

# PIREPS

A bi-monthly newsletter for Nebraska pilots and Aviation Enthusiasts



Encourage and Facilitate the Development and Use of Aviation in Nebraska

## PIREPS

Dec 16 - Jan 17

Volume 67, Issue 6

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Circulation: 3320

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## “An Early Auburn Christmas”

By Tom Winter

The city of Auburn and the Auburn Airport Authority took a giant step into the future October 21 with the Grand Opening of their new 3750' X 60' concrete runway, with taxiway, and a large new hangar building. Lieutenant Governor Mike Foley pointed out in his remarks that it will enable new



L to R: Bird's Eye View of the Terminal Building, New Large Hangar, New Taxiway, and New Runway

economic developments across the board from agriculture to manufacturing. It will attract aerial applicators, for instance; it will be attractive to manufacturing, citing the famous truism of past FAA Administrator Marion Blakey “When economic opportunity comes to town, it doesn't get off at the bus station.” A town's airport is the town's Main Street.

The giant step was the product of a long-range view. There were several steps along the way to the giant step culmination. Some landmarks along the way from the files of the Department of Aeronautics obtained by Diane Hofer: The City of Auburn's first grant request about an airport was filed in 1983!

In 1990 grading was funded for (ultimately) a 4,000 foot strip, there was an unsuccessful grant request in 1992, there was a planning redesign up to new FAA standards in 2003, the terminal building was completed in 2010, and now, the Grand Opening of a far-sighted city's dream 35 years in the making!

Pat Pope, CEO of the Nebraska Public Power District, pointed out that NPPD needs it: any part needed for the nearby Cooper Station cannot be had at the hardware store (!), as even a bolt has to be nuclear power certified, and a day's downtime is a 30 million dollar setback. Parts delivery is by corporate aircraft. Auburn Mayor Scott



L to R: Airport Manager Kendall Neiman, CEO NPPD Pat Pope, Chairman Airport Authority Dr. Jay Hauserman, Mayor Scott Kudrna, and Lt. Gov. Mike Foley

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## “Merry Christmas”

By Ronnie Mitchell

Only a few more shopping days until Christmas and I haven't gotten a “want” list from my wife! Of course I haven't given her one for myself either but that's another problem.

The gifts under the tree this year will most likely include a quadcopter that you can't wait to fly before the sun goes down. There is a problem though if you didn't register it with the FAA. Fortunately it is very easy to register if it weighs more than 0.55 pounds, just go to <https://registermyusa.faa.gov>, create an account, and follow the instructions for model (recreational) aircraft. It costs \$5 to register and the fee covers all your recreational UAS (Unmanned Aerial System) for a three year period.

You will receive an “N” number just like a manned aircraft that must be readily seen on your UAS. You should follow FAR Part 101 or FAR Part 107, fly below 400' AGL, within visual line of sight, and not flown over people, stadiums, sporting events, or near emergency response efforts (e.g., wildfires or crime scenes), other aircraft or airports. Then you must be aware of local airspace limitations and “bottle to throttle” rules (no drinking of alcohol 8 hours prior to flight) also apply.

But what if you want to earn some money with your UAS. You must follow FAR Part 107, earn a remote pilot certificate (go to [www.faa.gov/uas](http://www.faa.gov/uas) for guidance) and change the registration number to one for non model use. The FAA has a smartphone app called “B4UFLY” which you should install and it will show airspace you should not fly into.

All of this sounds complicated but in reality it is fairly easy to navigate through the process. Okay, now you're ready to fly that newly acquired gift and to do so legally. Over 540,000 UASs have been registered as of August 2016 and there will probably be that many registered during 2017.

Another issue which will be in the news in 2017 concerns low commodity prices. Even though agricultural production in NE is at an all time high, corn and soy bean prices are almost half of what they were in 2012. This portends lower revenue for state government which relies almost completely on sales and income tax revenue. State government is getting leaner by restricting travel and hiring only mission critical personnel when workers leave or retire. The January session of the legislature will be dealing with revenue 2 1/2% lower than projected, or in other words, state spending will have to be curtailed as our state constitution requires a balanced budget.

And finally, December the 9th, congress will have to authorize a budget for the Government or another continuing resolution. Airport Improvement Projects may be slowed or perhaps not. Time will tell what the new administration will accomplish.



Director Ronnie Mitchell

## “Rudder, Rudder, Rudder”

By Lee Svoboda

I've harped on this subject before; however, I am a bit older and my heart may not be able to stand many more escapades out over the grass during soft field takeoffs. In a tricycle geared airplane, the nose wheel helps keep the nose going straight during the initial part of the takeoff roll. When the nose wheel is lifted off the runway, rudder is the only thing counteracting torque and P-factor. When there is not enough right rudder deflection the nose goes left.



Lee Svoboda

Instead of adding more right rudder, many pilots apply right aileron, which adds adverse yaw to the equation and we have a dipping right wing. It is even more extreme when doing a soft field takeoff, as the nose wheel is lifted off the runway much earlier in the takeoff roll, meaning less air over the rudder, more rudder deflection is required to keep the airplane going straight. If adequate rudder is not applied, we go left toward the grass.

I also find my pulse rising when an applicant is recovering from a power off stall. If he/she does not release enough back pressure and adds full power without aggressively applying right rudder, the nose goes left closely followed by the right wing. Does it develop into a spin? Most of the time no, but I have found the heading indicator rapidly moves at least 90 degrees left, especially if the applicant has tried to stop the roll with aileron, adding adverse yaw and making the situation worse. Power on stalls can also get interesting, especially to the left, when the applicant does not apply enough right rudder to overcome torque and P-factor as the aircraft slows to a stall.

Inadequate application of right rudder can also cause problems during a go around. You're at a low airspeed and adding full power requires a lot of right rudder pressure to keep things going straight and not left.

Most of these potentially exciting situations can easily be avoided by applying adequate pressure to the right rudder as the hand comes forward applying power. Another help would be NOT to add right aileron which worsens the situation.

Bottom line to this issue: remember the rudder controls movement around the vertical axis of the aircraft. When we want to initiate movement around the vertical axis OR to STOP movement around the vertical axis, pressure on the rudder is the correct control input. Remember that our feet control where the ball goes in the turn and slip indicator. If we keep the ball in between the two lines, both wings will be going the same speed. And normally, if we keep the wings going the same speed, unsurvivable events do not occur. Hey, this flight testing has already cost me a full head of black hair. Let's see if we can keep me from having an early coronary. RUDDER, RUDDER, RUDDER. FLY SAFE!!



## Wake Up!

By Jerry Tobias

It was a typical flight on a typical day in Vietnam. We had started at "o'dark-thirty," it was hot, the R-2800 radials on our Fairchild C-123K Provider were loud, and now – after lunch – we were very tired. Our 123s didn't have autopilots, so I was hand-flying down the coast toward our destination at 1500 feet AGL when I SUDDENLY WOKE UP! Startled that I had dozed off, I humbly glanced over at my copilot and you guessed it, he was sound asleep!



Jerry Tobias

Thankfully, my microsleep episode only lasted a few seconds. If I had slept much longer, aircraft recovery at our low altitude might not have been possible. Needless to say, we immediately implemented measures to ensure that such an incident would never happen again!

That wasn't the first time that I had fought sleep while "at the controls." My earliest microsleep vs. machinery battles were during my high school years on International Harvester W-9 tractors. The scenario was similar: hot and noisy, with early mornings that resulted in serious "sinking spells" after lunch. I confess I was jarred awake more than once when my right front tractor tire jumped out of the furrow at the end of an unplowed field!

Even more alarming is the fact that we have all "nodded off" on highways. The National Highway Traffic Safety Administration estimates that 100,000 accidents, over 1500 deaths and 40,000 injuries occur each year as a result of drowsy driving. And, how many aviation accidents and incidents, hangar mishaps or bungled maintenance procedures occur because of drowsiness or fatigue? Probably more than we know.

We do know that pilots often face classic fatigue scenarios because of very early starts followed by later flights during mid-to late-afternoon, the drowsiest part of the day. The same is true of those working in the hangar.

The remedy for these problems is two-fold: awareness and preventive countermeasures. First, understand that drowsiness and fatigue are serious matters. Both erode human performance and unquestionably impact safety! Next, proactively counter these threats with common sense tactics. Ensure that you get sufficient rest (meaning sleep, not just time off). Know what helps and hurts you through the drowsy parts of the day. Learn to recognize the first signs of your own drowsiness- and/or fatigue-induced performance degradation. And, immediately do whatever you need to do to combat drowsiness when you note it (denial is not an option!).

The bottom line? Drowsiness and fatigue are significant issues that can and often do have severe consequences! And that's something to wake up and think about!

## NDA Aviation Art Contest 2017

By David Morris

Since 1986, the Nebraska Department of Aeronautics has sponsored an annual Aviation Art Contest for the benefit of our youth. The program goal is to motivate and encourage young people to become more familiar with and participate in aeronautics,



engineering, math and science. There are three age categories of contestants: 6-9, 10-13 and 14-17 for boys and girls.

The 2017 theme is "Beyond The Clouds". We live beneath the clouds. We look up and see them stand stationary or speed across the sky. We see them reflect the bright colors of the sunrise or



set. Above the clouds is a space known only to those who dare to break the bounds of earth. Some soar in hot air balloons, gliders and hang gliders, floating across the sky with the clouds. Others fly in planes, as pilots or passengers, watching the clouds and earth race by below.

This is an excellent opportunity for our youth to grab their favorite artist's tools and create a poster celebrating their thoughts about "Beyond The Clouds".

Entries for the contest need to be submitted to the Department of Aeronautics and postmarked by January 20, 2017. An awards ceremony will be held in Lincoln during April 2017, recognizing state, national and international winning students for their accomplishments. The winning art will be displayed for everyone to enjoy as well as numerous aircraft on static display and refreshments.

For more information and an entry brochure contact David Morris at the Department of Aeronautics by calling 402-471-2371 or e-mail [David.Morris@nebraska.gov](mailto:David.Morris@nebraska.gov).



## “Changing Times”

By David Moll

Recently I had breakfast with an old friend who just got retired from his position as a Falcon 900 Captain simply because he turned 64. I say old, not because of his age, but because I've known him since the early 1980's. We are the same age, so both of us being out of aviation because of our age is very discouraging. Conversely, in another profession, 86,000 Husker fans are cheering 63 year old head coach Mike Riley praising his lifetime of coaching experience. If the Huskers have a losing season, probably more fans would pass away from heartache than a corporate jet going down because one of the 1 of the 2 pilots had a heart attack.



David Moll

One subject we laughed about was how hiring has changed. When he and I started in corporate aviation rarely did we ever get interviewed by anybody except the Chief Pilot and probably the CEO. If they liked you and your experience fit their operations, you got hired. Nowadays, typically your first interview is over the phone with an H.R. person who knows little to nothing about aviation. They should ask if we've ever used one FBO over another because it has the best looking line girls while ignoring fuel prices.

We both remembered flying with an assistant Chief Pilot who used to be a FlightSafety instructor. Milt flew with him on a daily basis, while I flew with him on occasion while doing some contract pilot service for the same company. Every deadhead leg was a training session. During cruise it was non-stop questioning of every system in the airplane and then relating this to how the checklists had been developed. “Rowdy's” job was to make sure all the pilots in the company airplane knew the systems and emergency procedures inside and out. If you had a fragile ego or thought you knew everything, you were not the pilot he wanted in his airplane. Conversely, if you were open minded and wanted to learn something new every day, he was a thrill to fly with and pushed you to be better. This was a game changing experience for both of us which we practiced for the rest of our careers. Nowadays if you taught with his same technique, the P.C. pilots would whine like a TPE 331 motored Mitsubishi.

On another topic, the U.S. Advanced Aerobatic team came in 2nd place at the World contest held in Radom, Poland. Cameron Jaxheimer who placed 5th in the world is a former collegiate pilot from the University of North Dakota who has competed at Seward's Midwest Aerobatic Championship. Head Coach of the UND Aerobatic Team, Michael Lents, has built an aerobatic program that already has 8 National Collegiate Championship trophies. Michael leads by example finishing in 6th place at the U.S. Nationals in the Advanced Category.

## “Glider Pilots”

By Dick Trail

Recently I was privileged to attend a presentation on the history of the glider program at the Air Force Academy, Colorado Springs. Lt. Col. USAF Retired, “Wally” Leland, was the presenter and his body of work will go into the archives of the Academy. In his research Wally discovered that there had been an earlier glider program at the three year temporary site of the Academy near Denver. He also discovered that this former cadet and now longtime CFI had been a participant in that original program and had been the first cadet, ever, to solo in a glider. Wally stressed the point that flying gliders would make for better Air Force pilots in their future flying careers.



Dick Trail

How so? Well an outstanding example would be Chesley Sullenberger better known as Sully. When his airliner had both engines disabled by a flock of geese Sully masterfully ditched his Airbus on the Hudson River but there is more to the story. Sully was a long time glider pilot, former cadet and glider instructor at the Academy. He had departed LaGuardia and knew that he couldn't glide back to that runway nor make any other runway so he went to his best L/d speed and landed nearly straight ahead.

Flying gliders one learns two indicated airspeeds, one for minimum sink and one for best penetration. Minimum sink, slowest rate of descent, is used for soaring in thermals, you turn toward the lifted wing and feel for the best rate of climb. For penetration you want the best lift over drag which will be a higher IAS than minimum sink. That will get you the most distance, think best glide in general aviation aircraft. Gliders don't change weight from burning fuel and the best glide is only presented for maximum gross weight in our POH's. A rough approximation for our powered aircraft would be  $V_x$  for minimum sink and  $V_y$  for best penetration.

Another handy tip for making an engine out approach in our general aviation aircraft would be to factor in the headwind after one lines up for final approach. If you are high and it looks like you'll overrun your selected spot to land, slow to just a few knots above  $V_{so}$  and that will make your descent angle much steeper as will doing a slip, adding flaps or lowering gear. If you look short, add the velocity of your headwind and it will stretch your glide. Try it for practice and see how well it works. Flaps will not stretch a glide.

Besides all that I urge you to find an outfit that has gliders to teach soaring and you will discover it is a lot of fun. You will be a better pilot for it.

Editor note: The Omaha Glider Club in eastern NE. meets each Saturday at Blair; Bob Craig H402-294-3186 or Cell 402-490-8360.



# “Takeoff Briefing”

By Dan Petersen

In multiengine and jet aircraft it is common and good practice for the pilot to conduct a takeoff briefing in the event of an emergency. During this briefing the pilot flying recites to the other pilot, or if single pilot to himself, what actions are to be taken if an engine fails or other abnormality occurs during the takeoff. This briefing gets us mentally prepared for such emergencies.



Dan Petersen

Transport category aircraft have a decision speed called V1. If there is an engine failure or anything that would cause doubt in a successful takeoff prior to V1, the pilot is to reject the takeoff and safely come to a stop prior to reaching the end of the runway. At V1 the decision is made and the pilot will continue the takeoff. Certification rules for transport category aircraft require the aircraft has the performance to continue the takeoff at V1.

When I fly with other pilots in single engine aircraft, I seldom hear a takeoff briefing. We can certainly adapt the takeoff briefing to our single engine aircraft. Yes, we must modify it from the transport category aircraft because obviously we cannot continue a takeoff with an engine failure. Most of us know we will land straight ahead in the event of an engine failure right after takeoff because we know the risk of making a low altitude turn back can have catastrophic results. We rarely think about the rejected takeoff in single engine aircraft and it is seldom practiced or taught.

Many things can happen prior to lift off such as a tire failure, door or window popping open, rough running engine or directional control issues to name a few. Be aware when you close the throttle to reject the takeoff the aircraft will handle differently because the P-factor and torque that you were compensating for are no longer as much of an influence. If you have not practiced or been taught how to safely reject a takeoff, get with an instructor to practice them.

Here is my takeoff briefing in a Husky. I say it out loud in the interphone even if I'm the only one in the airplane. Yes, I talk to myself. It gets me mentally prepared in case of an emergency. Feel free to modify it to fit the aircraft you fly or your comfort level. “I'm going to make a short field takeoff from runway 35 and liftoff at approximately 50 mph. If prior to liftoff we lose an engine or any abnormality that causes doubt that the aircraft can fly, I'm going to close the throttle and stop straight ahead. If after liftoff I lose an engine below 1,000 feet, I'm going to pitch to 70 mph and land straight ahead. If above 1,000 I'm going to pitch to 70 mph and make a right turn back to the airport because we have a strong crosswind from the right.”

For those of you flying aircraft new enough to have good takeoff

and landing performance charts, look at the takeoff and landing roll distances, add them together, factor in 100 to 200 feet and you can estimate how much runway you need to reject prior to liftoff. Also look at the takeoff distance over a 50 foot obstacle for takeoff and landing and add those together plus 200 feet or so to estimate how much runway you need after liftoff to be able to land on the remaining runway. You will be surprised how large that number will be.

It's always best to be prepared and to have a good idea what your aircraft is capable of before you turn the ignition switch.

Fly safe and wishing you tailwinds except on landing!

# “Airport of the Year”

Once again it's time to nominate your favorite airport for 2016 Airport of the Year. All you need to do is complete the Airport of the Year form from the Dept. of Aeronautics website at [www.aero.nebraska.gov](http://www.aero.nebraska.gov). Once there click on the Airport tab, three to the right on top row, and then click on the Airport of the Year. Fill out the form and mail to editor PIREPS, PO Box 82088, Lincoln, NE 68501. The stronger nominations may include letters of support from elected officials, airport users or perhaps those just visiting the airport.

The recognition given to Nebraska airports as Airport of the Year will include a road sign which the airport may put up, designating it as Airport of the Year 2016. The actual award will be presented during the Nebraska Aviation Council's 25th Anniversary evening banquet at Kearney, January 26, 2017.

## New Pilots

### Private Pilots

Armbruster, Jeffery	Norfolk	Eastin, Brandon	Cordova
Babb, Dustin	Bennington	Eiler, Andrew	Hastings
Bailey, Jamie Lee	Hastings	Erickson, Elliot	Hyannis
Bartels, Steven	Franklin	Essenmacher, Adam	North Platte
Becker, James	Sutherland	Fauver, Dennis	Omaha
Benson, Wayne	Denton	Fitzsimmons, Alicia	Lincoln
Beyer, James	Bellevue	Fowler, Anthony	Lincoln
Bierman, Phillip	Omaha	Gallo, John	Bellevue
Blessington, Lloyd	Lincoln	Gaut, Andrew	Omaha
Bogert, Clayton	Lincoln	George, Kevin	Sutton
Burwell, Jefferey	GRI	Gill, Jason	Omaha
Campbell, Dan	Bellevue	Goggin, Jeffrey	Omaha
Castle, Christopher	Omaha	Goodlett, Nicholas	Omaha
Cheung, Cheuk Shun	Lincoln	Goss, Glen	Papillion
Christoffersen, Thomas	Omaha	Gotschall, Jake	Columbus
Cisar, Daniel	Omaha	Graham, Stephen	Lincoln
Clanton, Harrison	Lincoln	Griess, Taylor	Scottsbluff
Cowan, Scott	Sidney	Gross, Reichard	Omaha
Dall, Jason	Omaha	Hansen, James	Omaha
Dalton, Gregory	Malcom	Hansen, Robert	Omaha
Davison, Heather	Lincoln	Harder, Seth	Plainview
Deards, Jeffrey	Lincoln	Harms, Donald	McCook
Defrain, William	Lincoln	Hernandez, Zoraya	Omaha
Derner, Seth	Lincoln	Hovey, Michael	Elkhorn
Doffin, Bradley	Winside	Huetter, Travis	Omaha
Douglas, Randal	Roca	Impens, Aaron	Lincoln
Downing, Lorin	Kearney	Insko, Matthew	Papillion
Driggins, Michael	Papillion	Ito, Yuta	Kearney



## Employee Recognition

Russ Gasper awarded NDA Manager of the Year 2016. As Project Manager for the Department of Aeronautics' Engineering Division, Russ has an exceptional work ethic coupled with management skills that inspire his staff and fellow employees. The Engineering Division has a reduced staff, with an increasing work load due to requirements of the Federal Aviation Administration's Airport Improvement Program. Consequently, he focuses on efficiency of services and the manner in which they are provided to become more effective. In addition to ensuring his division produces top quality work in a timely and customer focused manner, Russ took the time to research and write a paper on the benefits of aerial application in agriculture which has been published in several trade journals. He also volunteered to produce the department's annual report producing an outstanding document.



Russ Gasper

Tim Krienert (photo not available) was awarded NDA Employee of the Year 2016. Tim is an extremely valuable employee. He doubled his work load taking on management of Harvard State Airfield while also managing his primary airfield of Fairmont. Costs have been reduced resulting in both State Airfields being in top notch condition with dramatically improved tenant relations. Tim also trained our new manager at Scribner State Airfield bringing him up to speed on airport facilities management. Additionally, he taught the department's pavement maintenance and marking program worker the proper way to seal and mark airport pavement. This instruction saved money on materials, resulting in a better final product with increased customer satisfaction. Directly due to his dedication and incredible work ethic the three state owned airfields are in the best possible condition with superb customer/tenant relations.



Robin Edwards 30 Years

Robin Edwards, NDA Division Manager Accounting and Support, recognized for 30 years of State service.



Barb Atkins 20 Years

Barb Atkins, NDA Accountant, recognized for 20 years of State Service.

## New Pilot Certificate

By Wayne Woldt

Many pilots and aviators may not be aware the FAA has created a new pilot certificate for individuals commercially flying unmanned aircraft. It became available on August 29, 2016, and based on a short visit to the FSDO office and there is a fair amount of interest in it. The official name: "Remote Pilot with Small Unmanned Aircraft System Rating." The certificate authorizes pilots to operate under the new FAR Part 107 regulations, entitled "Small Unmanned Aircraft Regulations", for commercial business purposes. The new rules became effective on August 29, 2016.

The new Part 107 rules provide a regulatory framework for those wanting to fly small unmanned aircraft for business and profit. The FAA definition of small unmanned aircraft is based on a takeoff weight of less than 55 lbs. People that want to fly model aircraft, including remote control aircraft for fun and hobby, do not need a Part 107 pilot certificate. The new rules require pilots demonstrate aviation related knowledge in the following twelve broad areas: Part 107 rules, airspace classification and sectionals, aviation weather sources and impact of weather on safe flight, aircraft loading and performance, emergency procedures and crew resource management, aviation radio communication procedures, determining the performance of small unmanned aircraft, physiological effects of drugs and alcohol, aeronautical decision making, airport operations, and maintenance and preflight procedures.

Individuals that do not have an existing Part 61 pilot certificate will need to pass a knowledge exam to earn a Remote Pilot certificate. Passing the knowledge exam demonstrates an awareness and understanding of aviation, and proficiency in rules and regulations for safe and legal flight of unmanned aircraft. In addition, those flying with a Remote Pilot certificate will be held to aviation standards, and any violations have the potential to jeopardize their certificate. For those already having a Part 61 pilot certificate and current flight review, there is an optional route to secure their Remote Pilot certificate. In this case, existing pilots can complete an FAA on-line training course to earn their Part 107 pilot certificate. There are no "check ride" requirements.

As the old saying goes "The only thing constant is change." And the times sure are changing in aviation. There will be a whole new cadre of pilots joining the world of aviation, and by some estimates, the number of Remote Pilots will surpass all other pilots combined. As I ponder this potential future and the possible implications for aviation, I often wonder, "Is the glass half empty, or half full?" Personally, I think the glass is overflowing. How about you? Additional information on Part 107 rules can be found in Advisory Circular AC 107-2 < [www.faa.gov/uas/media/AC\\_107-2\\_AFS-1\\_Signed.pdf](http://www.faa.gov/uas/media/AC_107-2_AFS-1_Signed.pdf) >, and additional FAA information on small unmanned aircraft can be found at < [www.faa.gov/uas/](http://www.faa.gov/uas/) >.

Wayne is a professor at UNO conducting an active research program on unmanned aircraft in agriculture as Director of the NU-AIRE laboratory.



# “The Gift”

By Jess Banks

Joe was out on a five day trip in the middle of a winter storm and wondering why it had to be him? He was on the sixth leg of day four in the foulest, most miserable weather a winter storm could dish out. Nearly every takeoff that day had been preceded by a deicing followed by a lengthy wait in the takeoff lineup that almost caused a trip back to the de-icing area for more of the latest type IV de-icing fluid. Joe mentally thanked the experts who had developed a fluid which could keep the aircraft free of ice for a good thirty minutes. He felt sympathy for the line crew who had to spray the aircraft in these miserable conditions, especially the ones who didn't have that comfortable cab with all the windows that protected them from the elements and the spray.

The second problem Joe had, this was Christmas eve and he had been shopping hard for gifts for his wife and two kids! He had a gift for each of them but just didn't feel they were the right ones. Time to think about that some more in a little while, right now Joe needed to focus on his Instrument Landing System (ILS) approach down to a reported ceiling of 200 feet above the ground and one half mile surface visibility in driving snow! Joe's copilot was making the radio calls and watching the instruments, backing Joe up as needed.

Normally, Joe would have coupled the autopilot to the ILS signal but that function had quit working just before the approach began. Joe was hand flying the aircraft loaded with 128 passengers all of whom were trying to get home for Christmas!

Another problem that kept dogging Joe was his suitcase! You've seen those little roller suitcases with the extendable handle the flight crews all seem to have and its difficult to carry everything you need for a five day trip in one of them! You need an extra pair of shoes, your shaving kit, and enough socks and underwear, plus a couple of clean uniform shirts an extra pair of uniform pants and some regular clothes for those short evenings in a hotel. Joe always folded everything very precisely for that suitcase because that was the only way he could get everything into it for his trips. He had even demonstrated to his nephew, who had a yen to travel, how to fold and not crumple things for the suitcase! You could almost say it was an obsession with Joe on how to pack the suitcase that kept him comfortable for five day stretches.

This time it bulged with the little gifts he had picked up for his family. The zippers wouldn't zip right and he had to allow perfect strangers at each security checkpoint go through his personal possessions as if he were a criminal!

The controller was giving Joe headings and altitudes to fly while fitting the aircraft into sequence for landing. "Turn right heading 100 degrees, maintain 2400 feet until established on the localizer, cleared for the ILS approach to runway 14 right, contact tower on 120.75". Joe heard his copilot read back the clearance and check in on tower frequency. They were "cleared to land on 14R", now all Joe had to do was "fly the airplane". His copilot was advising him,

"localizer alive", which meant Joe was intercepting the desired course and needed to fly the aircraft to the desired heading.

Turbulence started in the early part of the approach and Joe had his hands full maintaining the localizer course. So far no one had gotten sick! Joe's copilot was advising "glide slope alive", the ILS needle was moving down from the top of the instrument case and Joe had almost forgotten to configure the aircraft for landing!! Joe called for approach flaps and as the glide slope was intercepted, "landing gear down". Now all that was required was to maintain that 3 degree glideslope.

The GPS was indicating a 20 knot tailwind so the rate of descent had to be increased by another 100fpm. Normally a minor correction in calm wind but now with the turbulence the vertical velocity indicator was jumping all over the place! Joe kept thinking, "fly the plane", worry about the gifts on the ground! Now, "full flaps!" At 300 feet the copilot was calling out, "approaching minimums", "no visual on the runway". This was becoming a difficult approach! Precisely at 200 feet above the runway, the copilot called "minimums, approach lights in sight". Joe had about 10 seconds to visually transfer from instruments, keeping the rate of descent going, maintaining airspeed and land the aircraft with a now 15 knot crosswind in blowing snow! At 100 feet, Joe saw the runway!

It wasn't the smoothest touch down Joe had ever made but the aircraft didn't bounce and stayed straight on the centerline! Joe's feet were almost shaking on the rudder pedal brakes and he was worn out from all the instrument flying, ready for a quiet, lonely Christmas Eve's night at a hotel!

Christmas Day dawned bright and clear, the storm had run itself out and now only two legs to fly before Joe could go home and celebrate with his family! Joe had spent a lot of money on those little gifts in his bulging suitcase but still wasn't sure they were the ones his family would enjoy! Finally the trip was over. Joe was on his way home, stopped at a light waiting for the green when he happened to notice a small patch of fluff next to the road. Joe got out of the car and discovered a young dog, shivering in the cold and snow. Without thinking he picked it up and snuggled it up in his overcoat, taking it back to his warm car.

Joe arrived home, carried the dog and his suitcase with the three expensive gifts into the house. His wife and children gathered round and were excited to see Joe and the "little dog" who they immediately named. Two bowls quickly appeared, one filled with warm milk and the other with leftovers from the evening meal. Everyone watched as the little dog drank the milk and ate the food. He was "home" and knew it!! The expensive gifts everyone had searched hours for during the previous weeks weren't even thought of, everything was focused on the little dog and his needs.

That was a Christmas Joe and his family would remember! Their greatest gift appeared to come from heaven, was nothing they had earned or even deserved but gave them unconditional love with a faithfulness that none of them could even begin to comprehend. With the little dog's presence, they began to understand what Christmas was all about!

## PIREPS

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## Events Calendar

**- York Airport (KJYR)**, EAA Chapter 1055 Fly-in breakfast (free-will donation) on the 1st Saturday of every month, 8:00-10:00.

**-Crete Airport (KCEK)**, EAA Chapter 569 Fly-in breakfast on the 3rd Saturday of every month, 8:00-10:00.

**Dec. 3 Holdrege (KHDE)** Fly in lunch 10:30-2:00pm. Homemade chili and chicken noodle soup, free for fly-ins. Discounted fuel, prizes and helicopter rides. More info: [www.holdregeaviation.com](http://www.holdregeaviation.com).

**Jan. 25 - 28 Kearney (KEAR)** The 25th NE Aviation Council Aviation Symposium and Maintenance Technicians IA Renewal, Holiday Inn, Kearney, ask for the NAC rate prior to January 3, 2017. The Maintenance Seminar will be FAA approved for those wishing to renew their Inspection Authorization. More info: <http://nebraskaaviationcouncil.org>.

**Feb. 20 - 22 Kearney (KEAR)** NE Aviation Trades Association Annual Convention & Agricultural Aviation Exposition, Holiday Inn, Kearney. Be sure to ask for the NATA Convention rate. PAASS program on Tues. and Wednesday to be recertified. More info: <http://gonata.net> or 402-475-6282.

### AOPA NE Air Trails

The great state of Nebraska was featured in an AOPA blog. See (<https://blog.aopa.org/aopa/2016/07/11/the-nebraska-air-trail/>) and try an aerial tour of Nebraska!

### "An Auburn Early Christmas" Continued From Page 1

Kudrna recounted that when the NPPD CEO learned of the 3,400 runway project, he replied in effect "we need the longest runway we can get" and then came up with the additional funding to help construct the runway to a length of 3,750'. Total cost for the project was approximately \$3 million dollars. The Airport Authority used grant funding from the: FAA, Nebraska Department of Aeronautics, and NPPD to keep the local share of the cost to approximately \$250,000.

The public was treated to aerial performances as well as congratulatory words: Harry Barr flew his P-51 Mustang. Jessy Panzer arrived in her Pitts and Doug Roth in his Staudacher flying in formation, and took turns performing. Tom Trumble, lead engineer for the project with Olsson Associates, emceed the aerial performances.

When it was all done, one member of the attending public, Josh Mederes, got his very first ride in a Cessna 150, touring above Nemaha County and the Missouri River in the PIREPS Press Plane, piloted by your reporter.



L to R: Josh Mederes and PIREPS Press Plane Pilot Tom Winter