

---

# TAILWINDS

---

## July Meeting Recap



Our July chapter gathering was held on July 8 when we were treated to an instructional session led by William Bennett. William talked about dimpling, tools to use to dimple, and tips and techniques for successful dimpling.

The purpose of dimpling is to counter sink rivets to create a smooth surface that has less drag. The dimples also create a mechanical feature that assists the rivet in holding structures together.

A C-frame is used to dimple larger pieces and a hand squeezer can be used for smaller pieces. The hand squeezer is a standard rivet squeezer with a dimple die. William showed the difference between a standard dimple die and a tank dimple die. The tank die makes a deeper dimple to provide space for pro-seal in fuel tanks.

William described his method of dimpling. He creates the dimple in the sheet metal, then uses a countersink tool to square out the dimple to make sure the rivet sits squarely in each hole. The countersink tool straightens out the sidewalls of the dimple so the rivet fits perfectly. Additionally, William recommends deburring the drilled holes prior to dimpling to avoid having cracked and jagged edges.

Finally, William recommended a video created by The Walt Disney Company during World War 2 that describes riveting techniques. The video can be viewed on YouTube: <https://youtu.be/WC5BAp2xvDc>

## August Chapter Meeting

In August, our local AME Dr. Larry James will give us an update on the Third Class Medical. He will also answer any questions folks might have.

The meeting will begin at 10 am at Georgetown Municipal Airport's terminal building. The address is 500 Terminal Dr, Georgetown, TX 78628. **Early bird breakfast at 9:15 am!**

## Upcoming Events

### Rockdale Tiger Flight: Help us Build an RV-6!

Rockdale Tiger Flight is a group organized by several EAA 187 members in Rockdale, TX. The group is focused on teaching mid- and high-schoolers airplane building skills. Our current projects are an RV-6 and a Zenith CH-601. We get together **every Saturday at 10 AM**, and focus on building those airplanes. We also offer **weekly Young Eagles rides** to kids, subject to weather and aircraft availability.

This weekly event is free to participants, and we are looking for help! Both kids and adults are welcome! For more information, log on to [rockdaletigerflight.org](http://rockdaletigerflight.org).



### USO Style Hangar Dance

The Hangar Hotel in Fredericksburg, TX is hosting a hangar dance on September 2. Doors open at 6:30, with swing dancing lessons from 7-8 PM. Tickets are \$30 and all proceeds benefit the USO Ft. Hood. <http://www.hangarhotel.com/picts/USO%20Dance%20Labor%20Day%202017.pdf>

### Under-the-Wire Fly-In

The 28th Annual Under-the-Wire Fly-In will be September 15-17 at Flying V Ranch (T26) in Louise, TX. There will be Stearman Formation practice, dinner and live music.

## Texas STOL Round Up

The 4th Annual Texas STOL Roundup will be held at Honda (KHDO) September 29-October 1. The event sounds like it will be a lot of fun. On Friday morning, there will be a STOL Seminar describing STOL techniques, a hangar dance on Saturday evening and much more!

## Ranger Airfield Fly-In and Airshow

The 11th annual Ranger Airfield Fly-In and Airshow is October 6-8, 2017 at Ranger Airfield in Ranger, TX. The event draws owners and enthusiasts from all over the south for a fun weekend of flying, camping, fire pit, flying, BBQ, burgers, drinks, and more flying! For more information see <http://www.rangerairfield.org/>

## Northeast Texas Pietenpol Fly-In

The Northeast Texas Pietenpol Fly-In will be on November 11 from 9 AM to 6 PM at Mineola-Wisener Airport (3F9). The event will feature a catered lunch.

## Summer Flying Fun!

*Courtesy of Pete Christensen, we are featuring an article from ATC controller, Rose Marie Kern. Republished with permission.*

The spring winds are still howling here in New Mexico though by the time this article is published it will be June. What a winter/spring! We've had a lot more rain than usual – which is great for us desert folk! The Rio Grande and all its acequias (irrigation canals) are running full.

It is cooler than normal for this time of year too, last weekend it actually snowed. All this makes you wonder which direction 'climate change' will actually take us. However, I am certain that the warmer temperatures are just around the corner, and whether you are flying in the Rockies, the Ozarks, or over the plains of central Texas – it is time to start boning up on the changes warmer temperatures bring to your flying experiences.

First and foremost, it is time to dig out the charts for calculating Density Altitude. DA is a silent killer – no loud bangs of thunder, no screaming winds. Nothing that stands up and screams "Hey, You better rethink your weight and climb ratios!"

I watched from Albuquerque Tower one morning about 10am as a Delta L1011 prepared to take off of Runway 8. That's over two miles of runway, but at 91 degrees, and a mile high at the surface, the heavy aircraft lumbered like a pregnant cow. All of us in the tower watched with concern – the nose wheel didn't lift until it was more than three quarters to the end of the runway. The tires barely cleared the low barricade at the end before they folded into the fuselage.

It struggled with the ground effects and we wondered if it would top the Sandia National Laboratory east of the field or not! It did, and then we watched as it struggled over the next barrier to the east

-Manzano Mountain. The TriStar did finally break the ground effect – which was a good thing since the then current governor of New Mexico was aboard!

Even though the field elevation at Phoenix is only 1135 Feet, the temperatures frequently climb above 105 degrees in summer. When this happens, the airport managers and ATC stop departures and landings because even with parallel runways over 2 miles long the air is too thin for the flaps to grab.



Photo credit: Carl Meek - Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?>

Mountain pilots in general are more aware of the sneaky way DA sabotages their ability to negotiate takeoffs and landings. Flat land pilots learn about it during training, but until they land or take off from a high elevation airport it doesn't hit home.

The three things to remember are: Elevation plus heat plus humidity=high density altitude. In the mountains pilots should automatically start calculating DA whenever temperatures get above 75 degrees Fahrenheit.

Summer is also a time when the upper air streams moisture out of either the pacific or the gulf coast throughout the western and central parts of the country. That moisture stays aloft and invisible until the afternoon heat begins lifting it into fluffy cumulous. When enough moisture meets enough uplift we get sporadic afternoon thunderstorms that can quickly become severe. Throw in the west Texas dryline or a random cold front and Area Weather Watches for storms and tornadoes abound.

The heat also generates considerable afternoon turbulence and mountain waves that can “push-pull” an aircraft as high as 35,000 feet!

A frequent question to flight service specialists during the summer “monsoon” season is “When will it stop?!” The answer is mid-September when the jet stream begins waving its way into a fall pattern. In the meantime, pilots will find flying conditions the best in the early morning to between noon and 1pm when the air starts to rise.

Something else to keep in mind if thunderstorms are possible – summer thunderstorms tend to produce BIG hail. I have been traveling in the mountains twice when fist sized hail pounded huge dents in my vehicle. Once I was traveling west out of Amarillo in clear blue skies. I could see the anvils at least 20 miles south of V12, so I thought I was good, but then a few random watery balls of slush struck for about 3 or 4 minutes. I was fairly low so they'd mostly lost their cohesiveness as they dropped through warmer temperatures – but my heart jumped around like mad!

Moral of that story – stay far away from thunderstorms and if there is even a possibility that one might be in the neighborhood, consider paying for hanger space.

Another common summer hazard is fire. Whether it is a forest fire in the mountains or a grass fire ripping across the plains, the smoke decreases visibility dramatically. Usually the total number of Temporary Flight Restrictions (TFR) increases during the summer months as firefighting aircraft dominate an area. To check and see if a TFR has been issued you can go to the [www.faa.gov/tfr](http://www.faa.gov/tfr) website, or any other good pilot briefing website.

If you are doing any border crossing over the summer remember that Customs makes you stay in or close to your aircraft when you land in the U.S. until they can come out to inspect you. If they are busy you could be sitting in the hot sun on a ramp in El Paso or Tucson for close to an hour – so bring extra water!

Summer flying is a lot of fun on dry high pressure days, but don't ASSume anything – get your pilot briefing as usual and look for potential problems just as you would if it were winter!

*Rose Marie Kern worked in ATC for over 34 years. Her book, "Air to Ground" is a unique resource offering pilots insights into the world of Air Traffic Control and Aviation Weather. You can get it through Amazon or her website [www.rosemariekern.com](http://www.rosemariekern.com).*

#### **Chapter Officers**

President - Haruko Reese  
Vice President - Pete Christensen  
Secretary - Valerie Barker  
Treasurer - Rob Reese

#### **Young Eagles Coordinators**

Jimmy Cox  
Fi Dot Fomichev

#### **Chapter Flight Advisor**

Deene Ogden

#### **Chapter Technology Counselors**

Seth Hancock  
William Bennett  
Deene Ogden

#### **Webmaster**

Fedor "Fidot" Fomichev

#### **Newsletter**

Valerie Barker  
Send submissions to:  
[valeriebarker@mac.com](mailto:valeriebarker@mac.com)

#### **Tool Chest**

Gary Hamilton

#### **Chapter Board Members**

John Nunn (2015-2016)  
Deene Ogden (2016-2017)

#### **Meetings**

Georgetown Municipal Airport (KGTU)  
Terminal  
2nd Saturday each mont at 10 AM

[eaa187.org](http://eaa187.org)