

PIREPS

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NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

American Legion Auxiliary Girls' State 2024

By David Morris



Girls State visitors to the NDOT – Division of Aeronautics, pictured in front of the state-owned aircraft, Beechcraft King Air C90GTx, from L to R: Bryn-Marie Eggleston of Oconto, Amelia Engle of Bennington, Miah Fox of Paxton, Ayla Janssen of Columbus, and Staff Leader Lee Brauer of Omaha.

The American Legion Girls' State is a nonpartisan program that teaches young women responsible citizenship. The program began in 1937.

At Girls' State, the delegates study local, county and state government. They do this by setting up their own miniature city, county and state governments and administer them according to the rules and procedures set by Nebraska's laws.

On Thursday, June 6, four young ladies, all just completing their Junior year in high school, visited the NDOT – Division of Aeronautics. During their visit, they were greeted by Flight Operations Manager David Morris and Tiffany Thompson, Airport Service Manager. An overview on the responsibilities of the Division of Aeronautics was discussed as well as various opportunities available for anyone pursuing a career in aviation.

After an interesting discussion in the conference room, the group was provided a tour of the state-owned aircraft, Beechcraft King Air C90GTx. The airplane tour provided an opportunity for some of the young folks their first experience of being near a general aviation aircraft.

Each of the four individuals involved in the visit at the Division of Aeronautics held an elected position that would simulate the structure of the department. These individuals were Bryn-Marie Eggleston of Oconto, Amelia Engle of Bennington, Miah Fox of Paxton, and Ayla Janssen of Columbus. The Staff Leader was Lee Brauer of Omaha.

We are always honored to be part of the Girls' State program. Here at the Division of Aeronautics we consider this opportunity an investment in our young people. ■

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Falls City Hot Air Balloon Festival

David Morris



Zebra and winged pig kites share the sky at the Hot Air Balloon Festival in Fall City

For the young-at-heart there were air-filled trampolines that would test anyone's ability to maintain balance while being bounced into the air. And, for everyone's enjoyment, there was live music by the Dixie Cadillacs and the Kyle Saylor Band. There were an estimated 300-500 individuals present to take advantage of this exciting event. Saturday activities were supposed to wrap up with a fireworks display that was well planned. But, by about 7:30 p.m. some hefty weather moved into the airport area with strong winds and heavy rain. This would bring the Saturday activities to an end.

It's truly well-thought-out events like the Falls City Hot Air Balloon Festival that helps folks of all ages realize the presence of the local airport, and to learn more about just how important the airport is to any community. ■



Festival onlookers enjoy the colorfull kite display.

If you woke up on Saturday June 15, and was wondering what you should do with yourself that day, heading out to the Balloon Festival at the Falls City Brenner Field Airport (FNB) would likely have turned out to be an exciting time. Friday



Above: Tiger kite flies overhead as attendees watch. Bottom Left: Food vendors supply refreshments, while live music entertains at the event Bottom Right

June 14 and 15 were two days set aside for this exciting Balloon Festival which included kites of many different sizes, and hot air balloons.

The day started with plenty of severe-clear sunshine, free onsite parking, lawn chairs and blankets, and vendors that sold clothing products as well as a wide variation of food truck choices. The Friday and Saturday schedule both included the launching of numerous hot air balloons; however, both days had winds that made for the launching of the hot air balloons impractical. So, we got to see kites of various makes; some kites were steerable, and others made up for not being steerable by their interesting enormous sizes.



FAA Reauthorization Act of 2024



Jeremy Borrell

After several months of negotiations, the “Federal Aviation Administration (FAA) Reauthorization Act of 2024” was signed into law on May 16, 2024, ushering in a wave of changes that promise to impact our state’s airports. Let’s examine some of the key provisions and explore the potential benefits for Nebraska.

Improved Infrastructure Funding:

One of the most significant aspects of the FAA Reauthorization Act is the allocation of increased funding toward airport infrastructure projects. The Act authorizes \$4 billion from the Airport and Airway Trust Fund (AATF) for the Airport Improvement Program (AIP), a 19.4% increase from the previous funding cap of \$3.35 billion. The Act also revises the apportionment formulas, increasing the funding for most primary and commercial service airports in Nebraska. Nonprimary entitlement (NPE) remains unchanged. The FAA is also directed to update the AIP Handbook and release a draft for public comment before final publication.

These changes will enable Nebraska airports to continue making vital upgrades such as runway expansions, terminal modernization, and enhanced safety measures. This investment in infrastructure will not only improve the overall user experience but also contribute to the region’s economic growth. It is important to note that Congress must pass appropriations bills to fund these programs at the newly authorized levels.

Enhanced Safety:

Safety remains a top priority in the aviation industry, and the new FAA Reauthorization Act reinforces this commitment. Sections of the Act address safety management systems (SMS), aircraft certification procedures, and a review of weather reporting systems, to name just a few. Additionally, the Act directs the FAA to establish a Runway Safety Council to address airport surface safety risks. Nebraska airports will benefit from continued investment into advanced technologies and updated protocols to enhance safety measures.

Environmental Initiatives:

In line with the global shift towards sustainable practices, the FAA Reauthorization Act emphasizes the importance of environmental initiatives within the aviation sector. Airports will now be eligible to use AIP funding for airside energy projects. The Act also created a pilot program to allow ten airports (nationally) to utilize AIP funding to acquire equipment and infrastructure to support the operation of electric aircraft. This pilot program will support the long-term development and implementation of the electrification of aircraft. Funding has also been allocated to support the replacement of firefighting foam containing PFAS and associated equipment.

Nebraska airports are encouraged to implement eco-friendly practices when feasible. By embracing these practices, Nebraska airports can play a pivotal role in mitigating environmental impact and supporting a greener future for aviation.

Workforce Development:

In addition to the modernization and infrastructure improvements, the FAA Reauthorization Act of 2024 also places a strong emphasis on workforce development within the aviation sector. The Act contains provisions to enhance the recruitment and training of personnel for flight crewmember, maintenance technician, safety inspectors, and air traffic control positions. By investing in training programs, promoting aviation career opportunities, and supporting educational initiatives, the act aims to strengthen the workforce pipeline and ensure that Nebraska airports have access to a talented and qualified pool of individuals to drive innovation and growth in the industry.

To conclude, the FAA Reauthorization Act of 2024 presents a wide array of opportunities for Nebraska airports to benefit from additional federal funding and programs designed to improve our aeronautical system. This is just a tiny sampling of the programs that will receive continued or increased funding or are created through this legislation. ■



Commercial Aviation

David Morris

Immediately after World War I ended, many countries in Europe began to look at the airplane for its commercial value. Germany started the world's first passenger airline service using heavier-than-air aircraft. The British and the French both began passenger service in 1919, using modified military bombers to carry passengers between London and Paris.

Airmail

Progress was being made in commercial aviation in the United States. The Post Office Department started airmail service in the United States on May 15, 1918, using aircraft and pilots borrowed from the Army. Three months later the Post Office Department took over the operation completely, hiring its own pilots and buying its own aircraft. The first airmail route was between Washington, D.C. and New York City. The routes were eventually expanded to include Chicago, Cleveland, and San Francisco. True airmail service on a regular basis began July 1, 1924.

Air Mail Act Of 1925

The legislation which made possible the private carrying of mail was the Air Mail (Kelly) Act of 1925, a law which essentially dealt with the economic regulation of the Federal air system. This act authorized the Post Office Department to contract for airmail service. This act allowed the contractor to be paid 80% of the airmail revenue for carrying it. This was the incentive needed to get big business into the aviation field, and really marked the beginning of commercial aviation in America.

Air Commerce Act Of 1926

The first attempt to standardize and regulate commercial aviation was made on May 20, 1926, when Congress passed the Air Commerce Act, which established the Aeronautics Branch within the Department of Commerce.

The Aeronautics Branch was authorized to license all planes and pilots, establish and enforce air traffic rules, develop navigational facilities, map airways, furnish flight information, investigate accidents, and provide aviation safety through assistance and guidance to civil aviation. This arrangement lasted for eight years, when it was changed by a new airmail act.

Air Mail Act Of 1934

On June 12, 1934, Congress passed a new Air Mail Act which changed the economic and safety regulation arrangement of commercial air transportation. This act was significant because it separated air transport companies and aircraft manufacturers, and the payments it provided for carrying airmail developed a sound and well-organized air transport system. The act also authorized a thorough study of commercial aviation which would lead to the independent Civil Aeronautics Authority in 1938 and in 1940 to two new organizations – the Civil Aeronautics Board and the Civil Aeronautics Administration.

Air Mail Act Of 1938

Signed into law by President Roosevelt on June 23, 1938, this law combined both economic and safety regulation into one independent agency called the Civil Aeronautics Authority (CAA). This act unified the economic and safety regulation of the entire field of aviation and increased the depth of government control over aviation activities and operations.

The history of these early airmail flights is among the most dramatic in all of aviation. The airmail pilots were true pioneers, flying their own small open cockpit aircraft along uncharted air routes. They flew in all types of weather, night and day, with no radios and very primitive instruments. To many it is no wonder that during the first three years there were 25 flyers that lost their lives along these routes. ■

FAA Presses For More Charter Oversight: NBAA Pushes Back

Mark Phelps

On Monday (June 17) the FAA announced two new actions addressing public charter flights, citing a rapid expansion of "frequency and complexity" of the operations in the past few years. The agency said that some of the charter providers "appear to operate like scheduled airlines but under less-rigorous safety regulations" that are often not clear to customers.

"The FAA will explore new ways to integrate charter flights into the airspace in a manner that provides flexibility and safe options for all flyers," the FAA said in a statement. The first act would be to launch rulemaking that would amend FAR Part 110 definitions of "scheduled," "on demand" and "supplemental" operations.

The object of the new rulemaking would be to subject public charters to operating rules "based on the same safety parameters as other non-public charter operations."

The plan would apply to charter operators regulated under FAA Part 135 safety rules and U.S. Department of Transportation Part 380 economic requirements. FAA Administrator Mike Whitaker said, "If a company is effectively operating as a scheduled airline, the FAA needs to determine whether those operations should follow the same stringent rules as scheduled airlines."

Ed Bolen, president and CEO of the National Business Aviation Association,

questioned plans for the new rulemaking on charter operators. He said, "The plan to impose new requirements on these carriers has been introduced without an apparent data-based safety rationale. Additionally, the FAA's approach to developing the requirements has the potential to relegate to the sidelines the citizens in small communities and other important voices most impacted by this process.

"We call upon the FAA to step forward with a data-driven basis that explains the need for this change, and detail its intended process for engaging with all voices in a meaningful dialogue about the agency's approach to public charter policy." ■

Turbulent weather

By David Morris

As aviators we all know that a complete and current weather briefing is a requirement for a safe flight.

As we typically plan the flight to avoid areas of reported severe turbulence, it is not always possible to detect individual storm areas or find the in-between clear areas.

The National Weather Service classifies turbulence as follows:

Class of Turbulence	Effect
Light	Occupants may be required to use seat belts, but objects in the airplane remain at rest.
Moderate	Occupants require seat belts and occasionally are thrown against the belt. Unsecured objects move about.
Severe	Aircraft may be momentarily out of control. Occupants are thrown violently against the lts and back into the seat. Unsecured objects are tossed about.
Extreme	Aircraft is violently tossed about and is practically impossible to control. May cause structural damage. Thunderstorms, squall lines and violent turbulence should be regarded as extremely dangerous and must be avoided. Hail and tornadic wind velocities can be encountered in thunderstorms that can destroy any airplane, just as tornadoes destroy nearly everything in their path on the ground. Thunderstorms also pose the possibility of a lightning strike on an airplane. Any structure or equipment which shows evidence of a lightning strike or being subjected to a high current flow due to a strike or is a suspected part of a lightning strike path through the airplane, should be thoroughly inspected and any damage repaired prior to additional flight. A roll cloud ahead of a squall line or thunderstorm is visible evidence of violent turbulence; however, the absence of a roll cloud should not be interpreted as denoting that severe turbulence is not present. Even though flight in severe turbulence must be avoided, we need to always remember flight in turbulent air may be encountered unexpectedly under certain conditions at any time. ■

2022 Miami Bridge Crash Report Reveals Unlikely Probable Cause

By Mark Phelps - Published: June 30, 2024

In a tragic case that demonstrates that carburetor icing is not limited to cold-weather or high-altitude operations, the National Transportation Safety Board's (NTSB's) final report on the May 14, 2022 fatal Cessna 172 accident on a bridge in Miami concludes that carburetor ice was the probable cause. The pilot, who was also an air traffic controller and Airframe & Powerplant mechanic, died in the accident and his two passengers were seriously injured. At his most recent medical examination in 2020, the pilot recorded 149 hours of flight experience, some 101 of which were in the make and model of the accident aircraft. His two passengers, both family members, were seriously injured and five motorists suffered minor injuries.

The pilot initially took off from Miami Homestead General Aviation Airport (XSI) just before noon and landed at North Perry Airport (KHWO) in Hollywood, Florida, about 12: 20 local time to refuel and pick up the passengers for a sightseeing flight to Key West International Airport (KEYW). At 12:48, as the Skyhawk was flying along the coastline at 1,200 feet under flight following, the pilot issued a Mayday call to Miami Approach: "... lost engine

The pilot told his passengers he was going to land on the Herman B. Fultz Bridge, which spans the Haulover Inlet. According to the NTSB report, the bridge is about 1,257 feet long and 56 feet wide. "The edges of the deck were equipped with sidewalks, railings, and streetlights," the report reads. "The bridge was configured with four traffic lanes (two northbound and two southbound) separated by a raised concrete median."

The NTSB reported that the northbound landing Cessa struck one vehicle from behind and another from the oncoming southbound lane, before coming to rest and bursting into flames.

At the time of the accident, weather at HWO (nine miles northwest of the site of the crash) showed an air temperature of 29 degrees Celsius and a dew point of 19 degrees, yielding a relative humidity of 55%. Also, according to the NTSB, unofficial reporting stations near the accident site recorded relative humidity levels between 63% and 66%. The post-crash examination of the wreckage showed the carburetor heat control was in the "off" position.

The NTSB report stated: "Weather observations indicated that the relative humidity exceeded 50% in the area of the accident site and along the route of flight, and review of atmospheric soundings revealed conditions conducive to the development of moderate carburetor icing at the airplane's altitude. Based on the available information, it is likely that the pilot's failure to use carburetor heat resulted in an accumulation of ice within the carburetor, which subsequently resulted in a total loss of engine power." ■

AIR SHOW

O'Neill Nebraska
[KONL]



Night airshow
July 19th 7pm to until
show is over
July 20th 8 am - 3 pm

The Air Show is the premier event for aviation enthusiasts. The show features military and civilian demonstrations, interactive exhibits, food truck and vendor booths. Car displays
Free will donations at the gate. Bring your lawn chairs and family. Kid-Friendly Activities and Games. NO OUTSIDE COOLERS.

www.oneillairshow.com

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New Entry Procedures In Effect In Mexico

According to an internal memo, the Mexican Federal Civil Aviation Agency implemented new entry procedures for all foreign aircraft entering the country starting January 1. The new "Single Entry Authorization" (Autorización de Internación Única) is required for all foreign registered aircraft and is valid for 180 days; during that time aircraft may enter and depart Mexico freely.

Events Calendar

Please check the Aeronautics web page for a list of upcoming aviation events.

<p>Crete Airport (KCEK) EAA Chapter 569 Fly-in Breakfast 3rd Saturday of every month, 8:00 a.m. - 10:00 a.m. Suggested donation: \$10 for adults; \$5 for kids</p> <p>3rd Thursday Pilot Lunch Jams – Midtown 7814 West Dodge Road, Omaha, NE 68114 3rd Thursday of every month at 11:00 a.m.</p>	<p>7/19 - night airshow 7pm until show is over. 7/20 - 8am-3pm www.oneillairshow.com</p> <p>7/28 Genoa Municipal Airport Breakfast Fly-in Breakfast free to fly-ins - Free will offering</p> <p>7/28 Thomas County Airport + American Legion Post 284 Fly-In 7:30-11:00am Legion Breakfast 7:30-9:30am, Community Church 10:00am on the court house lawn.</p>	<p>September</p> <p>9/7 EAA Chapter 680's Planes, Cars, and Coffee 7-10am Classic Air at Western Nebraska Regional Airport (KBFF)</p> <p>9/8 Fly-in Breakfast hosted by Northeast Nebraska Aviators 7-11am Wayne, Airport (KLCG)</p>
<p>July</p> <p>7/19 – 7/20 State Fly-In & Airshow O'Neill Municipal Airport (KONL)</p>		