

PIREPS

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> **NEBRASKA** Good Life. Great Journey. DEPARTMENT OF TRANSPORTATION

Pireps has Gone Electronic

Beginning With The August – September 2020 Issue Of Pireps, The Publication Will No Longer Be Available In Print Form.

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Aviation Art Contest 2021 Winners Announced

By David Morris



Nithin Mehta, First Place, Junior (Ages 6-9) Lincoln Christian School, Lincoln

Since 1986, the Department of Transportation - Division 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. This year's theme was "A Friendlier World With Air Sports."

When we think of aviation, our first thoughts go to the sky. We imagine what it would be like soaring through the air in a glider, floating across the sky in a hot air balloon, or maybe even twisting and looping through clouds in an aerobatic plane.

Air shows, of course, offer it all. A single parachutist in the sky can hold the attention of hundreds of people below. Air sports brings people together and creates friendships that connect people from all over the world and of all ages.

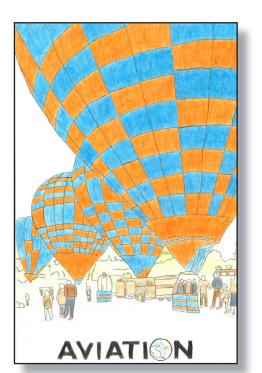
Due to the current coronavirus (COVID-19) situation, the Aviation Art Contest 2021 awards ceremony will likely have to be canceled. This is a challenging time and our priority is to do our part in helping everyone stay healthy. For this reason, the probability is that the winning participants will receive their awards in the mailbox.



Vivaan Mahapatra, Second Place, Junior (Ages 6-9) Jeanette's Art Studio, Gretna We want to recognize and congratulate the following individuals for their accomplishments: Category I Junior (Age 6-9): First – Nithin Mehta, Lincoln; Second - Vivaan Mahapatra, Gretna; Third - Julia McNamara, Papillion.



Julia McNamara, Third Place, Junior (Ages 6-9) Bellevue Elementary School, Bellevue



Daniela Naranjo, First Place, Intermediate (Ages 10-13), Knickrehm Elementary, Grand Island

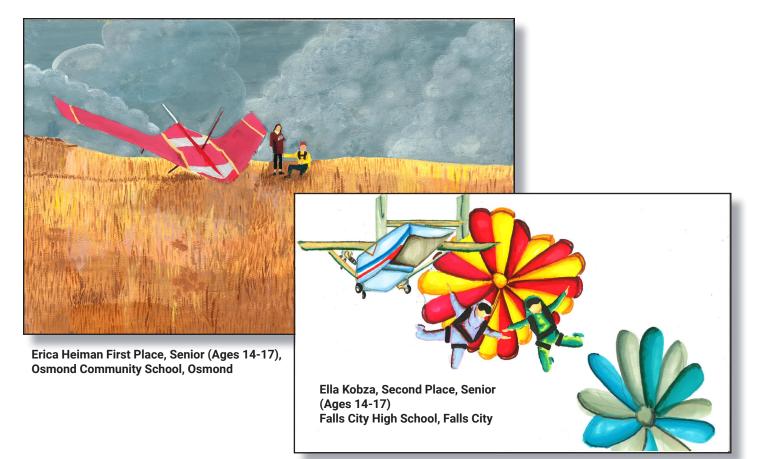
Category II Intermediate (Age 10-13): First – Daniela Naranjo, Grand Island; Second – Abigail Rempe, Grand Island; Third – Marley Sepmoree, Eagle.



Abigail Rempe, Second Place, Intermediate (Ages 10-13) Knickrehm Elementary, Grand Island



Marley Sepmoree, Third Place, Intermediate (Ages 10-13), Elmwood Murdock Public, Elmwood



Elianna Bruxellas, Third Place, Senior (Ages 14-17), Falls City High School, Falls City



Category III Senior (Age 14-17): First – Erica Heiman, Osmond; Second – Ella Kobza, Rulo; Third – Elianna Bruxellas, Humboldt.

We are proud to congratulate the following individuals who won Honorable Mention: Johanna Haas, Sophia Wortman, William Pearson, Bella Schmidt, Violet Nunnenkamp, Lainee McDowell, Brooklyn Justus, Eliseo Lucas, Dylan Bornemeier, Mya Breedlove, Brooklyn Mommens, Kiersten Hans, Kylar Spellman, Christian Brettmann, Mya Kavan, Sydney Huber, Gabriel Jose, Gracyn Hanes, Juan Briones, Cristobal Hernandez, Sarah Hernandez, Leia Meyer, Xander Brown, Cali Gutz and Grace Morris.

In addition to receiving trophies, the first-, second- and thirdplace winners from each category will receive checks for \$150, \$100, and \$75, respectively. They will also receive postcards of their winning art poster. All winners will receive a certificate signed by the NDOT – Division of Aeronautics, Director Ann B. Richart, AAE, as well as a print of their winning poster.

Congratulations to all the contestants. Your work was outstanding and made tough decisions for the judging committee. Thank you to the parents, teachers and mentors for all the time, hard work and support you have put into this program.

A special "thank you" to the Nebraska Aviation Council (NAC) for providing checks for our contest winners. Without your continued generous support and enthusiasm in sharing the spirit of aviation, this program would not exist.

Director's View

Nebraska Aviation System Plan



NDOT-Aeronautics is beginning work on a Nebraska Aviation System Plan. The last Nebraska system plan was completed in 2002. Quite a bit has changed in our state, our country, and our industry since then, so it's time to review and make sure we understand the purpose and needs of Nebraska's system of airports.

This planning effort is 90% funded through a grant from the Federal Aviation Administration (FAA) and follows the FAA's guidance in Advisory Circular 150/5050-7 – The Airport System Planning Process. The FAA's blueprint calls for a four-pronged approach to planning an airport system: 1) Define the needs of the system, 2) Develop a system-wide development cost analysis, 3) Determine which aeronautical needs should be met by a system of airports, and 4) Develop state standards for the non-primary public use airports.

The first step in this important process has involved bringing together Nebraska aviation leaders to set the overall vision for our aviation system. Their vision for our system is, "A dynamic aviation system which enhances quality of life through infrastructure and services that meet the diverse and evolving needs of all Nebraskans." This vision will guide us as we determine what our system needs to be to ensure quality of life for Nebraskans.

In order to develop the ideal system, we'll examine how our airports support Nebraska's important industries such as:

- Agriculture including aerial application, crop inspections, and travel for stock sales
- Tourism including hunting, river sports, golf, the College World Series, and the Berkshire Hathaway Shareholders Meeting
- Medical access medivac and specialty medical access
- Other emerging industries

We'll also explore how industry advances, such as the use of drones and the introduction of hybrid and electric aircraft, will impact our needed airport infrastructure.

This planning effort will document all the ways that Nebraskans' lives are enriched through aviation, even though they may not be aware of this impact. Understanding the important role that airports play in our quality of life will help us make important choices about how to preserve and develop the system.

We're grateful for the FAA Central Region Airports Division office for partnering with us on this important effort. We expect to have a completed Nebraska Aviation System Plan in 2022.

Transition to Lincoln starts with first aircraft arrival

55th Wing Public Affairs, Offutt Air Force Base, Nebraska



Aircraft maintainers from the 55th Aircraft Maintenance Squadron recover an OC-135B Open Skies at the Lincoln, Nebraska Airport February 1, 2021. All 55th Wing aircraft will temporarily operate from the Lincoln Airport during the replacement of Offutt's flight line, which is expected to be completed in 2022. (U.S. Air Force photo by TSgt. William O'Brien)

Normally a 55th Wing OC-135 Open Skies aircraft landing and taxiing to its parking spot is no a big deal, but this particular landing on Feb. 1, 2021, was unlike any other.

This flight was Offutt Air Force Base's first aircraft arrival to the Lincoln Airport, where the 55th Wing and its mission partners will operate all flying operations from for the next 18 months as contractors replace the base's runway.

"This is historic," said Col. Gavin Marks, 55th Wing commander. "This first flight was the culmination of many years of hard work by a lot of people including not only those from our wing, but also Air Combat Command, the Air Force and our local and federally elected officials."

In attendance to witness the arrival was Nebraska Lt. Gov. Mike Foley, Lincoln Mayor Leirion Gaylor Baird and about a dozen Lincoln Airport Authority administrators and staff.

"Planning for our transition to Lincoln has been very smooth and that is because of the support we have received here from the Lincoln Airport Authority, Nebraska National Guard and the city of Lincoln," said Lt. Col. Derrick Michaud, Runway Program Management Office director. "We look forward to being great teammates of theirs over the next 18 months." The transition process will continue over the next few weeks with all aircraft scheduled to be in Lincoln by the beginning of March.

"We're being very methodical in our process," Maj. Brian Ross, Runway Program Management Office deputy director. "We won't skip a beat operationally."

Planning for the \$144 million runway replacement transition has been ongoing for years at Offutt. Part of that process also included a \$30 million upgrade to portions of the Lincoln Airport parking area, renovating an old hangar and building a temporary hangar.

"We're very fortunate to have a location like this to operate out of, which is very close in proximity to Offutt," Michaud said.

This is not the first time Offutt has transitioned its operations 50 miles away to Lincoln

has transitioned its operations 50 miles away to Lincoln to repair its runway. However, those repairs were much smaller in scope.

"This is much larger in scale as it is a full replacement," Michaud said, "and we will be here a lot longer this time."



Aircrew members and 55th Wing leadership pose for a photo with civic leaders from Lincoln, Nebraska after the first 55th Wing aircraft arrives at the Lincoln, Nebraska Airport February 1, 2021. All 55th Wing aircraft will move from Offutt Air Force Base, Nebraska to the Lincoln Airport where they will temporarily operate out of during the replacement of Offutt's flight line, which is expected to be completed in 2022. (U.S. Air Force photo by TSgt. William O'Brien)



FAA Requests Airports Share Administrator's Message on Unruly Passenger Policy

The Federal Aviation Administration (FAA) is encouraging airports to share with passengers a <u>video</u> that FAA Administrator Steve Dickson recorded on the agency's new, stricter enforcement policy against unruly airline passengers. FAA has made available the resources below to allow airports to share the video through social media and in the gate and security checkpoint areas of the terminal.

FAA's request to airports follows the agency's adoption of a stricter legal enforcement policy against unruly passengers that went into effect on January 13. According to FAA, the new policy is in response to an increasing number of incidents where passengers have refused to wear masks and to recent violence at the U.S. Capitol. FAA has traditionally provided warnings and counseling or imposed civil penalties for unruly passengers. However, under the new policy, FAA is taking a "zero tolerance" approach and will pursue an enforcement action against the passenger, including imposing fines of up to \$35,000 and imprisonment, if they interfere with, physically assault, or threaten to physically assault aircraft crew or anyone else on an aircraft. The policy will be in effect through March 30, 2021.

AAAE remains in constant contact with senior leadership from FAA and the Transportation Security Administration (TSA), including in relation to the recent safety and security related events, and will continue to do so to ensure airport needs and concerns are addressed.

NDOT Receives \$12.5 Million Federal Grant Allocations through Airport Coronavirus Response Grant Program (ACRGP)

The Nebraska Department of Transportation (NDOT) received guidance on February 12 from the Federal Aviation Administration (FAA) regarding their recent allocation of the \$2 billion funding made available under the FAA's Airport Coronavirus Response Grant Program (ACRGP). The ACRGP funding was approved by Congress in late December as part of the Coronavirus Response and Relief Supplemental Appropriation Act (CRRSA).

Nebraska airports will receive \$12,528,712 in grant allocations from the ACRGP. This includes 72 airports throughout the state. A complete list of the airports receiving grand funds is available at <u>grant awards</u>.

These funds will provide economic relief to Nebraska airports affected by the COVID-19 pandemic. The FAA will make grants to all airports that are part of the national airport system, including all commercial service airports, all reliever airports, and some public-owned general aviation airports.

Two notable updates were provided to previous FAA guidance on the ACRGP, including concession relief and mask requirements at airports. Concessions will also be provided relief from rents and minimum annual guarantees to on-airport car rental, on-airport parking, and in-terminal airport concessions. Grant agreements will include a special condition that airport sponsors implement a policy requiring persons to wear a mask at all times while in the public areas of the airport, except where certain conditions apply.

Additional updates and FAQs will be posted on the FAA website <u>https://www.faa.gov/airports/crrsaa/</u> and on the NDOT Aeronautics website: <u>https://dot.nebraska.gov/aeronautics/</u>

We Pilots Help Each Other

By Tom Winter



Hangar neighbor Harlan Waak helped the author liberate the "Blue Bird Of Happiness" from the snowplow barricade.

Here in the snowbound depths of Arctic cold, it helps to remember joys that have been, with faith in joys that will be, by revisiting friends and kin, if only in memory. There is comfort in the thought of pilot fellowship and how helpful others have been to us.

Brighter days are dawning. Once again there will be flights over the Nebraska checkerboard, bicycle rides to the hangar, afternoons with pilot friends at ease, watching other pilots launch or land, and listening to the pilot chatter on the handheld.

Remembering Jimmy Debus makes me happy. Many times, I thanked him for rallying around to help when I was at a loss, and once he waved it off saying, "We pilots help each other." Were truer words ever spoken?

The hangar neighborhood wasn't all airplanes and engines and flight. There was the livestock! I had a pet toad in my old dirt floor hangar. And who could forget the chipmunk!

Climb Higher

In recent years, Jimmy Debus and Harry Barr were training a chipmunk to climb a rope up to the table, using popcorn for a reward. They had tiny paper cones, each holding a popped kernel, at little intervals on the rope, enticing the 13-striped chipmunk to climb ever higher! (A metaphor if ever there was one!)

Jimmy made himself a KR aircraft, and once he had me try it on for size. Ken Rand was a small man, and he tailored his KR to his own size. I barely fit, but once I got my knees under the panel, we decided I could fly it. It was always worthwhile to step uphill to Jimmy's corner to see what he was working on. Jimmy was proud of wrenching on the Rolls Royce engine in Barbara Jean, Harry's P-51, and he gave me a tour of it once. Jimmy's last project, the three-quarter scale Jenny, is essentially complete and lives in the hangar on the other side from mine, under the care of Ed Bowes.

Then there was the time when Harry put a parachute on me and sat me in the front seat of the Christen Eagle. Harry had offered it as a door prize for the Lincoln Experimental Aircraft Association (EAA) chapter, and I lucked out! Not being much taller than Ken Rand, all I could see was the panel!

I got instructions on how to bail, but not to worry, the chute had been packed by Larry Bartlett himself. What a memory! I learned rolls, learned

that I do not like loops, and it surprised us both to learn that I like Hammerheads!

Wonderful Day

Who could forget Larry and Diane Geiger organizing fundraisers for the Whisler grandson, and the pilots who pitched in to make it a grand success? What a wonderful day that was!

I recently passed along my favorite "Jimmyism." Harlan Waak, an old friend who is now a hangar neighbor, was warming up the engine in his straight tail 172. There was a snowplow barrier and as I worked away with spud and shovel to clear a path out of my hangar, I heard him taxiing back. I strolled up to inquire.

"No radio." In Charley airspace, that means you don't fly!

Now the place to go for avionics problems is Justin Haak's Avionics Place in Beatrice and it's a Catch 22: to fix the radio, you have to have a radio! "There's a handheld in my hangar. I'll go get it."

Harlan pitched in to free my 150. We thanked each other, and I added Jimmy's words: "We pilots help each other."

Another hangar neighbor is an Airframe & Powerplant (A&P) technician, but the only help I've ever been is holding the flashlight on his work! I have a quick release oil drain, but I couldn't pull it due to arthritis. So to do an oil change, I have to ask for help. It's a great neighborhood, and when you need it, help is there.

Can you pull down a quick release? I may need you!

Winter Hazards

By Dan Petersen



Even though spring is in the not too distant future, this February illustrated that winter and all of the hazards associated with it are still here, as almost 75% of the country was covered in snow at one point. Texas was especially hard hit as airports there are not well equipped to cope with snow and ice. The Dallas Fort Worth Airport cancelled approximately 75% of their flights over a three-day period.

Winter weather brings numerous hazards for aviation. Icing is probably the number one hazard, specifically airframe icing that can change the shape of the airfoil and cause it to stall prematurely. If you are flying an aircraft that is not certified to fly into known icing conditions, you need to exit the area at the first sign of airframe ice. If you are not equipped with deicing or anti-icing devices, loss of control can happen fairly quickly, depending on how rapid the ice accretion. This is not a time to be shy with air traffic control (ATC). Inform them immediately that you have encountered ice and they will help you find an altitude or area that is free from ice.

The best preventive measure is to get a thorough weather briefing before flight. Even aircraft that are certified to fly into known icing conditions are not immune. In Nebraska several years ago, a Beechcraft Baron that was certified to fly into known icing conditions lost control soon after takeoff and crashed, killing all on board after it encountered freezing rain. Freezing rain exceeds the limits of all known icing equipped airplanes. The flight didn't last 10 minutes.

Ground icing conditions are another hazard. This is when there is precipitation that is likely to adhere to the aircraft while on the ground. Do not take off with ice on the aircraft. Remove all ice and frost from the critical controls, which are the wings, flight controls, air inlets, propellers, pitot and static ports. Ground icing conditions will prevent most of us from flying, so we must delay any takeoff until conditions no longer remain. There are approvals to operate in ground icing conditions that involve approved deicing programs but beyond the scope of this article.

Icy Runways and Taxiways

Ice on the airplane is not the only ice we need to worry about. Icy runways and taxiways can cause problems as well by making it difficult to stop or maneuver. Rejected takeoffs may make it difficult to

stop on the remaining runway. If a runway has not been plowed and there is any deep snow, all of your runway takeoff distance charts are out the window. You may not have enough runway to take off, and you are now a test pilot.

Taxi slowly, especially when you are in the ramp area near buildings and other aircraft, and make gradual turns, as the nose wheel might not have enough traction to make sharp turns. I remember long ago while deadheading in the back of a 727 from Boston to New York, the captain attempted a sharp 90-degree turn onto the runway and the aircraft would not turn. We shut the runway down in Boston for about an hour before they could sand the runway enough for us to make the turn.

Cold temperature hazards don't get enough attention. Preheating engines is a best practice as very cold starts can be extremely harmful to engines. Be sure to let the engine warm up by checking your oil temp and cylinder head temps before applying takeoff power. Some engines even have a specified temperature limitation before taking off.

Your flight instruments, specifically gyros, also can be very sluggish in the cold, so make sure they are working properly prior to takeoff. Cold can affect pilots as well. Be sure that you are properly dressed for the cold and that you can survive an off-airport landing. Hypothermia can happen fast, so be prepared.

This is not an exhaustive list of winter hazards, but a few to think about. Stay safe, be prepared and stay warm. Right now, I am glad I moved to Florida. ■



Fathers Day Fun For The Whole Family

Featuring WWII B-29 Superfortress "Doc"SaturdaySunday

7.20 am

9am – 5pm	B-29 Static Display
9am - B-29	Passenger Flight
11am – B-29	Passenger Flight
8pm – 11 pm	Hanger Dance – Hosted by
10pm -	Night Show – Radial Rumble T6



Larry Bartlett Parachute Drop Rob Ator Pitts S-2 Doug Roth - Staudecher Jessie Panzer Pitts Erik Edgren - Taylorcraft Jeff Setterly - T6 Radial Rumble Brian Correll - Pitts S2S

7:30 am	Drive in / Fly in Breaklast
-10:30am	Open to the Public
9:00 - 3:00	Car Show In Front of Terminal
9:00	1st B-29 Flight
8:00 - 3:00	Aircraft Mfg. Display - Cirrus / Piper
8:00 - 3:00	Static Aircraft Display
9:00 - 1:00	Kids Can Fly Exhibits – EAA Hanger -Propeller Shaping -Riveting a Name Badge -Radio Work
9:30	Designated Pilot Examiner Panel Discussion
10:30	'99's Compass Rose Dedication
10:45	2nd B-29 Flight
11:00	Learn to Fly Seminar
12:00	Kids Ping Pong Ball Drop
10:30 - 1:30	Food Vendors
12:30 - 2:30	Airshow!

Drive In / Elv In Breakfast

Tribute to Harry Barr

Chapter 544

65372

Fathers Day Weekend June 19 & 20

Foggy Conditions

By Jesse Schulz, NDOT Meteorologist

One of the main forecasting challenges in the early part of spring deals with fog. Fog in its simplest meaning is a cloud that is in contact with the ground. When determining the potential for fog, one of the main things forecasters will look for is the amount of moisture in the air, or the dew point temperature. The dew point temperature is defined as the temperature the air needs to cool for condensation to occur, either in the form of rain, snow, drizzle, mist or fog. Fog will usually form if you cool the air temperature to the dew point temperature or add moisture to the air. There are six types of fog: radiation, advection, steam, upslope, precipitation and freezing.

Radiation fog is the most common type. This usually occurs during the morning and/or evening. The earth emits radiation back to the atmosphere once the sun sets, which will cool the ground. As the ground temperature approaches the dew point, fog could form. When the sun begins to heat the ground, the fog will usually burn off. This type of fog is best when skies are clear, there is little to no wind and there is a lot of moisture. As we head further into spring and all the winter snow begins to melt, this will help aid in the formation of radiation fog if winds remain light during the morning hours.

Advection fog is most common along coast lines or very large bodies of water. When you have a sea breeze it will advect the moist air from the water over a cool land, which will then lead to the formation of fog. Due to a constant breeze off the water, this fog is usually more persistent than radiation fog.

Steam fog is most common during the cold winter months, especially during the early part of the winter. This occurs as cold dry air moves over a warm body of water. This type of fog will usually remain confined to the body of water, as that is where all the moisture is located.

Upslope fog is most common along mountain ranges. Moist air will move toward the mountain, but since it can't get through, it rises. As it does so it will cool, which in turn could create fog. It usually forms at higher elevations and builds downwards to the valleys. Precipitation fog occurs as warm rain is falling through cool dry air. The raindrops will evaporate, which leads to an increase in moisture in the cool air. When enough rain falls it could create fog. This is a tough type of fog because it can be easily confused with mist. If the conditions are right this fog can be dense and long-lasting.

The last type, freezing fog, is similar to radiation fog; however, the difference is if the air temperatures are really cold, below 15 degrees, the fog will come into contact with surfaces and freeze. This can be hazardous to air and ground travel, although it does make for some pretty scenery.

These are just a few examples of the different types of fog and how they can form. Fog usually occurs close to the ground, and as you climb into the atmosphere you will come out of the fog. With all the snow cover along the ground, the further we head into spring the greater the chance for fog development, especially during the morning hours.

IMPORTANT - NEW LNK ATCT HOURS!

The Lincoln Airport (LNK) Air Traffic Control Tower (ATCT) will be operating on a 24/5 schedule beginning on March 1, 2021. ATCT will open at 0600L on Monday, March 1 and then remain open continuously until Saturday, March 6 at 2200L. They will open again on Sunday, March 7 at 0600L and close Sunday night at 2200L.

The subsequent weekly schedule will have ATCT opening at 0600L on Monday and remaining open until Saturday night at 2200L. They will then open at 0600L Sunday morning and close at 2200L on Sunday night.

This will be the normal weekly schedule for the duration of Offutt's stay at LNK. The Air Force's move back to Offutt AFB is scheduled for October 2022. ■

Events Calendar

Tekamah Fire & Rescue Pancake Breakfast, Hosted By Tekamah Municipal Airport Sunday June 6th 2021, 7:00AM till Noon *subject to Covid restrictions

York Airport (KJYR), EAA Chapter 1055 Fly-in breakfast (free-will donation) on the

1st Saturday of the month, 8:00-10:00 AM.

Crete Airport (KCEK),

EAA Chapter 569 Fly-in breakfast (free-will donation) on the 3rd Saturday of every month, 8:00-10:00 AM.