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**Steadfast Pilot – King Air Owner Frank Singer is Still Flying at 83**

**Lessons Learned from Recent Spring Storms**

**Understanding Deep Vein Thrombosis (DVT)**

**Ask the Expert: Kiss your King Air?**

**C. V. Cessna – Wichita’s Aviator**

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Steadfast Pilot
King Air Owner Frank Singer is Still Flying at 83

by Kim Blonigen

Frank Singer has been flying for over 60 years and bought himself a 1996 King Air C90B for his 70th birthday.
Californian Frank Singer is living life to the fullest at age 83, and that includes flying his King Air C90B. He explained that every year he goes to get his medical for insurance requisites and, so far, he has no exceptions. “When I go in to get my medical, they always ask what medications I’m taking and I tell them nothing. They always reply in disbelief commenting that I’m over 80 and reaffirm that ‘surely I must at least be taking something over the counter,’ and ask what I take for a headache. I told them that I think I may have had a headache a few years ago and taken something.”

He continued, “I still run two miles every morning, I love to ski and when I look in the mirror I wonder who that old guy is!” Crediting his mother’s side of the family for his health and longevity, he explained that she lived until the age of 97, her mother was 104 and her grandmother lived to 114.

Singer has led an interesting life from the start. Born Jewish in Vienna, Austria, he and his family fled their country for America on the last peace-time sailing of the Queen Mary before World War II. They settled in New York and since he had a former nanny who spoke English, Singer became the translator for his parents when they arrived.

When he was about 16, his mother worried that he could eventually get drafted to fight in a war, so she told him to start applying and taking entrance exams for colleges. He got accepted to four without his high school diploma and chose Purdue to study engineering. After gaining a degree in engineering, he went on to earn an MBA and then joined the workforce.

From Rocket Scientist to Entrepreneur and Philanthropist

Singer’s first job out of college was with Sperry Gyroscope Company, known for its advanced aircraft navigation equipment; his work there entailed various projects with gyroscopes, as well as some basic rocketry. It was there that his interest in becoming a pilot was piqued. A technician that was assigned to him had been a Flying Sergeant in World War II and shared, as Singer describes it, “wonderful tales of flying the P-51.” Soon after, he went to a close-by airport and signed up for flying lessons.

“I learned in a Piper J-3 Cub from an instructor who had one eye and had been a fighter pilot in World War II! I got very good training from him and acquired my PPL in 1956, at the age of 22,” Singer explained.

After leaving Sperry, Singer worked on programs involving propulsion, navigation, rocketry and even Polaris missiles for various companies including Honeywell, General Dynamics, and Dayco. While at Dayco, he was living in the Los Angeles area and was picked to oversee one of their conglomerate companies in Costa Mesa, California, that manufactured flexible metal hoses. Dayco decided to sell the company and Singer asked to buy it. He purchased the company and after about seven or eight years, in the mid-1980s, he said he got bored. His company ended up in a joint venture with a company from China that had 500,000 employees in one location. He was surprised that the Chinese company would reach out to his small company of 80 employees. He said the Chinese company had searched out certain types of technologies and was interested in the way Singer’s company manufactured the hoses. Eventually, a large company wanted to buy his flexible metal hose company and he told them he wasn’t interested at that time. He still wanted to build up its equity and said he’d probably be ready to sell it in at least five years when it would be worth more. The company came back and offered him the amount that he expected his company would be worth later. Singer is still surprised that such a big company would want to buy his small company, but they were interested in its relationship already established with China.

After selling the company, Singer formed Tech Coast Angles with five of his friends to invest in high-tech, early-stage companies. He also is a partner in an aircraft service company, SoCal Jets, located in Van Nuys, California.
Early on, Singer found a fulfilling way to be able to fly and keep up his hours while also giving back. He got involved with Flying Samaritans, a volunteer group that operates free medical clinics in Baja California, Mexico. Singer helps fly doctors, dentists, medical specialists, nurses, translators and other support personnel to the clinic, and says that some of the patients at the clinic have traveled a long way to get there, many times on foot.

As his schedule became more flexible, a friend got Singer involved in another charity organization, Wings of Rescue, that has become very close to his heart. He flies approximately 35 hours a year transporting animals that may be euthanized in California to other parts of the nation where there is more demand. Ninety percent of the animals he transports are from Southern California, where 4,000 pets per year are transferred out of the area. Singer says he has fit up to 60 cats and dogs in his C90B, if they’re small and have two in a cage. The animals are transferred to the country’s northern states of Washington, Oregon, Idaho, Montana, New York once or twice a year, and even up to Canada on occasion.

Singer has also flown for the Veterans Air Command, which flies soldiers (and sometimes their families) who have been injured in combat or suffer from post-traumatic stress disorder to appointments or sometimes home from a hospital stay. “It’s much easier, and more comfortable, for them to fly in a private airplane and it’s the least I can do for them, as they sacrificed their lives for us,” Singer said. “Giving back is extremely satisfying.”

The King Air – a Personal Gift

Singer has earned instrument and commercial ratings and has kept up with their requirements. Over the years he has owned various aircraft, including a Luscombe, Piper Cherokee, an older model Beechcraft Bonanza, followed by an A36 and later a B36TC (the only one he purchased new) and a Duke which he loved to fly.

He said that owning a King Air was a dream he had for many years, so when he finally had the money, he bought himself a seven-year-old, 1996 C90B for his 70th birthday. The King Air had a five-tube EFIS, but Singer added GPS and a MPD “glass panel.” At the time, it was “state-of-the-art,” but now is a bit outdated. Singer said he will not upgrade it anymore because “you can’t teach an old horse new tricks (and I’m an old horse),” plus it is still very service suitable. He has also added BLR winglets, Raisbeck wing lockers, Frakes exhaust stacks and Pulselite anti-collision lights, as well as an in-cabin TV and satellite phone.

“The engines are getting close to having 3,200 hours on a 3,600-hour overhaul requirement,” he said. “I’m considering the possibility of buying some mid-time engines, but sometimes I wonder what will ‘retire’ me from flying first – my airplane or the insurance company!”
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Singer explained that the C90B is actually much easier to fly than the Duke he owned, because everything is automatic with the King Air. “There are a lot of switches and buttons, and it’s fun to fly both hands-on and hands-off; and it’s very user-friendly,” he stated. “It has more versatility, is much more comfortable, very dependable and safe, and I pay less on its maintenance than I did with the Duke.”

In his over 60 years of flying, Singer has had no accidents and only one minor incident. He stated, “I was in the Duke, landing at night up in Big Bear, California, and a rogue whirlwind blew me off the end of the runway causing my landing gear to collapse when I put the plane in a ground loop to avoid going through a fence.”

It seems only appropriate that Singer, himself resilient, buy an aircraft that replicates the same
characteristics. Steadfast, durable, versatile, and dependable are a few that come to mind. When asked how long he plans to continue flying he replied, “I passed my medical in May, so my insurance is good for another year. My goal is to continue flying as long as I can. I recently became a member of the UFO (United Flying Octogenarians). When I asked my wife if I should join, she responded, ‘yes, you should meet the other five fools.’ He continued, “Some of its members are pilots in their 90s that are still flying. Of course, they aren’t flying an aircraft as complex as the King Air, but they’re still flying.”

Here’s to getting those used engines installed when needed, so the King Air can keep up with Singer and he can retire from flying when he chooses to.

One of the modifications also done to Singer’s King Air was the addition of BLR winglets.
Lessons Learned from Recent Spring Storms

By Kyle White

Spring 2017 kept insurance adjusters busier than usual. Storms arrived earlier in the season due to the mild winter in much of the United States. In some areas it seemed Mother Nature was specifically seeking airports as direct targets, similar to mobile home parks frequently falling into the path of storms accompanied by tornado sirens.

Unsurprisingly, when the sky clears and the paperwork starts being processed, emotions can run rampant. We all know our King Airs aren’t just an asset sitting on our balance sheet; they are our magic carpets keeping us safe with the confidence of Beechcraft quality at FL250. Your King Air is your pride and joy, and you no doubt give it a great deal of care, respect and attention to keep it in the best condition possible. So, when the cold air tangles with the warm, moist air creating towering cumulonimbus which will eventually produce hail, straight line winds, and sometimes tornados, are you confident you are positioned to deal with the aftermath if your King Air gets damaged?

In Boy Scouts one of the first things we learned was in order to be a good scout, you must “be prepared.” This has proven to be a great “motto” throughout life. The first step in being prepared to deal with a storm-damaged King Air is to have a solid hangar contract/agreement with the airport authority or Lessor of your hangar. The recent spring storms revealed many old and inadequate hangar leases. Some airport authorities operate on a “month-to-month” basis with lessees. This means there is no hangar agreement in place. While this may initially sound appealing, it is actually a very dangerous and expensive way to do business. Without a hangar agreement in place, there is no clear outline of which party is liable for damages that may occur to your aircraft while inside the airport authority’s hangar. Now attorneys are added to the equation, making an already expensive situation, even more so.

Specifically, if not addressed properly through a well-conceived hangar lease and insurance policies, you are going to be faced with diminution of value as a result of damage history, having an aircraft repaired that you may want totaled, loss of use, and getting immediate access to your property (the King Air) after immediate removal of the hangar owner’s property (the hangar door sitting on your King Air).

I’ve written about loss of use in a previous King Air article, so I won’t spend much time on that. What we haven’t delved into is contractual liability (hangar lease), over- or under-insuring your King Air, and damage history, which results in diminution of value. Every year you should contemplate what an appropriate value to insure your King Air would be. You should insure it for the current cost to replace it with “like, kind, and quality” in today’s market, which means some years the value of your aircraft will go up and some years it will go down. It is just as important to not over-insure it, as it is to not under-insure it. In the event of a total loss, the insurance company will write you a check, less any deductible, for the exact amount on your insurance policy. This is called the “agreed value.”

If you under-insure your aircraft, it is more susceptible to being totaled, as opposed to being repaired. Even minor damage could create a situation in which the insurance company is better off to write you a check for the agreed value and then sell the aircraft as salvage. By doing so, they minimize their loss/out of pocket expense. However, you are left holding a check for $1,000,000, but your trusted aircraft broker may tell you it will cost $1,500,000 to replace your King Air with one of similar “like, kind, and quality.” You just unintentionally self-insured $500,000.

On the other hand, if you over-insure your aircraft, the situation isn’t any better. The claims adjuster will assess the damage and figure out a way to have it repaired
and back in the air so they don’t have to write a check for the over-inflated value. They realize the insurance company will not be able to recoup enough money due to the low salvage value. This can be a very emotional and frustrating situation. When significant damage occurs to our aircraft, we begin to have reservations about its structural integrity. We question if we really want to put ourselves, family, employees, or guests in the aircraft. We also want confidence that any performed repairs were done by a reputable shop, thus ensuring quality work and detailed inspections, to be sure we have a safe aircraft.

When your aircraft does suffer damage, speak up. Do some research and provide input and guidance of a couple of different shops you trust to do the repair work. The adjuster works with many shops around the country on a daily basis and will make some recommendations, but at the end of the day, your opinion and desires matter.

What if you find yourself in the situation of having your severely damaged King Air repaired? What challenges and options do you face? For starters, you may not want the airplane back for the reasons discussed earlier. You also have the hassle of waiting for the repairs to be complete. Extra expense coverage can help mitigate the cost of chartering or leasing a substitute aircraft, but when you finally get the airplane back, what are the next steps?

First off, keep the end result in mind. This reverts back to making sure the right shop does the repair work. Work with a professional that understands the King Air market and knows what buyers are looking for in terms of maintenance and repair, which leads us down the road of diminution of value. We all get email solicitations sent to us. Last week I saw one titled, “Wanted: Clean King Air 250.” This means they have a buyer looking for a King Air 250 without any damage history and a well-documented maintenance history. This leads us to believe a “dirty” King Air 250 is in less demand, resulting in being less valued. How do we recoup our loss of value, or “diminution” of value? Aircraft policies do not typically provide coverage for diminution of value because it is extremely difficult to adjust and agree to what the amount should be. However, we can all agree there is diminution of value. If our aircraft policy won’t pay, who will?

The next step is the hangar lease agreement. General Liability policies could be the source to recoup the loss of value. I’m not an attorney, but I’ve seen them in action. They review the hangar lease agreement and look for negligence on behalf of the lessor of the hangar, and potentially, the builder, engineer, or material provider as it relates to the hangar construction, maintenance, and operation. If the aircraft is in the “care, custody, and control” of the FBO, that is also a factor of consideration. Some hangar lessors and FBOs are requiring the aircraft owner to provide evidence of insurance coverage. This is a reasonable request. Conversely, you should ask and they should reciprocate providing you evidence of coverage as well. You want to make sure that they have enough “Hangarkeepers” coverage to step up to the plate in the event they are negligent and need to repair your aircraft or provide a settlement for diminution of value. Far too often I’ve seen FBOs carry a very low limit of Hangarkeepers coverage, or none at all!

Before the next storm threatens your airport, be sure you’ve reviewed your aircraft policy with your insurance broker to be certain the right ancillary coverages are in place, and the hull value is an accurate representation of what it would cost to replace your aircraft with “like, kind, and quality.” Have your insurance broker and attorney review the hangar lease agreement, along with the hangar lessor’s certificate of insurance, to be certain there is adequate Hangarkeepers coverage to appease your loss. These steps will help ensure an efficient claims process and favorable outcome in the event the “+FC” (well-developed funnel cloud, tornado or waterspout) is reported on your local METAR.

Kyle P. White is the CEO of Aviation Solutions, a Marsh & McLennan Agency company, an insurance brokerage and risk management company, and a former professional King Air pilot holding an ATP and MEII license. He can be reached by e-mail at Kyle.white@marshmma.com.

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There are two groups of veins that move blood from the lower extremities back to the heart. The first system is superficial and consists of veins lying close to the surface; the other larger system is the deep venous system which, as its name implies, is deep within the leg. The superficial veins communicate with the deep veins and eventually drain into the deep veins near the groin. From there the blood flows back to the heart.

Have you ever wondered how blood in your lower extremities manages to overcome gravity to return it back to the heart? It’s a complex process that involves the pressure generated by the heart’s contractions, valves in the veins that prevent blood from moving in the wrong direction, and contractions of the muscles of the leg that compress the veins and force blood upward against the opposing force of gravity. Because inactivity such as prolonged sitting results in few, if any, leg muscle contractions, persons who are sedentary may have blood pooling in the veins of their lower extremities because that blood isn’t being pushed up towards the heart efficiently.

Pooled blood is more likely to clot and this can result in serious issues. Clots can form in either the superficial or the deep veins. When clots form in the superficial veins, there is usually pain in the leg as well as swelling. Often one can feel the clot along the course of the vein. These superficial clots are usually associated with inflammation and the condition is called thrombophlebitis – “thrombo” means clot, “phleb” is a prefix for vein and “itis” signifies inflammation. While superficial thrombophlebitis may be uncomfortable and result in significant swelling of the leg, as well as long-term leg problems, it is not potentially as serious as deep vein thrombosis, also known as DVT.

The deep veins are quite large and if a clot forms in them, the clot can also be large. In addition to the potential for leg swelling with a DVT, the real risk is that the clot could become dislodged and travel up to the heart. From there, it would be pumped into the pulmonary artery, which takes blood to the lungs to be oxygenated. The clot can completely block the pulmonary artery thereby preventing blood flow to the lungs. This makes oxygenation impossible and the result is sudden death. A clot that forms in one place and moves to another is called an embolus, therefore this condition is called a pulmonary embolus.

What are some of the risk factors for DVT and why is this condition something pilots should be concerned about? While some risk factors like an inherited blood clotting disorder, various malignancies, recent surgery and an age over 60 are not in our control, other risk factors are. Smoking increases the risk, as does obesity. Pilots taking hormone therapy (including birth control pills) are also at higher risk.
Dehydration also increases the chance of a DVT. But most important for pilots, prolonged sitting can increase the risk of DVT significantly. Not only are your leg muscles not contracting while you are sitting, you are often putting pressure on the leg in the lower thigh which can help compress the veins and decrease flow; pilots tend to sit for a long time in one position.

It’s important to try to prevent DVTs. Pilots can lower their risk by staying hydrated and exercising their leg muscles at frequent (every 15-30 minute) intervals. This is done by pushing down first with the toes and then with the ball of the feet to contract the muscles of the calf. Walking every half hour is ideal and while this can be done in an airliner, it’s impossible to do in most light GA aircraft. Additionally, the use of properly fitting compression hose (flight socks) may help. These socks are graduated in their compression and must go up to the knee for maximum effectiveness.

Many pilots take low dose aspirin for prophylaxis against heart attacks and wonder if the anticoagulant effects of aspirin will help with DVT prevention. The short answer is probably not. Aspirin inhibits the action of platelets which are important in arterial clotting but have little to do with clots forming in veins. There are prescription anticoagulants that do decrease the risk of DVT, but these must be taken continuously and there are significant potential side effects. Their use is reserved for persons at high risk such as those with a previous history of DVT, pulmonary embolism, certain cancers and postop of certain surgeries. Pilots using these drugs must have FAA approval via the Special Issuance process and require frequent monitoring. Furthermore, flying is prohibited until at least six weeks after the initiation of therapy, so they are not a reasonable choice for routine DVT prophylaxis.

Finally, be aware of the potential for deep vein thrombosis. If you notice swelling of one leg, or pain in the calf after a flight, consult a physician as soon as you can. Untreated DVT can be fatal.

Dr. Jerrold Seckler is retired after practicing medicine (urology) for over 40 years and as an active AME for 25 years. He has over 6,000 total hours, 2,200 of those in his 2001 Cirrus SR22. He is an ATP, CFII, former COPA Board Member and a ground instructor at Cirrus Pilot Proficiency Programs.

The items discussed in this column are related to experiences by Dr. Seckler in his many years as an AME, and made hypothetical for the article. Any information given is general in nature and does not constitute medical advice.
On May 23, the White House released a detailed budget for the Fiscal Year 2018, which included plans to cut $300 million from the FAA's budget and a tax structure to assist in developing an independent, user-funded air traffic control (ATC) organization. Calling the House proposal, spearheaded by House Transportation & Infrastructure Committee chairman Bill Shuster (R-PA), an “excellent starting point,” the White House plan outlines a multi-year process to transfer the day-to-day ATC control to a new “non-governmental, non-profit corporation,” and calls for the government to continue to regulate safety.

A week earlier, Defense Secretary James Mattis wrote in a letter that the Department of Defense (DoD) is “supportive of possible privatization,” though acknowledged the potential risks that it could create for national security. In response to that concern, the letter said that a committee of Combatant Command and military department representatives had been formed to assess the current ATC relationship between the DoD and FAA “to delineate the linkages that would be necessary to a privatized ATC entity.”

President Trump followed up the release of the budget with a press briefing where he laid out his vision for the private ATC organization that would be run by an independent board appointed by the Transportation Secretary and fully funded through the collection of user fees. Under the White House proposal, the fees only recourse would be reviewed by the Secretary of Transportation and the determination of the secretary would be “final and not subject to judicial review.”

It was reported by many national news organizations and Capitol Hill outlets that on June 19, more than 100 CEOs, many of whom are also pilots, sent letters to U.S. House and Senate leaders to weigh in on privatizing ATC, noting that “our nation’s airspace belongs to the public, and every person, business and community should have fair and equitable access, not just a few special interests in select cities and metropolitan areas.”

The proposal was also predicted to face an uphill battle on Capitol Hill, as it did. On June 21 in the House, Transportation and Infrastructure Chair Shuster unveiled its new ATC reform proposal which is included in a comprehensive six-year FAA reauthorization bill. Based on its proposal from last year, but with a series of compromises for critics, the new reform proposal’s plan still includes a new ATC organization run by a board, but the 13-member board would include one seat each given to people nominated by Part 121 carriers, cargo carriers, regional carriers, airports, business aviation and general aviation, along with air traffic controllers and pilot unions. The DOT would be allowed to appoint two members and two “at large” seats would be reserved for people with financial backgrounds. The board would also be led by a CEO.

Addressing the fee structure, last year’s proposal had exemptions for general aviation but would have assessed the user fees for Part 135 operators. The new proposal recommends Part 91 and 135 operators would pay the existing excise taxes to support the remaining FAA functions and the Airport Improvement Program. The $4.10 per-segment passenger fee and international overflight fees, still seem to remain included.

The airline ticket tax would transition to a user-fee system for Part 121 carriers to fund the new organization, with a two-thirds super majority vote of
the board required to raise the airline user fees. The proposal also included language guaranteeing access for small operators and small communities to establish a three-part oversight process. Shuster planned to bring the bill up for committee review on June 27 and reach the House floor by mid-July.

In opposition of the proposal, several general aviation groups – the Aircraft Owners and Pilots Association (AOPA), Experimental Aircraft Association (EAA), National Business Aviation Association (NBAA), National Air Transportation Association (NATA), General Aviation Manufacturers Association (GAMA), and Helicopter Association International (HAI) – showed unity in a joint statement that expresses in part:

“After a thorough and detailed review of Chairman Bill Shuster’s (R-PA) proposal to remove our nation’s air traffic control operations from the Federal Aviation Administration (FAA), we have concluded that these reforms, while well intentioned, will produce uncertainty and unintended consequences without achieving the desired outcomes.

We believe Chairman Shuster has raised the issue of reform in a meaningful and thoughtful manner and while we enjoy the safest most efficient air traffic control system in the world, we also believe that reforms, short of privatization, can better address the FAA’s need to improve its ability to modernize our system.”

The following day, the Senate released its version of the FAA Reauthorization Bill introduced by Senate Commerce, Science and Transportation Committee Chairman John Thune (R-SD). At the writing of this article the details of the bill had not yet been posted, but according to NBAA President Ed Bolen, “In addition to targeting support toward implementation of a Next Generation (NextGen) aviation system, the bill addresses several other priorities identified by NBAA and other organizations, including provisions for streamlining the certification process for aviation technologies, enhancing aviation safety and integrating unmanned aircraft systems into the National Airspace System.”

Bolen continued, “Also notable is the Senate bill’s lack of controversial language to privatize ATC oversight. NBAA has long had significant concerns with the notion of privatizing ATC, which would turn control over the ATC system – a natural monopoly that currently serves the public’s interest, and is overseen by the public’s elected representatives in Congress – to a new entity governed by private interests.”

As the debate heats up, it may only be a matter of time before there is an FAA Reauthorization Bill that can be signed and one we can hopefully agree is fair for all parties involved.
As I was trying to come up with a topic for this month’s article, I happened to read the “Waypoints” column in the June 2017 issue of AOPA Pilot magazine, written by Thomas B. Haines, the editor-in-chief. It tells of an incident in his 1972 Bonanza A36 in which he aborted a flight and taxied back to the avionics shop since the airspeed readouts – both on the Garmin G500, as well as on the backup display – were both reading a little less than 60 knots … and he surely wasn’t taxiing that fast! In fact, they kept reading that speed even when parked. It took the shop owner significant time to remedy the situation before Mr. Haines could depart. I think I could have saved them time and worry had I been there!

You see, I have seen this exact situation quite a few times in King Airs. It can happen when the airplane has sat outside in a windy rainstorm … as had happened to Mr. Haines before he tried to depart. The static ports on the aft fuselage – one or two per side, depending on your serial number – are connected by plastic tubing that then is routed up to the top of the fuselage from both side’s ports before moving forward in a single
tube through the aft bulkhead and on to the static air instruments ... airspeed, altimeter, and vertical speed. Here is what’s happening.

As the wind blows the rain against the static ports, some water enters the plastic tubing until the tubing fills with enough water to prevent the wind from having any further effect. As the wind abates and the pressure it applied to the side of the fuselage decreases, that little slug of water tries to drain out. However, the capillary action associated with the small tubing causes some of the water to remain in the tube. As the slug of water descends in the tube, it causes a decrease in the tube’s pressure upstream of the water. This erroneously low static pressure causes the airspeed indicator to show some speed, since static pressure is less than pitot tube, ram air pressure.

Had Mr. Haines not noticed the discrepancy – or decided to depart anyway – I am quite certain that the problem would have corrected itself as the vibration and airflow of flight would remove the rest of the water. I admire his decision not to depart, however, with this never-before-seen malfunction.

The shop cleared out the water by blowing high pressure air into the static port on one side while having a tissue to collect the water that was expelled from the opposite side. I presume the portion of the tubing going to the instruments from the junction of left and right ports was disconnected so that there’d be no chance of subjecting the static system to too much pressure.

Well, I have an easier, quicker way to solve this problem – kiss your King Air. Actually, you are not really kissing it, but I hope no one sees you doing this because it’ll surely look like you are! Merely put your lips and mouth up over the static port – you may need a stool on the King Air – and lightly suck. Be prepared for a little water to be ingested. Do it to both sides and then recheck your airspeed indicators in the cockpit. Fixed it, didn’t it? No access panels removed, no tubing disconnected, no shop air needed … just a little “kiss” and you’ll be good to go.

I bet that little tip was never covered in King Air ground school, was it?!

King Air expert Tom Clements has been flying and instructing in King Airs for over 44 years, and is the author of “The King Air Book.” He is a Gold Seal CFI and has over 23,000 total hours with more than 15,000 in King Airs. For information on ordering his book, go to www.flightreview.net. Tom is actively mentoring the instructors at King Air Academy in Phoenix.

If you have a question you’d like Tom to answer, please send it to Editor Kim Blonigen at kblonigen@cox.net.
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At the beginning of the 20th Century on the Great Plains of America, wheat was king. It was the Midwest’s bread of life and flourished unchallenged as the leading economic driver of the region. That grain ruled in Kansas, too, and the bustling town of Wichita celebrated the harvest each year with the Wheat Exposition held during the first week of October.

The “War to End All Wars” had been raging in Europe for more than two years, and the death toll shocked the world. From that bloody conflict emerged a new method of warfare that caught (and held) the public’s attention – aerial combat. Sensing a financial opportunity to boost revenue from the exposition, officials invited a popular aviator by the name of Clyde Cessna to make a series of flights during the event.

Clyde had been flying before the public eye since 1911, and by 1916 was making a handsome annual profit thanks to the success of the Cessna Exhibition Company. More than a century later, many pilots flying Cessna airplanes are unaware that the farmer from Rago, Kansas, had always harbored a desire to build and sell airplanes of his own design. Flying was exhilarating, but was always a risky and dangerous business. Cessna’s interest in aeronautics went beyond flying, and in 1913 he was prepared to take his enthusiasm to the next level. As early as 1913, he believed that people were ready to buy airplanes and learn to fly. Cessna was a visionary, even to the point of telling the press that one day people would fly in airplanes large enough to enjoy ballroom dancing while crossing the Atlantic Ocean from New York to Paris, nonstop, of course.

During a three-day visit to Wichita in October 1913, Clyde began to realize that the “Peerless Princess” held great potential as a site to manufacture aircraft. He was so convinced about the location that he held a press conference. Clyde informed the newspaper reporters that he planned not only to build flying machines, but to train pilots at the city’s first flight school. Unfortunately, Cessna’s initial encounter with Wichita’s bureaucracy resulted in his arrest! He was distributing handbills advertising demonstration flights when J.A. Blair, superintendent of street cleaning, charged the aviator with unlawful distribution on the city’s avenues.

Hauled into court, Clyde told W.D. Jochens, the presiding judge, that he was unaware of the ordinance and asked that the charges be dropped. The judge disagreed and fined Clyde one dollar. Adding insult to injury, Jochens suggested that the next time Cessna wished to deliver handbills to the public, he should drop them from an airplane. There was no ordinance against that!

Despite his brief clash with the law, Clyde remained optimistic that Wichita was the best place to make his ambitious dreams come true – all he needed was money and people to help him get started. Three years later, in August 1916, that help arrived in the form of George Sherwood, production manager for the local J.J. Jones Motor Company. By that time Cessna already had become acquainted with J.J. Jones, whose “Light Six” touring car was produced in a factory north of the city.¹

Visiting Clyde at his home in Rago, Sherwood represented a small group of businessmen who were

C.V. Cessna
– Wichita’s Aviator

Thanks to a group of aviation enthusiasts in Wichita, Kansas, in 1916 Clyde Vernon Cessna relocated to the “Peerless Princess of the Prairie” to pursue his dream of manufacturing and selling “aeroplanes.”

by Edward H. Phillips

Clyde Vernon Cessna was a farmer, a natural mechanic, automobile salesman extraordinaire, and a true pioneer aviator. Unlike his close friends Walter H. Beech and Lloyd C. Stearman, Cessna never held a pilot’s license and preferred to pursue his dream of manufacturing and selling airplanes of his own design. His career began in 1911 and spanned another 25 years. He died in 1954 and is remembered as one of the “Founding Fathers” of America’s general aviation industry.

(EDWARD H. PHILLIPS COLLECTION)
willing to step up and support Cessna’s desire of becoming an aircraft manufacturer. In addition, they wanted him to establish a flight school to train fledglings in the art of flight. Many of the businessmen were members of the Wichita Aero Club, but their only “flying machine” was a hot air balloon. As with Cessna, they believed that airplanes offered the only practical solution for the future of air travel.

One member, in particular, Jack Turner, was enthusiastic in his belief that Wichita held great promise for the manufacture of airplanes, and the flat prairie lands around the region offered natural landing fields. Turner, who owned a lumber and coal company in town, went one step further; he told Clyde he was ready to order a Cessna airplane and take flying lessons from the aviator himself. Turner’s zest for the new science of flight bred considerable enthusiasm among his peers, and Sherwood was quick to echo these sentiments along with offering other details about the proposal.

By now, Sherwood had captured Clyde’s complete attention. His guest then explained that a vacant building at the Jones facility would be made available, and a large tract of land adjacent to the structure would serve as a rudimentary flying field. Sherwood returned to Wichita with what would prove to be a landmark agreement – Clyde Cessna would become the city’s first airframe builder.

To drum up local interest, Clyde and Sherwood would depart from Hutchinson, Kansas, in a race to the Jones factory. Sherwood would drive a Light Six car and Clyde would fly his monoplane. As intended, the competition pitted an automobile against an aeroplane – the perfect contrast of speed and utility designed to demonstrate why Wichita should have its own airplane factory.

Both men had little doubt who would prevail, but Sherwood promised to put up a good fight by keeping the Light Six “flat out” all the way. As scheduled, by September 1, 1916, Clyde and his older brother Roy (who was an indispensable asset to the Cessna Exhibition Company) had arrived in Hutchinson and prepared the monoplane for the upcoming flight. Sherwood was already there and had the Jones machine tuned to a fever pitch.

At precisely 11:00 a.m., Sherwood slammed the accelerator to the floor and rapidly upshifted the Jones machine, while nearby Clyde gave the Anzani full power and began his takeoff roll across a bumpy field. Roy, after helping his brother depart, jumped in his Model T Ford and sped southeast toward Wichita, 60 miles away. Only 35 minutes later (after flying at a reduced power setting to preserve the hard-working Anzani), Cessna landed in an alfalfa field near the Jones campus. His flight had been uneventful as the country roads below guided the aviator toward his destination. As planned, the Light Six was nowhere to be seen. Thirty minutes later, Sherwood finally arrived, followed soon by Roy Cessna.

The “race” had been a success, and after resting briefly, Clyde climbed back aboard the monoplane and took off for a flight above the downtown area of the city. He circled above the Schweiter, Eagle newspaper and Fourth National Bank buildings, as well as the sales office of the J. J. Jones Motor Company. To cap off his flight, Cessna reduced throttle and glided down to an altitude of about 300 feet over the streets. He could clearly see throngs of Wichitans waving enthusiastically at their newest resident and his marvelous flying machine.
Clyde then applied full throttle and climbed to a higher altitude as he flew high above Main Street before landing near the Jones factory.

Both flights were successful in igniting public support for the city’s first aircraft manufacturer. Soon after landing, Clyde’s machine was surrounded by hundreds of onlookers anxious to get a closer view of the aviator’s steed. Flushed with success, Clyde and Roy were whisked away to a special luncheon held in their honor by the Wichita Aero Club whose members were there in force: Jack Turner, C.C. Bayless, Jerome Herington, Elmer Reese, Hal Black, Henry Lassen, George Sherwood and Charles E. Becker, publicity manager for J.J. Jones.

These men reaffirmed publicly their desire and support for C.V. Cessna’s transition to Wichita, as well as offering financial and logistical support for the establishment of an aircraft factory and a flying school. A few days later, Aero Club officials told the local press that Mr. Cessna had officially accepted their offer and had begun the process of relocating his family to the city. By the time of the official announcement more than 40 men had expressed an interest in taking flying lessons, but Clyde cautioned that it would be at least six months before classes could begin. Of these men, none was more jubilant than Jack Turner. The wealthy Wichitan was outspoken in his zeal for aviation and learning to fly, and quickly approached Clyde about designing a custom-built monoplane for his personal transportation.²

During the next few days Clyde and Roy inspected Building “I” that would become their workshop at the Jones factory. It proved to be more than adequate at 80 feet in length and 50 feet in width. Cessna estimated that he could build up to 10 airplanes during the first year.
of manufacture. To sweeten the deal, Mr. Jones offered a total of 73 acres of ground adjacent to the building for a flying field.

For Clyde, his new endeavor seemed full of hope and the promise of success. There was no incorporation of a company, no stockholders, no capital investment. Men of the Wichita Aero Club along with J.J. Jones simply had invited him to Wichita, provided a place to build airplanes and operate a flying school, all supported by a select group of businessmen. The Cessna Aeroplane Exhibition Company, as it was renamed, would continue to operate essentially as it had in the past. Only the location, facilities and particularly the possibilities, had changed.

In addition to setting up the new workshop in Building “I” at the Jones factory, Clyde and his brother were busy flying exhibitions that included flights at the Cowley County Fair on September 7. The local newspaper reported that Cessna thrilled the crowds by performing “fancy tricks in the sky.” Next stop for the Anzani-powered monoplane was the Hutchinson State Fair late in September, followed by a short flight back to Wichita. By the end of the month Clyde, Roy and their brother Noel were busy moving equipment into the workshop in preparation for building Cessna airplanes.

Clyde, however, was busy participating in the city’s annual Wheat Exposition held in the first week of October. Sponsors of the event had hired Cessna to make a series of flights, and he received a handsome monetary reward for his efforts. Clyde flew almost every day, taking off about 5:00 p.m. when the winds were more favorable for a safe flight. The monoplane and its radial engine performed flawlessly and Clyde found himself the center of attention after each flight as newspaper reporters and curious onlookers bombarded him with questions. They wanted to know how airplanes flew and whether it was hard to learn to fly such a machine that, to many people, remained such a mysterious phenomenon.

In an effort to answer their questions and showcase their new facility, the brothers Cessna held an open house on October 5. Inside Building “I” Roy and Noel explained to guests how the woodworking equipment operated, the type of tools they used to build aircraft, along with a display of airplane parts and engines. Meanwhile, outside Clyde was kept busy discussing the monoplane’s airframe and its radial engine. People were quick to notice that the airplane had become an aerial billboard sporting an advertisement for Jack Spine’s clothing store located at 111 West Douglas Avenue. Others were fascinated by the monoplane’s engine and its seemingly odd arrangement of the six cylinders in a radial configuration. One reporter for the Wichita Eagle newspaper called it the “mighty French engine” and...
extolled its 60-horsepower rating as one of the highest in the United States.³

In the wake of Clyde’s flights at the exposition, another pilot flew into town to put on her own show – Ruth Law. She had come to Wichita to demonstrate how helpless large cities were to aerial bombardment. Every morning newspapers across America carried stories of the war in Europe. Although airplanes were considered a novelty in the early years of the war, by 1916 field commanders viewed flying machines, and particularly large bombers, as airborne weapons platforms capable of leveling entire metropolitan areas. On October 10, Law took off in her Curtiss biplane and “bombed” Wichita’s city hall, the Forum building and the court house. She was paid $750 per day for her efforts that included “stunt flying,” which Cessna considered foolishness and detrimental to the future of aviation. In contrast to Law, who used the airplane to sensationalize flying, Clyde was trying to commercialize the airplane.⁴

By November 1916, the Cessna Aeroplane Exhibition Company shut down operations as winter approached. The 1916 season had been highly profitable, and Clyde planned to build two more airplanes during the cold months to handle the busy schedule in 1917. In a bold effort to promote his aircraft, Cessna planned to fly from Wichita to New York City in the summer of 1917. If all went well, he expected to land on Manhattan Island after flying for 18 hours and making three stops for fuel.

To attempt such a feat, however, would require a new aircraft and a more powerful engine. He estimated that if $2,000 could be obtained to acquire an engine of 100 horsepower, it would take only two months to construct the airframe. “From Wichita to New York” soon became the battle cry of the Cessna Aeroplane Exhibition Company as the brothers began to design the airplane. By December preliminary construction had begun. Unfortunately, funding was not forthcoming and Clyde eventually shelved his plans for the long-distance flight.

Construction of a new monoplane, however, continued unabated. Among the workers hired by Cessna to assist in building the ship was Miss Avis Van Hee, a jaunty young
lady who had taken a flight with the famous Arch Hoxey, a celebrated aviator who flew for the Wright Brother’s exhibition team. Van Hee’s enthusiasm convinced Clyde to put her on the payroll, and she helped to construct the first airplane built in Wichita. By February, a second airplane was taking shape in the workshop, one that would feature a small cockpit ahead of the pilot’s seat to accommodate a paying passenger.

When spring 1917 finally arrived, the new Cessna monoplane (and the first airplane built in Wichita) was ready for its maiden flight, which occurred late in March. With war clouds gathering over America as President Woodrow Wilson struggled to keep the nation out of the bloody conflict, on April 6 he asked Congress for a Declaration of War against the Central Powers. America was officially in the fight.

Anxious to do his part helping the war effort, Cessna wired the War Department that he could have two airplanes “ready for action,” including the two-place ship that he believed would be ideal for aerial reconnaissance. He offered the airplanes at a price of $4,000 each, but the government turned him down. Undaunted, Clyde next sent a telegram to Kansas Congressman William A. Ayres asking for assistance authorized under the National Defense Act recently passed by Congress. If he could not build airplanes for the military, he wanted to train pilots. He petitioned Ayres to wield his influence on Capitol Hill so Clyde could acquire the equipment, vehicles and aircraft to establish a flight school. Once again, his hopes were dashed. The War Department would train its pilots, not civilians.

Clyde resumed his plans for a flight school, claiming in advertisements that it would be the first privately-operated flying institution west of the Mississippi River. Soon more than 25 applications arrived in the mailbox. Among the requirements for acceptance each applicant had to pass a physical examination (equally stringent as that of the U.S. Army) by a qualified physician. Only five young men were chosen: W.E. True, Joseph J. Smith, Marion McHugh, Edgar B. Smith and E.F. Rickabaugh. Of these, True worked at the J.J. Jones facility, McHugh was employed by the Ponca Tent and Awning Company in town, and Smith was a student at the local Fairmount College. He also worked as an assistant to Homer Harden, a commercial photographer in the city.5

Plans called for the flying course to cost $400 and last about eight weeks. By the end of training, each pilot would be capable of flying one of Cessna’s monoplanes. Instruction began in June. Each day the student pilots were expected to arrive at Building “H” no later than 4:30 a.m. while the Kansas air was calm and cool. Clyde’s approach to ground school was unique – he suspended the 1913 monoplane above the floor and had each student sit in the pilot’s seat and learn the purpose of the rudder bar, wing warping and elevator controls.

When Clyde was satisfied that the fledglings thoroughly understood the controls, the airplane was moved outside and the boys learned how to start the cantankerous Elbridge engine. When that was mastered, they began taxiing the ship at low speeds across the flying field, gradually increasing throttle until short “hops” just off the ground were achieved followed by a safe landing. Of the five students, Smith and McHugh were deemed candidates to join the exhibition company. Clyde needed help meeting the more than 30 contracts for flights he had already lined up across the Midwest region. He reasoned that with three pilots and three airplanes, the 1917 exhibition season should be a great success.

As the demand for exhibition flights increased that summer, Clyde’s time to train his student pilots came to halt. The five boys began to complain, and eventually a lawsuit was filed claiming breach of contract. The
suit claimed that Clyde had not provided eight weeks of training nor did he set up flight demonstrations as stipulated in the contracts. Apparently, the suit was settled out of court. McHugh, however, was the only one to finally complete the course and was hired by Cessna as a pilot. 6

In addition to preparations for the flight school, the brothers Cessna continued work on the two-place monoplane that they dubbed The Comet. When it was finished that summer, Clyde was appalled that the airplane had cost him $6,000 to build, causing the pioneer aviator to complain that airplanes were too expensive (some things never change!). The Comet first flew late in June. Clyde was enthusiastic about the airplane’s performance, and when he flew the ship at Blackwell, Oklahoma, for the city’s observance of the Fourth of July; he received $500. More than 11,000 people received their money’s worth as Cessna flew his monoplane in ever tighter circles above the grandstands, then reduced throttle to idle and glided down to within a few hundred feet of the ground. Suddenly, he opened the throttle and zoomed directly over the spectators as both men and women screamed and dove for cover wherever they could find it.

On the return flight to Wichita, the Comet covered the 65-mile route in 36 minutes at a speed of 107 mph. Painted under the left- and right-wing panels were the words: “Cessna Monoplane – Made In Wichita.” In the months ahead Clyde did fly the Comet with a passenger in the front cockpit, but when the U.S. Government essentially banned private flying in 1918 to conserve fuel for the war effort, the Cessna Aeroplane Exhibition Company closed its doors.

The Cessna boys soon went from aviators to their previous occupation as farmers, growing wheat to help feed the nation and the military servicemen and women. After the war ended in November 1918, Clyde’s thoughts returned to flying but the exhibition business never resumed operation. As for Cessna’s family of monoplanes, all of them were eventually dismantled and disappeared except for the Comet that survived until 1930 when Mr. Cessna reportedly destroyed it. During the intervening years of 1919-1924, Cessna operated a successful custom wheat threshing business. The profits from that enterprise would one day help finance and equip the next generation of Wichita’s aviation industry, starting with the Travel Air Manufacturing Company founded by two young men named Walter H. Beech and Lloyd C. Stearman. 7

NOTES:
1. The J.J. Jones Motor Company began manufacturing the “Light Six” in 1914. Later, Jones relocated the company to the site of the Burton Car Works in north Wichita. During the 1880s Burton had earned an excellent reputation as a builder of quality passenger railroad cars.
2. In the years ahead, Turner’s passion for flying never abated. He is recognized by local historians as a key investor in the Travel Air Manufacturing Company (1924), Cessna Aircraft Company (1927) and in particular the Stearman Aircraft Company (1927), for which Turner personally spearheaded the raising of $60,000 to bring Lloyd Stearman and his infant company back to Wichita from California.
3. The radial powerplant was one of many designs by Alessandro Anzani, a well-known manufacturer of bicycles in Europe who turned to building aero engines. His designs, although unsophisticated compared to other engines of the period 1910-1920, were generally reliable. By 1928, however, they were considered obsolete as new air-cooled, static radial engines such as the Wright J-4 and smaller Lycoming and Continental opposed engines began to dominate the marketplace.
4. Aviatrix Ruth Law was one of America’s celebrated female pilots in 1916-1917. Her most famous flight was a cross-country journey of 590 miles in November 1916, flying her Curtiss pusher biplane nonstop from Chicago to Hornell, New York, in slightly more than five hours and setting a distance record. After America entered World War I in April 1917, Miss Law and her Curtiss pusher campaigned vigorously for “Liberty Loan” fund drives in behalf of the Red Cross and United States’ military.
5. Smith later became one of Wichita’s most respected and sought-after photographers. From 1924-1931 he photographed hundreds of airplanes built by the Travel Air Company, Cessna Aircraft Company, Stearman Aircraft Company as well as smaller builders including Swallow, Lark and Laird. Smith took aerial photographs from the aft cockpit of his old Standard J-1 biplane, often piloted by local aviators Ted Braley or Walter H. Beech.
6. McHugh is reported to have flown one of Cessna’s monoplanes during an exhibition in Coldwater, Kansas, but the flight could not be verified.

Ed Phillips, now retired and living in the South, has researched and written eight books on the unique and rich aviation history that belongs to Wichita, Kan. His writings have focused on the evolution of the airplanes, companies and people that have made Wichita the “Air Capital of the World” for more than 80 years.
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Garmin® Announces EASA Approval for the G1000 NXi
Aftermarket STC upgrade includes King Air 200/300/350 aircraft models

Garmin has announced the receipt of European Aviation Safety Agency (EASA) approval of the next generation integrated flight deck, the G1000 NXi, in the King Air 200/300/350 aircraft models. Boasting a modernized flight display design with significant performance enhancements, the G1000 NXi incorporates innovative capabilities into a state-of-the-art avionics platform. Features such as wireless cockpit connectivity, including wireless aviation database updates using Flight Stream 510, enhanced situational awareness with SurfaceWatch™, visual approaches, map overlay on the horizontal situation indicator (HSI) and more, are all available with the G1000 NXi.

The G1000 NXi integrated flight deck boasts modern processing power that supports faster map rendering and smoother panning. The flight displays initialize within seconds after start-up and provide quick access to frequencies, flight plan data and more. Contemporary animations, new LED back-lighting, enhanced display clarity and brightness, as well as reduced power consumption all offer significant improvements within the G1000 NXi integrated flight deck.

Connext® wireless cockpit connectivity unlocks more capabilities from within the G1000 NXi, offering unique features such as Database Concierge, wireless flight plan transfer and more. Available as an option, Flight Stream 510 supports the wireless transfer of aviation databases from the Garmin Pilot™ app on a mobile device to the G1000 NXi system. Flight Stream 510 also supports two-way flight plan transfer, the sharing of traffic, weather, GPS information, back-up attitude information and more, between the G1000 NXi and compatible mobile devices running Garmin Pilot or ForeFlight mobile. The D2™ Bravo and D2 Bravo Titanium aviator watches also sync with the Garmin Pilot app to ensure flight plan data matches throughout the cockpit.

Visual approaches integrated within the G1000 NXi system offer pilots safety-enhancing guidance in visual flight conditions based on a three-degree glideslope from the threshold of the runway. Pilots can select the runway for which they have been cleared to land, set customized minimums, select vectors or straight-in for the final approach intercept and fly a visual approach coupled with the autopilot. By utilizing visual approaches within the G1000 NXi, pilots are provided a more stable descent and precise flight path throughout the approach and landing phases of flight in visual conditions.

Geographical map overlay within the HSI is available on the primary flight display (PFD), which also supports the display of NEXRAD, weather radar, SafeTaxi® airport diagrams, traffic, terrain and more. For example, pilots can display SafeTaxi on the HSI map while preparing flight plan information on the multifunction display (MFD). Also aiding in situational awareness, optional SurfaceWatch runway monitoring technology provides visual and aural cues to help prevent pilots from taking off and landing on a taxiway, on a runway that is too short or on the wrong runway based on performance data entered during preflight. Visual and audible runway distance remaining annunciations are also available, which provides aural callouts beginning at 5,000 feet through 500 feet.

Equipped to meet future airspace modernization initiatives, G1000 NXi equipped-aircraft are rule compliant to meet EASA and FAA Automatic Dependent Surveillance-Broadcast (ADS-B) requirements. Exclusive traffic features such as Garmin’s patented TargetTrend™ and TerminalTraffic™ further enhance the traffic picture. TargetTrend provides pilots with a more intuitive method of judging target trajectories and closure rates, while TerminalTraffic displays a comprehensive picture of ADS-B-equipped aircraft and ground vehicles throughout the airport environment.

The G1000 NXi integrated flight deck also supports additional features:

- Advanced Doppler weather radar capabilities, including ground clutter suppression and turbulence detection as options.
- COMM frequency identification displays the station ID, as well as frequency type.
- Display of sectional charts, as well as IFR low/high enroute charts on the MFD.
- NEXRAD weather radar imagery can be overlaid on the moving map and animated on the MFD, as well as the HSI map.
- Vertical Situation Display (VSD) incorporates terrain profile view on the MFD, taking into
consideration the active flight plan, altitude constraints and winds aloft.

- Pilots can preview departure and arrival procedures on the MFD prior to loading and activating the procedures.
- Pilots can optionally overlay European Visual Reporting Points (VRPs) on the moving map, as VRPs are standard within the navigation database.
- Three-color terrain shading incorporates green, yellow and red contouring, which depicts the aircraft is 2,000, 1,000 and 100 feet above ground level (AGL) respectively.
- Aircraft maintenance personnel experience faster system software upgrades and streamlined equipment replacement.

For new retrofit installations, the G1000 NXi integrated flight deck is estimated to provide a weight savings of 113 kilograms (250 pounds) or more in King Air aircraft, allowing additional baggage, passenger and/or fuel load flexibility. New G1000 NXi retrofit installations also utilize a new, fully integrated and lightweight air data and attitude heading reference system (ADAHRS), streamlining the upgrade process. King Air owners and operators with an existing G1000 integrated flight deck can easily upgrade to the G1000 NXi with minimal aircraft downtime and disruption of the panel as the displays preserve the same footprint and connector so panel modifications are not required.

EASA has granted STC approval for the G1000 NXi integrated flight deck in the King Air 200/300/350 and is available from select Garmin Authorized Dealers. New G1000 NXi installations and display upgrades all come with a two-year warranty, which is supported by Garmin's award-winning avionics product support team.

For additional information regarding the G1000 NXi upgrade for the King Air, contact Scott Frye at 1(913) 440-2412 or scott.frye@garmin.com. For additional details, visit: www.garmin.com/kingair.

**Raisbeck Gets STC Approval for Swept Blade Props on B300 in Argentina**

Raisbeck Engineering is pleased to announce that it has received Supplemental Type Certificate (STC) approval on its Swept Blade Propellers for the King Air B300 series from the Administración Nacional de Aviación Civil (ANAC).

Raisbeck’s Swept Blade Propellers for the King Air B300 first received FAA certification in February 2016. Currently it is approved in 37 countries including...
Canada, Europe, Brazil, Mexico and Australia. Raisbeck’s Swept Blade Propellers with aluminum construction and advanced swept blade design, offers improved takeoff acceleration, better time to climb, faster cruise and improved landing deceleration. The propellers also offer measurable quietness in the cockpit and cabin.

For more information about Raisbeck Engineering and its products, please visit Raisbeck.com.

Advent Receives EASA Nod on eABS Braking System and adds Hampton Aviation as Dealer

Oklahoma-based Advent Aircraft Systems has received EASA certification for its eABS anti-skid braking system for the Pilatus PC-12/PC-12NG and the Beechcraft King Air B300. The Tulsa manufacturer has also launched certification processes for the system on the same aircraft with Transport Canada and Australia’s CAA.

Advent was expecting to add FAA, EASA and TC certification for the King Air B200 by the end of June, and it has already received its first European order for the braking system from a Norwegian customer for a B250.

Advent also added King Air maintenance expert Hampton Aviation to its network of authorized dealers and installers. Hampton specializes in heavy structural repair, inspections and modifications for all King Air models.

Since 2003, the service center has been the premier King Air inspection and repairs facility for the U.S. Army, Air Force and Navy. Hampton’s capabilities include complete inspections, airframe dismantle, spar replacement or repair, sheet metal work, pre-purchase inspections, and excellent paint and interior.

For more information, visit hamptonaviation.com.

ForeFlight Introduces Next-Gen Performance Flight Planning

ForeFlight, the creator of the most widely used flight planning and electronic flight bag app for Apple iPad and iPhone, announced the launch of its next-generation flight planning features, which provide fast and accurate time, fuel, route, and altitude computations for high-performance pistons, turboprops, and jets. The market-leading features are part of the new Performance Plus and Business Performance subscription plans available for purchase on ForeFlight.com.

At the core of ForeFlight’s new performance planning capabilities is a sophisticated global routing and flight optimization engine powered by ForeFlight’s AviationCloud technology, an extensive library of aircraft with detailed performance profiles sourced and verified by the ForeFlight aircraft performance team, and enhanced map and form-based flight planning user interfaces.

ForeFlight’s in-house performance team built the aircraft performance profiles from the manufacturer’s climb, cruise, and descent performance data. The performance models are defined for multiple altitudes, weights, and temperatures, allowing the planning engine to produce highly accurate speed and fuel flow data for all conditions. ForeFlight’s library includes hundreds of profiles for popular piston and turbine aircraft from Beechcraft, Bombardier, Cessna, Cirrus, Daher-Socata, Dassault, Eclipse, Embraer, Hawker, Gulfstream, Pilatus, Piper, and more.
Setting up an aircraft in ForeFlight with performance profiles can now be done in less than a minute. Customers simply search for and select their aircraft model, confirm the basic weight and fuel data, and add a tail number. All of the performance data and multiple cruise profiles automatically load with a click on the web or a tap on the iPad.

Customers will also see a newly designed Flights view that replaces the File & Brief view. Flights simplifies and consolidates the planning workflow into a single form-based view. In addition to route information, the new planning form has neatly-organized sections for payload and fuel planning. ForeFlight automatically runs structural weight limit checks with every adjustment to the plan and provides visual alerts when an issue is detected, helping to eliminate an overweight takeoff or landing scenario.

ForeFlight Performance gives users the ability to select from multiple fuel policies, allowing the flexibility to calculate block fuel using a desired fuel strategy. The form-based workflow of the Flights view integrates Route Advisor and Altitude Advisor, two powerful decision-making tools previously accessed only on the Maps view.

Powered by the AviationCloud advanced flight planning engine, Route Advisor analyzes current and forecasted wind and temperature data, aircraft performance capabilities, and recently cleared routes to generate a comprehensive list of valid wind-optimized route options for any two airports in the world, even for airports without previously flown or preferred routes. ForeFlight calculates performance results for each route and displays the estimated flight time, distance, and fuel burn alongside each route string allowing for quick comparisons between different routes.

The user-friendly interface extends from ForeFlight Mobile to the web where the Flights tab on the web not only mirrors the functionality and workflow of the mobile app, but also displays an adjacent map of the route that stays in perfect sync with any changes made to the form. ForeFlight Sync ensures that all planning activity automatically syncs between mobile devices and the web.

The new high-performance planning features are part of ForeFlight’s two new subscription plans: Performance Plus for individuals and Business Performance for multi-pilot flight departments. The single user Performance Plus Plan is priced at $299.99 USD per year and the multi-user Business Performance Plan starts at $300 per year, per license. For plan comparisons, visit foreflight.com/pricing.

Videos and additional content for ForeFlight Performance planning are available at foreflight.com/9-1.
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From Communiqué # ME-TP-003: Multi-Engine Turboprop Communiqué

Issued: April 2017

ATA 56 – Window Electronic Shades - Cold Temperatures

Serial Numbers LJ-2137 and after; BY-207, BY-239, BY-250 and after; FL-954, FL-972, FL-1031 and after.

As part of the 2015 block point Fusion Avionics upgrade, Textron Aviation also upgraded the cabin windows with a new electronic dimmable window. This window uses electric current to charge an emulsion trapped between the panes to become dark shaded and/or opaque to block sunlight.

On the ground this helps keep the cabin cooler and protect the interior from ultraviolet rays; when the power is off the window defaults to dark. Condition Reports from operators have made us aware of the fact that prolonged exposure to subzero temperature can slow down the process to darken or clear the window especially on the shaded side of the cabin at altitude. While on the ground, you can expect it to change in a few seconds, but at altitude and subzero conditions you can expect it to take a couple of minutes. On the exit windows, especially, you may encounter a waterfall effect as it slowly darkens. Engineering is aware of this issue and is working with the supplier for a solution. You can expect this condition to improve on descent and should produce no lasting effects to the window.

On another note for the windows, you may experience a rainbow effect when looking out the windows in certain conditions or while taking pictures. This is caused by the emulsion along with the polycarbonate dust pane; this is also being looked at for possible improvement.

Another issue is not being able to clear windows before engine start because of voltage drop which can cause a flickering issue. This issue has been solved and is in the certification process now.

The above information is abbreviated for space purposes. For the entire communication, go to www.txtavsupport.com.
Pilots N Paws® is an online meeting place for pilots and other volunteers who help to transport rescue animals by air. The mission of the site is to provide a user-friendly communication venue between those that rescue, shelter, and foster animals; and pilots and plane owners willing to assist with the transportation of these animals.

A general aviation transport requires just one pilot volunteer and is far more efficient and dependable than time-consuming ground transportation for these animals who are often in danger of euthanization. Volunteer pilots retain complete authority of their planning and flights, and can give as much or as little time as they like.

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2. Post your information and read other posts
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- Gain flight experience and log more hours
- Explore new geographical areas
- An extremely rewarding experience every time

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