggle to Santa Fe to participate in Aviation Day at the Merrie Roundhouse. We will have an NMPA display in the main hallway that morning and will try to corner some of the elusive legislators regarding issues of interest to GA in the state. Again, members are welcome to participate: contact me for details.

Membership: Lanny Tonning sent me on an interesting link, titled "Why General Aviation is Failing," recently, (see

https://www.youtube.com/watch?v=rIz3gUVVGtI[https://www.youtube.com/watch?v=rIz3gUVVGtI]. The clip concludes that factors contributing to the decline in the GA pilot population include the obvious ones such as increased costs of getting a license, insurance, and flying in general, as well as the FAA's more stringent certification rules. More unsettling, however, the clip also suggests that there is "Just less interest in aviation..." these days. NMPA membership seems to reflect this condition. It's hard to compete with internet and videogaming activities that can be enjoyed with minimal effort or financial investment, and which seem to offer practitioners just as much enjoyment as non-virtual occupations. Can reality compete with virtual skills and views of the earth? Is General Aviation going to just fade away? Do an experiment: take a non-pilot friend flying. A typical reaction is: "This is amazing. I had no idea!"



Try duplicating *this* experience in the virtual world. Newest no-frills airline seats? Nope, WWII British mechanics ("erks") sitting on the tailplane of a Spitfire, the official method used to keep the 1100 HP, V-12 Merlin engine from tipping the airplane over onto its nose during a static runup (see the video at https://www.youtube.com/watch?v=dQaey3

4jobI).

Invited comment: NMPA has been one of several aviation entities and individuals invited to comment on 1) the development of MOSAIC (updating the Light Sport regs), and 2) the FAA's developing weather webcam system. Joyce Woods and the Advocacy committee have provided feedback on the former (explained more fully later in the Newsletter), basically recommending that while we welcome a program that opens the magic of flight to a wider audience, the high accident rate of Light Sport aircraft suggests that the certificate should not be a shortcut to the training necessary for safe flight, and that Light Sport aircraft should be manufactured to undiluted safety standards.

Regarding the weather webcam program, The FAA proposes to test cameras in the Santa Fe, Albuquerque, and Double Eagle areas, with the idea of expanding the program later. We put this to the NMPA board, who provided feedback to the effect that although this placement makes sense in terms of areas with the most traffic, weather coverage in these areas is already well developed and that it might be more useful to put weather cameras in more remote but heavily-traveled routes such as our mountain passes. By the way, Laurie McGavrin reminds me that Los Alamos/KLAM has their own great airport weather camera that can be accessed at https://rumble.com/v3vpeok-lac-lam-airport.html.

Beware of Muddy Runways: A recent report by Chris Wilson of his landing on a runway made muddy by several days of rain at Estancia, and experience on the suddenly muddy runway at Negrito after a rainstorm, reminds us of the seriously compromised directional control of an airplane on slippery runways. One can't even taxi properly, if at all, if the mud is too deep, and there's always the danger of nosing over if the wheels are grabbed by mud at touchdown. Slippery can also result from snow and ice. Try to get a recent report on runway condition (see the safety briefings on our website and at <u>https://airfield.guide</u>) if heading off to unpaved or potentially contaminated runways, and maybe drag a wheel before landing.

As much as we advertise our other programs, NMPA is often perceived as a Back Country organization. For better or for worse that is the sexiest and most visible program under our umbrella, and in fact Ron Keller is organizing several Back Country work parties as well as a Gila round robin rally for this coming summer. However, if you have an idea for a non Back-Country aviation activity, bring it to us and we'll gladly help you develop it.

"All of my passwords are protected by amnesia."



Left: Screen shot from the KLAM weather webcam showing the ramp and hangars east of the FBO, the east half of the runway, and an area of scattered showers and cloud cover in the Rio Grande Valley. The continuous loop also shows near and far views to the south and west. See: <u>https://rumble.com/v3vpeok-lac-lam-</u> <u>airport.html</u>. Right: The time-equivalent radar plot, from skyvector.com



Advocacy

by Joyce Woods

Advocacy Committee Member



Joyce Woods was introduced to flying by her husband Art, who grew up around aviation. She got her license in 1994 and is multi-engine and instrument rated. Besides continued service to NMPA, she flies Young Eagles and actively volunteers with the EAA, 99s, NM Airstrip Network, and was named 2016 SW Region FAASTeam Rep of the Year.

2024 NM Legislature Underway



This legislative session is mainly focused on funding. Aviation did well last year to get \$55MM in airport infrastructure funding, double the state operational budget, and finally remove the sunset on basic NM Aviation Division funding. We pushed hard for an NM Aviation Division administrative approach to preserving the Santa Rosa Peak Airfield, recently purchased by the state and now managed by the Game Commission. We began to develop understanding, credibility, and important relationships.

Join NMPA on February 6: Aviation Day at the Roundhouse in Santa Fe!

NMPA will have a display table from 0800 – 1200 in the Rotunda. NMPA volunteers will reconnect with legislators, their staff, and the public about New Mexico general aviation. *Stop by*! Or stay a while and help! Free parking if you arrive EARLY in lot next door, accessed from Galisteo St.

Aviation related bills filed as of 1/24: Click links to check progress and access a PDFs of each proposal. SB 105: Repeal Taxes. This proposal by Senator William Sharer would repeal the GRT exemption for aircraft and aircraft parts and services that was implemented just a few years ago after aviation industry leaders recognized that major aircraft service contracts, maintenance, and aircraft parts sales were moving to adjacent states to avoid taxation. I remember Cutter Aviation's longtime ABQ General Manager, Lowell Whitten and others who worked hard through a NM industry association to get this GRT exemption for aviation – seems a shame to go backwards on this!!

SB 120: Create The Unleaded Aviation Fuel Grant Program. Introduced by GA pilot Senator Soules of Las Cruces, <u>this</u> <u>bill</u> would establish and fund a new grant program providing \$200,000 to "publicly owned airports". . "for the sole purpose of installing an unleaded aviation fuel dispensing system or otherwise providing unleaded aviation fuel at an airport." This approach to provide an incentive for proactive communities to offer nonethanol Mogas or new aviation fuels. Upon asking NM Aviation Division for their perspective, they caution putting aside funds prematurely since there is not a clear national path to transitioning from current fuels, expected by 2030.

The full transition to unleaded fuel is complex. As AOPA says, "Nobody will argue that it's time to remove lead from all aviation fuels. It's as important that this transition needs to be done in a way that works for the entire general aviation fleet – safely, economically, practically, and efficiently." However, there would be real safety advantages to offering unleaded MoGas, eliminating current manhandling from local gas stations. These funds could also offer airports a kick start to address this lower volume need for engines where 100LL is not recommended but often used.



Advocacy – NM Legislature Underway continued ...

HB 40: Intrastate Airline Task Force. <u>This bill</u> creates a temporary task force to study and provide recommendations for establishing a transportation system to provide regular flights between Albuquerque, Las Cruces, Hobbs, Clovis and Gallup. The scope includes consideration of tourism, economic development, private/public options, infrastructure needs, etc. From my personal perspective, this is an exciting extension after the very successful service was added from Gallup to Phoenix last year. Director Rael reports that on average, 7 of 9 seats have sold, meeting or surpassing its goals. This task force would evaluate and make recommendations for commercial aviation access across the state.

Other Advocacy Updates: The NMPA Advocacy Committee has been active over the past 6 months although delinquent in meeting newsletter deadlines. NMPA has submitted comments on your behalf, related these issues affecting NM aviation:

<u>The BLM Conservation & Landscape Health Planning Rule</u> – as successfully done several years ago as the US Forest Service updated their Forest Planning process, we advised the BLM to specifically include and define the role of airfields in their process. We recommended establishing an inventory of historic airfields on BLM lands, articulating support for aviation access, specifying conservation leases consider the benefits of allowing aviation access and preserving or creating airstrips for that purpose, and including backcountry aviation access in future travel management plans.

<u>MOSAIC</u>: As AOPA and EAA encouraged comments on the FAA proposal which will redefine Light Sport Aircraft and Sport Pilot privileges, we wrote in general support of the effort. Lots of details and folks smarter than us making recommendations with invigorating flight training and improving safety in mind. Surfacing as a key issue for us in the mountain west is much improved safety from removing the restrictive LSA weight limit and allowing increased performance. This will have a huge impact on the future of GA! Latest news: <u>EAA</u> <u>AOPA</u>

<u>New Tower Installation</u>: Thanks to Ron Keller's monitoring, we learned that a tower is scheduled to be installed near the Cuba Landing Field (NM2). He submitted comments pointing out that the airfield was nearby and indicated he did not think it would not be a safety hazard but if it is a cell tower, would be favorable for the airfield.

<u>FAA WebCams</u>: In late 2022, the FAA requested input on new WebCam locations for <u>weathercams.faa.gov/</u>. They are now implementing at ABQ, SAF, and AEG and are asking for pilot input to establish most helpful views for positioning cameras. To offer your constructive input directly, contact Eric Wansor at <u>Eric.CTR.Wansor@faa.gov</u>

If you haven't followed development of this program, it's awesome - check it out. It started in AK and implementations are underway in several states including CO, MT, CA. The website puts side by side photos showing a clear weather day beside the live camera view. It's especially helpful where there are nearby mountain passes or other obstacles. For instance, an unfamiliar pilot can compare to see mountainous terrain which may not be visible on the Live Cam.

The other key airport we've recommended for this program is Reserve Airport (T16). In addition, we identified a short list of other airports we'd like to see included as the program expands: KAXX, KRTN, KGUP, KSVC, E14, KLSB, KLRU, KSRR, 1V0, E89 Thanks to Ron Keller for his great follow-up on this with one of his former employers (FAA) . . . ③

New Mexico Airstrip Network (NMAN)

by Joyce Woods NMAN Facilitator



Joyce Woods was introduced to flying by her husband Art, who grew up around aviation. She got her license in 1994 and is multi-engine and instrument rated. Besides continued service to NMPA, she flies Young Eagles and actively volunteers with the EAA, 99s, NM Airstrip Network, and was named 2016 SW Region FAASTeam Rep of the Year. **Did You Know?** NMPA is a founding member of an incredible partnership, sealed with a written agreement since 2016. The New Mexico Airstrip Network (NMAN) consists of diverse groups sharing a common interest in promoting tourism



The Voice of Aviation in New Mexico

through aviation access to New Mexico's unique cultural, historic, and recreational resources. Members leverage partner capabilities and expertise, working together to maintain and improve the airfields that provide accessibility, while preserving the environment. More info: <u>nmpilots.org/NMAN</u>

Dedicated Volunteers: NMPA members continue to be the key drivers working with state Aviation Division staff. A core team includes representation of NMPA, the Recreational Aviation Foundation (RAF), and the NM Aviation Division has met continuously (near monthly) since Larry Filener initiated it around 2009. Most active the past few years are John Lorenz, Ron Keller, Rol Murrow, Harv Martens, Director Pete Rael, Will Fitzpatrick, and Stephen and Meg Fleming.

There are three main areas focused on projects with network partners. Rol Murrow leads efforts with the BLM which has involved the NM Aviation Division and State Land Office, focusing on improving the Cuba Landing Field. Ron Keller leads the USFS working group, which you see monthly via this newsletter. I inherited the once active (needing revitalization) NMAN Tourism subteam involving Jeff Gilkey, Mike Lewis (KFMN Airport Manager), Lanny Tonning, Will Fitzpatrick, and Lancing Adams who is now Acting Cabinet Secretary at NM Tourism.

Backcountry Progress: We've made incredible impact through our partnership with the USFS in the Gila region. There's no question that our most significant accomplishments are in the Gila. Work party efforts since 2009 to clear rocks, install tie downs, replace fencing, install windsocks, fire rings, picnic areas, and a kiosk, return two abandoned airstrips to service, mow tall grass, and help install vault toilet installations at both Negrito and Sacaton. These facilities serve the public beyond pilots and are starting to get noticed.

National Recognition: As in Arizona, NMPA has a tight partnership with RAF and to some, everyone is an NMPA volunteer. To others, everyone is an RAF volunteer. Consider this as you read all the recent well-deserved nationally published kudos for New Mexico. The USFS published a <u>press release</u> to showcase our incredible work in the Gila Forest. This was prompted once the vault toilet at Sacaton Airstrip was completed, thanks to a national Cost Share funding agreement set up between the RAF and USFS. RAF then <u>published their release</u>, clearly acknowledging NMPA volunteers who started this at Negrito in 2010 and the NMAN partnership. GA News subsequently spread the news: <u>Sacaton Reopens Thanks to</u> <u>Volunteers</u>. Very nice!

In New Mexico, the NM Uplift Initiative, <u>a statewide asset assessment</u> commissioned by NMED and Outdoor Recreation recommends "*Connecting Southwestern Communities to Recreational Airstrips*" as an opportunity (see Regional "Long Term Recommendations"). We can use this with community leaders to build support.

NMAN continued . . .

Promote NM Aviation: Our tourism effort has morphed several times, initially focusing on growing backcountry tourism but as NM Airport Managers got involved, we expanded to any portal communities for recreational aviation. We established a strategy to address key stakeholders to help "streamline the aviation visitor experience and promote NM flying".

Progress: Jeff Gilkey led our FlyNM website development with an extensive awesome airport directory and regional recreation resources. We hosted well attended fly-in events to increase local visibility and build support at Lordsburg, TorC, and Deming. The state launched an airport courtesy car grant program. Mike Lewis and I presented recommendations for airport managers at the 2022 State Aviation Conference, providing ideas on how to increase visitors to their airport. Reserve Airport pilot shelter is in place, although access is still held up for new reasons. Will Fitzpatrick as Airport Manager for Navajo Lake Airport (1V0) assures some nice upgrades in 2025!

We participated in the 2023 Outdoor Recreation Day at the Legislature, raising visibility of recreational aviation and learning from those in the OR industry. If you know of opportunities in need of funding to improve recreational trails, camping facilities, etc. statewide, the Outdoor Recreation Division has a terrific grant program for groups like ours. Through Ron Keller's suggestion, the Gila Backcountry Horsemen received a state Outdoor Recreation grant to improve trails in the Gila and appreciate our work as well.

Promote NM Aviation – Next Steps: It's time to revisit our strategy, reset priorities, and enlist statewide involvement. As always, we'll go where our volunteers take us. *Want to participate*? It's an opportunity to tie in a local effort you are passionate about to a statewide effort. Let me know if you are interested in joining upcoming remote meetings to re-shape this effort and define our next phase.

Potential New Airfields: At our 5-year NMAN MOU renewal, our Steering Team partners asked, what next? We've started a list of new opportunities to consider but would appreciate any ideas, especially if you have a pet project in mind that you'd like help to realize.

You may recall we pursued a legislative solution last year for the Santa Rosa Peak Airfield, currently closed but on public land. It is part of the Marquez/LBar WMA near Mt Taylor, controlled by the NM Game Commission. (See the <u>map and new access rules</u>.) Still on our radar, we'd like to work with Commissioners to consider preserving this airfield within WMA access limitations. Anyone interested to help on this? State Aviation is willing to administer/maintain the field but we need to educate and gain Game Commission support.

Elephant Butte – ground tour









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.

And the sign said...

Wow, a momentary flashback to my youth thinking about that song with the 5 Man Electrical Band.

Sometimes signs are necessary to inform the less observant that a condition exists that should be noted. They are only effective if the observer is the type to follow the rules. I am amazed that the presence of a windsock and a wide, level and smooth patch of ground is not a dead giveaway that a runway (for airplanes) is there. But in fairness, there are things that I am not aware of unless there is a sign.

So, out of necessity, NMPA has purchased and installed a few signs over the years to inform the non-flying public that a runway is present in a particular area. The results have been mixed, but at least the signs don't have bullet holes, yet.

When a dirt/turf runway is dry, the only danger of vehicle traffic is airplane/vehicle conflict. That is bad enough and seems to be most prevalent at Negrito Airstrip when vehicle drivers mistake part of runway 17/35 for a road. There are signs at each entrance, but due to a purchasing limit on the number of letters per line, they just advise to stay off runway. There are of course 2 runways at Negrito, so I suppose that could be confusing. I plan to put a 2" red stick on "S" on each sign. The other problem arises when vehicles drive on a wet runway. The result is often moderate to severe ruts. The USFS says they will put some bigger signs up also, so maybe that will help.



Jewett Mesa Airstrip





Backcountry Beat, continued

A sign can be a really good thing, such as the kiosk at Negrito Airstrip. It promotes the airstrip, informs about camping and fires, and even has a map of all the Gila area airstrips for aviation visitors to consider. Those of us that assembled, lifted, and installed that kiosk still remember how dang heavy all that steel was.

Now for a funny little "Oops" story. When I ordered that brand new vault toilet for Sacaton/Rain Creek TH, I saw on the list of options something called an owl guard. I incorrectly assumed that it was some sort of spike strip that would prevent owls from perching on the roof, so it wasn't ordered. I was wrong! It turned out to be a perforated cover for the vent stack to prevent owls from going down into the toilet vault and becoming trapped. The Gila Recreation Manager explained this to me and wanted an owl guard. I was instantly convinced and worked with the RAF to order one a la carte. When it came in, I installed it and now it is an owl safe toilet!

RESERVE RD Me-Own Airstrip NEGRITO AIRSTRIP No "owlful" surprises now

Until next month, Fly Safe and Often! Ron

Safety Briefings are available on the NMPA website for all the <u>Gila USFS Airstrips</u>. Note that some require prior permission – just a phone call.

Another great resource, is <u>www.Airfield.Guide</u>, thanks to the Recreational Aviation Foundation (RAF)

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.

Go South, Young Man!

When we mention New Mexico's mountain flying opportunities most folks immediately fast forward to the northern part of the state, usually to the Sangre de Cristos range with its 13,167' Wheeler Peak, multiple internationally known ski areas, and renowned Angel Fire, the 4th highest public airfield in North America. There is however the issue of sometimes significant winters which can make flying in the north part of the state somewhat challenging. With mild apologies to Horace Greeley, going south is often a better winter choice in New Mexico.

New Mexico is either blessed or cursed, depending upon one's point of view, with numerous other mountain ranges and interesting flying opportunities. One such overlooked opportunity is the Sacramento-Sierra Blanca-Capitan Mountains complex of southern New Mexico. Residents and visitors alike tend to think of these mountains as a welcoming retreat from the summer heat that dominates Carlsbad, Roswell, and Alamogordo. But for us aviators a summer excursion into the area often involves very strong winds, high density altitudes, IFR conditions from wildfire smoke, and violent convective activity. Not necessarily the most enjoyable place to fly perhaps and then you still have to deal with the heat-escaping crowds on the ground.





Sacramento Mountains

I suggest you instead consider the winter flying opportunities offered by these three small but interesting and usually overlooked ranges. Yes, winter does visit here and the higher areas sometimes get several feet of snow but overall you'll find a lot of nice, sunny VFR flying days with more moderate temperatures than found up north and often smaller crowds unless you venture into the skiing and snowboarding areas. Unfortunately, prices for food, lodging, and ground transportation don't have an off season to speak of here so a winter visit for the \$100 hamburger may still be a bit pricey but then where is this not the case these days?

The Sacramento Mountains, lying just east of Alamogordo, or if looking the other way a bit west of Artesia, are a relatively small range, 85 miles north/south and 42 miles east/west, and can be divided into two sections: a northern section, encompassing all of the terrain above 7,500 feet, and a smaller southeastern section which abuts the Guadalupe Mountains. The western edge of the main section of the range forms a series of dramatic 4000' high escarpments leading up to a high ridge, which includes the highest named point in the range, Cathey Peak (9,645 feet). From this ridge the mountains slope gently down to the east, merging gradually into the Pecos Slope on the west side

of Artesia. There are two unnamed highpoints of the range, both approx 9,695 ft. One is near Sunspot above Corral Canyon and the second is on the crest of Benson Ridge. As western mountains go the Sacramento's are relatively low and easily cleared on a winter day by most general aviation aircraft.

Geologically, the range is a wide east-dipping fault block made up almost entirely of limestone. The Sacramento Mountains form the easternmost part of the rift system centered on the Rio Grande rift valley which bisects New Mexico. The Sacramentos were originally contiguous with the San Andres Mountains to the west but were separated because of downward faulting of the basin around ten million years ago. A unique bit of interest is that the deposits washed from these mountains are a main source of the gypsum sand that makes up the dunes in White Sands National Park, New Mexico's most visited park with over 700,000 visitors annually.

Evidence of man's presence is surprising short when compared to that found in surrounding mountain ranges, such as the nearby Guadalupes, and only dates back about five centuries showing occasional use by the Mescalero Apache Indians. Given that the Mescalero were a highly nomadic culture at that time and the small size of the mountain range perhaps this is not surprising. The first European to enter this range is unknown but may have been Álvar Núñez Cabeza de Vaca in the early 16th century. More likely, it was a member of Juan de Onate's 1598 expedition as they traveled north towards what would become Santa Fe. Regardless, the early Spanish explorers were soon followed by more Spanish and then Mexicans and then the Americans, eventually overwhelming the Apache culture and initiating permanent settlement in and around this range.

Immediately to the north, Sierra Blanca ("White Mountains") lies in the middle of the complex. A somewhat larger range, it includes Sierra Blanca Peak (11,981'), the most southerly peak and land area to exceed 11,000 feet in the continental United States as well as the most of the modern era settlements such as Ruidoso, Cloudcroft, and the Mescalero Apache Reservation. Like the Sacramento Mountains the majority of the Sierra Blanca range is within the Lincoln National Forest, and the western flank is protected as

the White Mountain Wilderness Area. Much of the southern half of the range, including the summit of Sierra Blanca Peak, is within the Mescalero Apache Indian Reservation. Sierra Blanca Peak is sacred to the Mescalero and requires a permit from the tribe for access. The range serves as the headwaters for important southern New Mexico rivers including the Rio Ruidoso, Rio Tularosa, and Rio Bonito and is also one of the southernmost points at which alpine ecosystems occur in the United States.

Geologically, Sierra Blanca is quite different from the Sacramento Mountains. It is a massive complex of volcanic rocks. An ancient and heavily eroded volcanic pile, it is the largest mid-tertiary volcanic complex east of the Rio Grande with an estimated volume of erupted products of 185 cubic miles. Eruptions began about 38 million years ago and extended over a twelve-million-year period. Most of the eruptions produced voluminous lava flows and breccias with numerous intrusive dikes throughout the complex. The final activity produced the intrusions which form the present-day Sierra Blanca Peak. Following the volcanic period the range's topography was modified by Pleistocene glaciation, block faulting, and erosion. The volcanic complex is part of the High Plains alkaline province, which lies along the boundary between the stable and the tectonically active western United States and formed during the time when the Rio Grande rift first began to open.

Man's history here is comparable to that of the Sacramento Mountains with evidence of Apache presence dating only to the 15th century and subsequent European migration into the area believed to follow that of the Spanish and Mexicans as they moved northward and then the Americans as they moved into the area from the east and north.

The third range that makes up this complex is unusual in that it runs east-west rather than the usual north-south found in North America. This is the Capitan Mountains, smallest and most northern of the three ranges making up this complex. The Capitans are



National Solar Observatory Photo New Mexico State University

about 20 miles long and only about 6 miles wide and were formed from a large elongated granite intrusion similar to the round one that produced Carrizo Mountain to the west. The town of Capitan is on the south side of the range and includes Smokey Bear Historical Park which honors Capitan's favorite son who is also buried here. This is the famous bear rescued from the 1950 man caused Capitan Gap Fire and which continues to serve to this day as the US Forest Service's spokesman for wildfire prevention. The highest point in the range is an unnamed peak reaching 10,201 feet but the entire range is quite easily flown over at lower altitudes. The entirety of the range lies within Lincoln National Forest and is separated from the Sacramento Mountains and Sierra Blanca to by the valley of Rio Bonito. There is no evidence of man's presence here earlier than that of the other two ranges, but local legend talks of a vast store of Aztec Indian treasure in gold bars and rich ore, said to total some \$25 million, hidden here in a cave hitherto undiscovered although not for a lack of persistent looking.

Besides easy mountain flying, popular winter activities include downhill skiing and snowboarding at Ski Apache and the popular Ruidoso skateboard park. Chamber of Commerce literature calls the area New Mexico's premier skiing and snowboarding resort area, perhaps a slight exaggeration that Taos, Santa Fe, and Red River would quibble with but let's face it, there aren't a lot of North American skiing opportunities of any kind when you get this far south so blowing the local horn is likely justified. There is also ice skating in Wingfield Park and sleigh rides at Ski Apache. Hiking, cross-country skiing, and snowmobiling opportunities abound in the surrounding 1.1-million-acre Lincoln National Forest. If you prefer to remain indoors but want more bright lights, there are three easily accessible casinos although unless lady Luck was one of your passengers, they are likely to treat your wallet a bit more roughly than the outdoor activities. Various area museums can be found in Alto, Lincoln, Ft. Sumner, Corona, Carrizozo, and Ruidoso preserving the story of Smokey Bear, the Lincoln County Wars, and other local history. There is the Spencer Theater for you stage aficionados and for those of you also into quarter horses there is the renowned Jockey Club where you can relax with others who share your love of horses and likely more than a few who also aviate (after all, travel by horse is sometimes a bit slow and of limited range). A truly unique opportunity is a visit to the National Solar Observatory in Sunspot. Located on Sacramento Peak this is the only observatory known to be utilizing the unique Inouye solar telescope. Nearby, the Apache Point Observatory, houses four telescopes and is credited to several important astronomical discoveries. Both are open for visitors, but you need to call ahead for tour times and available slots.

So how to fly there and enjoy these mountains? Generally speaking, approaching from the east is preferred since the terrain rises far more gradually. There are no mountain passes to speak of although the gap between Sierra Blanca and the Capitans (US Highway 380) might be viewed as one however the relatively low terrain really doesn't require the use of a pass to traverse between the east and west sides of the complex. US Highway 82 offers an easy route to follow between Artesia and Alamogordo as does US Highway 70 between Roswell and Tularosa although in reality these mountains are small enough that pilotage is usually all you'll need. The Beak A, Beak B, and Beck C MOAs flank the east side of the Sierra Blanca and The Capitans but the floor of all three is 12,500'msl, well above what you'd need for VFR even if the MOAs were hot. Approaching from the west is more of a challenge given the rapidly rising terrain and the numerous restricted areas which go all the way north to Gran Quivera leaving only a somewhat narrow north-south VFR corridor along the west flank of the mountains all the way south to Alamogordo. From Alamogordo to Timberon restricted area R-5103C actually pushes you right into the higher terrain which can make VFR along the southwestern flank of the mountains more difficult.

If you intend to do more than simply get a bit of mountain flying in there are a handful of airfields in the immediate area, including Carrizozo (F37), Timberon (E02), Alamogordo (ALM), and Sierra Blanca (SRR), with Alamogordo and Sierra Blanca offering the most services. Earlier this year NMPA worked with Sierra Blanca to reduce the ramp fees to a reasonable level but as with all airfields these days you would be well advised to call ahead and ascertain the current user fees.

If you've got a hankering for a bit of mountain flying while the north part of the state is still in winter's grip I suggest you consider these mountains for an easy day trip, or longer if you want to participate in the many ground activities.

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

<u> https://www.youtube.com/user/jefftrike</u>

Monument Valley Dragon

On my first trip to Monument Valley back in January 2006, I watched a dragon emerge from behind the western buttes for a few minutes before sunset. The existence of the "dragon" is not widely known as it can only be viewed from the air. Had I not grabbed the photo below, I might have thought I imagined the entire experience. I returned many times over the last 17 years, only to have arrived too late or on a cloudy day.





Monument Valley (MV) is one of the most majestic places on earth, with sandstone towers that rise 1000 ft above the desert floor. You can take your car on a 17 mile self-guided tour through the valley. Or you can gaze over the valley from the dining room of the "The View" hotel (below). But by far, the best views are from the air.

If you are flying in to Monument Valley, the most convenient way visit is to land at Monument Valley Airport (UT25) and stay at the Goulding's Resort/Hotel. This private airport is for customer use, so call ahead and get a meal at the restaurant or stay at the hotel. MV was the destination of my first long distance cross country trip. I was able to stay in a nice warm hotel room in January with a great restaurant, indoor heated pool, museum, gift shop and movie theater. I could see my trike from the room's balcony. Sunrise and sunset flights were as easy as walking about 1/3 mile from my room to the airport, going through my preflight, and taking off.

The Goulding's gas station is across the street from the MV airport if you can burn mogas, but it is a brutal ¼ mile hand carry. The nearest airport with aviation fuel is Cal Black (U96). Nearby airports at Bluff (66V) and Kayenta (0V7) work well if you can arrange for someone meet you at the airport with a car.



To help you find the dragon, circle southwest of the buttes that are just west of US Highway 163 about 30 minutes before sunset (see my blue ground track to the right).

Here are some coordinates to get you into position.

Latitude = 37.0366 Longitude = -110.0881

Monument Valley Airport (UT25) one way in, one way out

FLY SAFE

HWY 163

View Direction View Direction for the dragon

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.

Stay Out of the Water and You Won't Drown

The FAA eliminated spin training from the required private pilot curriculum decades ago, with the understandable logic that spins were killing students. I don't know why spins were so dangerous in training, maybe they were being taught by incompetent CFIs. Regardless, statistics seem to suggest that elimination of spin training has indeed reduced the number of stallspin accidents. That is all to the good, but the elimination of spin training turned spins into a dark bogeyman of ignorance. Moreover, since the mantra became "don't stall and you won't spin," attitudes towards stalls were sucked into the same frightening void, and today students and most pilots are scared silly by the thought of both stalls and spins.

But stalls don't cause spins, it's *asymmetric, aggravated stalls* that cause spins. Stalls done right are as predictable and manageable as any other maneuver. Even spins are manageable once a pilot knows the form: Lindbergh would intentionally spin to get underneath an otherwise impenetrable cloud layer when flying the mail. Stalling most of our GA airplanes is not dangerous unless the pilot stalls the plane in an uncoordinated condition, i.e., with asymmetric lift, and at the same time prolongs/aggravates the stall by holding up elevator. Let's look at the two factors.

Uncoordinated/Asymmetric Stalls: Per the accompanying chart, in normal flight, lift increases as Angle of Attack increases. But beyond a about 17°-18°AOA, where a wing is generally considered to be stalled, lift starts to diminish*. If your ailerons are neutral and the airplane is in coordinated flight when it is stalled, the left and right wings will pretty much stall at the same time, there will be no left-right lift differential, and the plane will not spin.





An airplane must be held in an uncoordinated stall to make it spin. Unfortunately, the intuitive but incorrect control inputs during a stall will do exactly that.

*Much of the abrupt pitch during a stall is in fact a result of losing the downward lift provided by the horizontal stabilizer, not the abrupt loss of upward lift from the wing.

However, if one aileron is up and the other down, they create different attack angles for the left and right wings. An aileron deflected downward creates a higher Angle of Attack, and in normal flight that produces more lift, but the relationship between lift and AOA is reversed once a wing enters the realm of a stall. To the right of the peak of the curve in the accompanying chart, a wing with increasingly higher attack angles becomes ever more deeply stalled and lift progressively *diminishes*: the wing with a downward-deflected aileron goes down despite aileron deflection. Counter-intuitively therefore, when stalled the pilot must *not* pick up a dropping wing with opposite aileron as that only deepens the stall on that wing and makes a bad situation worse. Rather, a pilot must pick up a dropping wing during a stall with opposite rudder, speeding up the more deeply stalled wing and reducing its AOA. Unintentional spins usually result from stalls where lift asymmetry is caused by differential aileron deflection, and the common scenario is stalling in an uncoordinated turn. Keep the ailerons neutral and stay coordinated in a stall, and you can stall as many times in a row as you want to without danger of spinning.

Aggravated Stalls: As the chart shows, lift drops off gradually, not abruptly, once the AOA increases beyond an optimum. (All bets are off beyond an AOA of about 25°, after which the wing is effectively a brick rather than an airfoil). Moreover, while approaching a stall, if a pilot stops pulling on the yoke at any point, the AOA is reduced and the stall is averted. Unfortunately, like mistakenly trying to pick up a dropping wing with opposite aileron, trying to raise the nose with more back elevator once the wing is stalled, the intuitive response, turns a benign situation in to a problem. When the nose drops in a stall, the pilot must let the nose come down to reduce the AOA and re-establish lift before pulling up. It may be an incipient stall, just nibbling at the loss of lift, and flight can be re-established immediately with minimal altitude loss by pulling just a little less on the yoke. Or it may be a full stall that consumes a few hundred feet of altitude, but recovery is the same: stop pulling so you break the stall.

You can even safely stall an airplane while cross controlled as long as you don't prolong the stall by holding back elevator: release the elevator at the stall and it won't spin. Likewise, as long as the ailerons are neutral you can hold the back elevator in an aggravated stall and walk an airplane down in a Falling Leaf, picking up the alternately dropping wings with judicious use of opposite rudder. If it starts to roll over and you can't catch it with the rudder, release the elevator and you're flying again, no spin.

To spin an airplane, the left and right wings must have different lift components, i.e., one must be more deeply stalled than the other, *and* the stall must be prolonged. You have to *make* an airplane spin, a spin doesn't reach up out of nowhere and grab you. Unfortunately, the intuitive control inputs during a stall are exactly those that produce a spin. Practice stalls with a competent CFI and get comfortable with the correct stall recovery techniques. Pick up a falling wing with opposite rudder, let the nose come down to break the stall. Stalls should command respect, not fear.



Lift first increases but then decreases as the wing's Angle of Attack increases. If the left and right wings have different Angles of Attack due to deflected ailerons when the airplane stalls (to the right of the peak of this curve), differential lift pulls the airplane around into a spin. But if you stay coordinated with neutral ailerons, the airplane stalls without rotation. Alternatively, just release the elevator to break the stall, preventing a spin. (From https://en.wikipedia.org/wiki/Angle_of_attack)

Tech Corner

by Will Fox



Well-Done Ingenuity

The Mars helicopter known as Ingenuity made its last flight on Mars on January 18, 2024. Flight number 72 was supposed to be a quick popup for a systems check, but during the descent Ingenuity lost contact with the Mars Rover, Perseverance. Upon reestablishing communications, it was determined that the helicopter's rotor blades had been damaged, making further flight impossible. NASA engineers believe that the blades were damaged when Ingenuity <u>lost its</u> <u>situational awareness due to the uniformity of the sandy</u> <u>terrain surrounding it</u>. It landed at an angle that caused the blades to strike the ground. The helicopter remained upright, but the damaged blades would create too much vibration in the rotor system to allow it to fly again.

In a last-ditch effort to get the helicopter flying again, NASA contacted Martian authorities to see if they could help with the repair of the damaged helicopter. It was agreed that they could, and new rotor blades are on order from NASA. However, supply chain issues are making it difficult to get replacements in a timely manner. Once the blades do arrive, installing them will be challenging. You see, Ingenuity uses metric fasteners, but Martians use tools based on the Sol standard, so they won't fit the Earth fasteners. To compound the problem, Earth tools do not accommodate Martian physiology (three digits instead of five), so the tools will need to be modified to work. However, Martian A&Ps, like their counterparts on Earth, are used to modifying tools to fix aircraft, so these problems will no doubt be overcome.

The bigger problem is the 24-volt electrical system that powers Ingenuity. Martians use fusion power systems that don't require electricity. The Martian union of United Solar Workers (USW) has raised concerns about the possibility of





Ingenuity photographed this picture of one of its blades showing the damage to the tip of the blade.



Martian technicians in bio -hazard suits headed out to inspect damage to Ingenuity.

an electrical shock causing a Martian to spontaneously combust. It turns out that Lithium is a significant component of Martian body chemistry. The USW points to the problems that Earthlings seem to have with their electrical vehicles bursting into flame, as an example. The USW goes on to point out that the potential for biological contamination is another source of concern for their workers. NASA insiders indicate that multiple renditions of the "War of the Worlds" movie has led to conspiracy theories on Mars regarding the intentions of Earthlings that plan to immigrate to their planet. In any case, Martian mechanics working on Ingenuity will be required to wear electrically insulated bio-hazard suits while repairing the aircraft.

Martians have, on occasion, have indicated a certain level of intolerance when it comes to Earthlings. Our physical features and level of intelligence are often the butt of their jokes. For example, Martians like to joke that if the Supreme Being wanted Earthlings to have cold fusion, he would have given them the brains to invent it. Martians, of course developed cold fusion energy sources eons ago, but their export control of advanced technology to Earth has prevented its use in any form. Hackers on Earth believe that they will ultimately be successful in circumventing the export controls.

OK, I made up the part about the Martians, but the part about Ingenuity not being able to fly again is true. Ingenuity has been a <u>tremendous success</u>. Originally designed as a demonstrator with only 5 planned flights, it ended up flying 72 missions as an aerial rover assisting Perseverance with route planning and helping scientists to learn more about the Mars landscape. Its success has inspired NASA to include <u>aerial rovers</u> for sample recovery in future missions. Kudos to JPL, NASA, and America for designing, building, and operating the first aircraft to ever operate on another planet. The investment of national treasure in science and technology has been one of our nation's greatest trademarks. It has and will continue to be one of the things that makes this Country great. Well done Ingenuity.





Ingenuity in flight over Mars, "The little helicopter that could".

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

<u>NMPA Certificated Flight Instructor Resource List</u> 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, captdellas@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 <u>peterdenismurphy@gmail.com</u>, 505-946-7777. CFII MEII LSP. Flight Design CT Instructor: *Diane de Souza* - Taos - contact info is <u>dyeingtoweave@gmail.com</u>

"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."