

PIREPS

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NEBRASKA

Good Life. Great Journey.

DEPARTMENT OF TRANSPORTATION

Celebrating More Nebraska Aviation History

By Penny Rafferty Hamilton, Ph.D.

In the Air and on the Ground
LINCOLN-TRAINED MEN GET THE BEST AVIATION JOBS!

World's Best Known Aviation School
GUARANTEE yourself a good future position as a Pilot for Airplane Mechanic now! You can do so by enrolling at the Lincoln Airplane and Flying School. For on the ground and in the air . . . Lincoln graduates get the best positions. That's because Lincoln is known throughout the aviation industry as the school that produces better-trained mechanics and pilots.

COMPLETE FACILITIES . . . SEASONED INSTRUCTORS

What Graduates Say:
"My first job paid \$200 per month. Now I earn \$400. Most essential requirement in Aviation is training such as yours." - C. L. Corrier
"I am the master of Lindbergh Field, Lincoln, since at a technical school. Airplane and engine repair to your school." - C. W. Goodman

MECHANICS' SCHOOL CONNECTED WITH LARGE AIRCRAFT FACTORY

LINCOLN AIRPLANE AND FLYING SCHOOL
202A Aircraft Bldg., Lincoln, Nebr.

MAIL THIS COUPON
Lincoln Airplane & Flying School
202A Aircraft Bldg., Lincoln, Nebr.
Give me the catalog you entitled "Aviation Backs You," containing full details of the Lincoln School and its facilities.
I am interested in:
 Flying Course Wrecking Course
 Radio Course Mechanical Course
Name.....
Address.....
City.....
State.....

LEARN AVIATION AT LINCOLN...WHERE LINDBERGH LEARNED

Lincoln Airplane and Flying School ad from the late 1920s

new Lincoln Flying School publicized that Charles Lindbergh, who in May 1927 was the first person to fly solo across the Atlantic Ocean, "learned to fly here." There is a lot more to that Lindbergh history story but this story is about a pilot named Waldren.

According to Dennis Parks, writing in the February, 2016, General Aviation News, "The flying school part of the business was purchased by Ernest Jeremiah Sias, a former minister turned business man...In 1928, when Sias obtained the flight school, he combined it with his mechanics school under the name Lincoln Airplane and Flying School.

November is National Aviation History Month. Celebrating Nebraska's stories is always an adventure. Picture Lincoln in 1928, the Roaring Twenties. Herbert Hoover was elected President. Nebraskans are dancing to the sounds of Duke Ellington and Louis Armstrong. Charlie Chaplin, as The Tramp at the Circus, is on the movie screen.

Near where the Lincoln Country Club is today, Page Airfield and the

"The school was advertised widely not only in aviation magazines, but popular technical magazines and newspapers...The reputation of the school, which offered training and certification for private, commercial, and transport licenses, spread far and wide. They had students not only from the U.S., but also from South Africa, Scotland, and Canada. In 1931 they had 24 students from China."

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An eager Nebraska student was Evelyn Nicholas, born in 1908 in Hamilton County. In 1926, Evelyn fell in love with flying at a local Nebraska airshow. For two years, she begged her parents to allow her to fly. She showed them the appealing money pilots earned, especially women. She told them stories of pioneer aviators, Ruth Elder and Phoebe Omlie. Her parents refused to allow her to fly. For every newspaper story Evelyn showed them about high-flying women, they had another one on an airplane crash.

Stellar Reputation

In 1928, when her family moved to Lincoln, the reputation of the Lincoln Airplane and Flying School was stellar. Finally on March 1, 1928, Evelyn and her mother signed up for 50 hours of lessons. According to a 1984 Oregonian newspaper story, Evelyn remembered. "My mother enrolled me. Paid \$50 and said, 'You are on your own now: probably just a whim anyhow.' Well, this whim has lasted 56 years." That \$50 would be about \$800 today.

On March 3, 1928, Evelyn took her first flight in a surplus World War I biplane. In the Oregonian she said, "It was the most remarkable, wonderful feeling. I felt the rush of wind in my face, smelled the exhaust. It looked like a fairyland down there." After just 14 hours, Evelyn soloed at Page Field. In 1928, Evelyn earned her pilot's license. Of course, the spunky Nebraskan began exhibition flying. In 1929, Evelyn married Howard Burleson, one of her Lincoln Flying School instructors. They moved to North Dakota. From 1931 to 1937, this enterprising pair ran the Jamestown Municipal Airport flying service. In later years, Evelyn became the first woman in that state to earn a transport pilot license.

In 1943, Evelyn again married. With husband, Robert Waldren, they managed the Sweet Home Oregon Airport. Evelyn continued to earn advanced ratings. In 1971, Evelyn began flight instructing at the Evergreen Field Mill Plain Flying Service in Washington. She flew there until a few months before her October

1986 death. In 1986, Evelyn Waldren was named Western Region Flight Instructor of the Year. In her career, she flew 23,700 hours. She was named National OX-5 Pioneer Aviatrrix of the Year, and was elected to their Pioneer Hall of Fame. It all began at Lincoln's Page Field. ■

101 TRAILBLAZING WOMEN OF AIR AND SPACE HAMILTON

Foreword by Captain Judith "Judy" Rice/Epic Flight Academy

101 TRAILBLAZING WOMEN OF AIR AND SPACE: Aviators and Astronauts

Penny Rafferty Hamilton, Ph.D.

MOUNTAIN TOP LEGACY PRESS

Penny's new book, "101 Trailblazing Women of Air and Space," is packed with similar, true stories of historic International women aviators and female astronauts.

<https://www.amazon.com/101-Trailblazing-Women-Air-Space/dp/0578307251/>

Transitioning to Unleaded "Drop in" Fuel



Are you aware of what's going on with unleaded gas? In the '60s and '70s, research found that many significant health problems were linked to lead. In the '70s, unleaded motor gasoline (mogas) was introduced. Starting in 1996, leaded mogas was completely phased out. But we're still using leaded

aviation gasoline (avgas). The challenge of developing an unleaded fuel that will work in our existing general aviation (GA) fleet has made progress on this issue slow. But recent community pressures have made this a priority issue. As an example, the Reid-Hillview Airport (RHV) in Santa Clara County, CA is slated for closure after a study found elevated levels of lead in children who live in the neighborhoods near the airport. The neighbors around RHV have been trying to close this airport for decades, and this issue looks like it will be the nail in the coffin.

In the 2018 Federal Aviation Administration (FAA) Reauthorization Act, Congress called for the National Academies to research options for reducing lead emissions from piston-engine aircraft. I was honored to be asked to peer review this study. While the study found that small GA aircraft are the single largest source of lead emissions in the US, it also found that there are still many hurdles to developing an unleaded fuel that will work in our existing GA fleet. Congress asked the researchers to explore the development of unleaded avgas, but also to look into banning aircraft that require high octane/leaded fuel, impose operational restrictions on those aircraft (such as times of day, locations where they can operate, etc.), and modify airport design to minimize the impacts of lead emissions on neighboring properties. The study found none of these options will be easy, but the development of an unleaded avgas would be the easiest and most effective method.

The FAA has stood up the Piston Aviation Fuels Initiative (PAFI) to develop workable lead-free fuel options. To date, the FAA has approved a supplemental type certificate (STC) for specific engine models to burn unleaded fuel. Though these approved engine types represent

approximately 70% of the GA fleet's powerplants, it only represents about 20% of the total avgas used. These numbers are important because they will drive your own ability to make the transition to unleaded fuels. The industry has begun using the term "drop in" fuel to describe the new unleaded avgas. The term "drop in" means that it can be used in your aircraft without making any modifications. This is a good thing. But there are some market barriers impeding the use.

From the perspective of a pilot, if you could fill your tank with a cleaner fuel without reducing the capabilities of your engine, of course you would do that. But for you to use that fuel, you must have the STC. From the perspective of an airport manager, this is the problem. In order to sell you unleaded avgas, I'm going to have to install a separate storage tank and pump in order to keep the 100LL and unleaded fuel separate. For most of Nebraska's airports, this step is cost-prohibitive. As the transition to lead-free avgas continues, I'm anticipating a challenging phase where an airport will offer either 100LL or unleaded avgas. You'll have to do your flight planning based on which one you want. This transition will make it difficult for airports to maintain a reasonable cost structure to both provide the fuel you need and to support the financial needs of the airport.

I urge everyone involved in the aviation industry to pay close attention to this issue and to talk with your elected officials about the need to develop a true "drop in" fuel that will allow all aircraft to operate efficiently without the need for redundant fueling systems. ■

OUR VISION

A dynamic aviation system which enhances quality of life through infrastructure and services that meet the diverse and evolving needs of all Nebraskans.

Visual Flight Rules (VFR) Flight Following Requirements

By David Morris

On two occasions recently, I had a pilot ask me the following question:

“If I am utilizing Flight Following from Air Traffic Control (ATC), and am about to enter Class B, C or D airspace, will ATC coordinate my clearance through this airspace with the controlling ATC facility?”

On both occasions, I shared a quote from the Airman’s Information Manual (AIM), paragraph 3-2-1 (d), Visual Flight Rules (VFR) Requirements: “It is the responsibility of the pilot to insure that ATC clearance or radio communications requirements are met prior to entry into Class B, Class C, or Class D airspace. The pilot retains this responsibility when receiving ATC radar advisories.”

Perhaps for many of us pilots, it may be a good idea to review from time to time the AIM and the many different requirements when navigating through the national airspace system. ■

Aviation Art Contest 2022

By David Morris

There is still time to get involved in the upcoming Aviation Art Contest 2022. This year’s theme, “Design Your Perfect Aircraft,” is an opportunity for those between the ages of 6-17 to pick up your favorite art supplies and share your dream of designing your perfect aircraft. Remember that each achievement in flight started with a dream. Along the way, the next generation of aviation enthusiasts, while building their dreams, can be part of a program that has shown “the sky is not the limit”!

All entries must be postmarked by January 10, 2022. For further information and/or an entry brochure, contact David Morris at the NDOT – Division of Aeronautics by emailing david.morris@nebraska.gov or call 402-471-2371. ■

Pilot Predicament

By David Morris

I find it interesting to have read recently that the global passenger traffic downturn has not altered long-term demand for pilots much, but changes to address short-term operational variations has created some new hurdles for the airlines to clear as the recovery strengthens. Some of these hurdles include variances within certain markets and how operators will deploy pilots; or a spike in COVID-19 cases could be enough to put its flying on hold. Also, the variable-heavy scenario presents headaches for airline flight operations departments – both in terms of managing current rosters and expanding them with new hires.

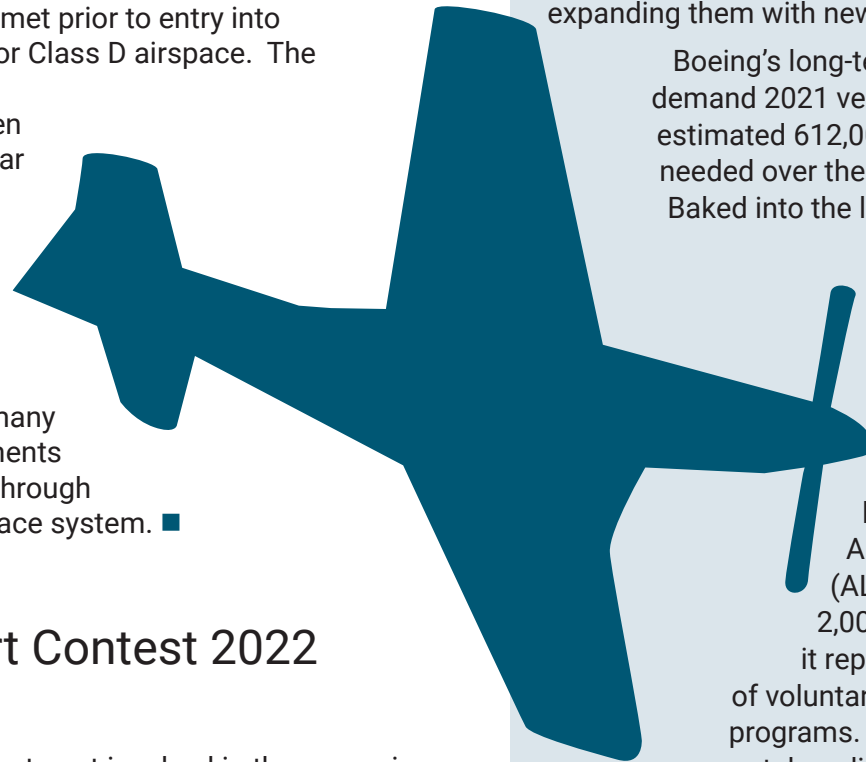
Boeing’s long-term commercial pilot-demand 2021 version indicates an estimated 612,000 new pilots will be needed over the next two decades.

Baked into the latest figures is an assumption that passenger traffic will be back to 2019 levels by 2025 at the latest.

In North America, a number of pilots have left the flight deck. The Air Line Pilots Association (ALPA) says more than 2,000 pilots at the 35 carriers it represents took advantage of voluntary job-reduction programs. They have either retired or taken different jobs.

Data compiled by Future and Active Pilot Advisors (FAPA) shows pilot hiring is in full swing among U.S. major airlines. The aggregate hiring total should surpass pre-pandemic levels in 2022, with several airlines planning to add 1,500 or more new pilots each, according to FAPA. Mesa Air Group has hired 250 pilots since April 2021.

Studies show that the applicant pools remain strong. We are seeing airlines roll out new-hire incentives and bonuses for current pilots. Despite what some call an unpredictable environment, many in the flight operations support and training standards expect the recovery to continue. ■



66,000 General Aviation Pilots Flying Under BasicMed

By David Morris

The Aircraft Owners and Pilots Association (AOPA) recently submitted a new report that more than 66,000 aviators are now flying under the BasicMed program, which was launched on May 1, 2017.

Statistics indicate that with hundreds of thousands of general aviation pilots in the United States, we are experiencing the highest safety numbers in years. The National Transportation Safety Board (NTSB) data shows the general aviation accident rate is at its lowest level in decades and has continued to drop every year since the 1990s.

The fundamentals of BasicMed have remained simple and straightforward. A pilot must have held a valid Federal Aviation Administration (FAA) medical certificate at least once since July 14, 2006 that was not suspended or revoked, have not had the most recent medical application denied, and have not had the most recent authorization for special issuance withdrawn. In addition,

the pilot must not have had any change in a mental health disorder, neurological disorder, or cardiovascular condition.

Pilots who meet these conditions can elect to see their own state-licensed physician or an FAA aviation medical examiner for exams every 48 months, then take an online medical education course every 24 months. Operational limitations associated with BasicMed privileges include a maximum takeoff weight of 6,000 pounds, 250 knots indicated airspeed, altitudes up to 18,000 feet mean sea level (MSL), and no more than five passengers and a pilot in command.

Mark Baker, AOPA President, has indicated in numerous articles that medical reform was a top priority for him, and as we can see, many pilots have embraced BasicMed for its effectiveness. The data clearly shows that BasicMed has been an undeniable success, even while skies are busier than ever. ■

Hemp/CBD Carriage and Use

By David Morris

To add an additional layer of burden on pilots and flight departments, the DOT Office of Drug and Alcohol Policy and Compliance sent out a notice reiterating that the Agricultural Improvement Act of 2018 (Farm Bill) removed hemp from the definition of marijuana under the Controlled Substances Act.

“Under the Farm Bill, hemp-derived products containing a concentration of up to 0.3% tetrahydrocannabinol (THC) are not controlled substances. THC is the primary psychoactive component of marijuana. Any product, including ‘Cannabidiol’ (CBD) products, with a concentration of more than 0.3% THC remains classified as marijuana, a Schedule I drug under the Controlled Substances Act.” The TSA now allows a passenger to carry hemp and CBD (less than .3% THC and still must abide by onboard liquid restrictions).

As already noted, CBD contains THC but, unlike its Uncle, Delta-9 Tetrahydrocannabinol in marijuana, the THC in CBD is not psychoactive. However, even though Hemp/CBD is not under the Controlled Substance Act anymore, just .3% of THC in your system can still end your career.

I think the point here is like the age-old cliché: “Know Before You Go.” ■

Benefits of the Aviation Safety Reporting Program

By Daniel J. Hassing

The Aviation Safety Reporting Program is a program administered by the National Aeronautics and Space Administration (NASA) that the Federal Aviation Administration (FAA) implemented to promote the free flow of information from those who experience or witness unsafe aviation practices. The hope of the program is that if participants in the national airspace system can anonymously report events without fear of the reports being used in enforcement actions against them, the FAA can use this data to take corrective action and improve the airspace system. The program has been in place since 1975.

For pilots, mechanics, and other participants in the national airspace system, it is important to remember that the FAA will provide immunity for certain violations if a timely report is submitted and certain conditions are met. While the sanction will not be assessed, a finding of a violation will still be entered into the airman’s record.

To receive the benefit of the program, the person must make the report within 10 days of the event or within 10 days of when the person became aware or should have been aware of the violation. The FAA is strict with this deadline. Reports are made on forms that are created by NASA that are designed to protect the reporter’s anonymity.

There are limits to what conduct is covered by the program. Only inadvertent violations receive the benefit of the program and deliberate violations do not. The program also does not protect pilots who lack qualifications or competency, or those who have had a violation in the previous five years. Finally, the assurance of confidentiality and the waiver of sanctions do not apply to those reporting “accidents” as defined by the regulations or criminal activity.

The Reporting Program serves an important purpose in the national airspace system. It creates incentives for participants in the system to self-report in certain circumstances without fear of repercussion, which ultimately provides better transparency for the FAA’s regulation of the system. This, in turn, makes the skies safer for all of us. ■

2022 NE Aviation Symposium & Maintenance/ Inspector Authorization (IA) Renewal Seminar



The 2022 NE Aviation Symposium & Maintenance/
Inspector Authorization (IA) Renewal Seminar
is scheduled for January 26, 2022.

The event will be held at the new Crown Plaza-Kearney, NE
located west of the Holiday Inn.

For more details visit our website, nebraskaaviationcouncil.org
or contact wendy@o2-management.com or call (402)414-4420

Events Calendar

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

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

30th Annual Nebraska State Fly-In, Grant
Municipal Airport (GGF)
Saturday, June 18, 2022
Contact: City of Grant, 308-352-2100