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King Air
June 2025 Volume 19 / Number 6
A MAGAZINE FOR THE OWNER/PILOT OF KING AIR AIRCRAFT

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COVER PHOTO
Clint Goff/Casey Aviation

CORRECTION

On page 22 of the May 2025 issue of *King Air* magazine, we mistakenly swapped the captions for these two photos. Here they are with the correct captions.

CREDIT: EDWARD H. PHILLIPS COLLECTION

Travel Air's production version of the Type 10 was the 10D powered by a Wright J6-7 (R-760) rated at 225 horsepower. Note the revised windshield design that was incorporated on production Type 6B and Type A6A airplanes in 1929-1930.

CREDIT: TEXTRON AVIATION

Late production monoplanes were redesignated Type 6B and Type A6A and featured a redesigned windshield that provided improved visibility and a larger cockpit area. Travel Air pilot Truman Wadlow flew this Type 6B in the 1930 Ford Reliability Tour, equipped with wheel fairings and a Townend ring for the 300-horsepower Wright J6-9 radial engine.


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King Air 360C Helps Greece Expand Air Ambulance Services

It's the third King Air for the country's national air ambulance program

by MeLinda Schnyder | Photos by J. Alan Paul Photography

In early May, a delegation from Greece traveled to Fargo, North Dakota, to perform final inspections and formally accept the newest dedicated air medical Beechcraft King Air 360C for use in the country's national air ambulance program.

The group included representatives from several organizations involved in helping ensure that ill and injured patients receive immediate safe air transport from remote areas of the country to central locations in Greece and Europe to receive the urgent care they need.

The Stavros Niarchos Foundation provided a grant for the procurement of the additional King Air to further strengthen the capabilities of the country's air ambulance services. The grants for this airplane and four previous aircraft, totaling $41.6 million, are part of the foundation's Global Health Initiative.

The Hellenic Ministry of Health owns the aircraft; the National Center for Emergency Care, also known as EKAB, uses the aircraft; and the Hellenic air force assists in flight operations.

"As the nationwide public ambulance service in Greece, EKAB is celebrating 40 years of service," said Dr. Demetrios Pyrros, director of medical services for EKAB. "This additional aircraft will enhance our capacity to serve the Greek citizens, as well as the 30+ million annual visitors who may need emergency medical transport. The generosity of the Stavros Niarchos Foundation makes this possible, and we are looking forward to putting it in operational use with the support of the Hellenic air force."

The King Air 360C joins four aircraft used exclusively by the National Center for Emergency Care's specialized air ambulance staff of flying doctors, rescuers and nurses since 2021: two fully outfitted Augusta Westland 109 Trekker helicopters and two Beechcraft King Air 350C airplanes. During their first three years of operation, the four aircraft already in service have completed 2,000 air transports.

Once the 360C featuring a cargo door rolled off the production line at Textron Aviation in Wichita, Kansas, it flew to Fargo Jet Center's special mission aircraft modification center at Hector International Airport (KFAR) for

> "Our team takes great pride in transforming these aircraft into flying intensive care units. We understand that every detail matters when lives are on the line ... "

the air ambulance conversion. Fargo Jet Center managed the full interior completion of the aircraft, partnering with Spectrum Aeromed, whose headquarters are also located at KFAR, on the medical equipment integration.

"At Fargo Jet Center, we take pride in delivering mission-ready aircraft tailored to the unique requirements of each operator," said Darren Hall, vice president, Business Development, Fargo Jet Center. "For this King Air 360C, our team worked closely with EKAB and Spectrum Aeromed to integrate advanced medical systems and develop a custom interior that enhances patient care and crew efficiency. This aircraft represents the highest standards of reliability and innovation in air medical transport."

The comprehensive air ambulance completion included full cabin integration of dual Spectrum life support systems; medical-grade stainless steel sidewalls for sanitation and durability; integrated oxygen, air, vacuum and power outlets; custom medical cabinet and forward storage cabinets; overhead Brownline tracks for flexible equipment mounting and positioning; and high-efficiency LED cabin lighting.

Fargo Jet Center also modified the King Air 350C aircraft delivered to Greece's Ministry of Health in 2021.

"It's an honor to support Greece's investment in air medical transport," said Jim Sweeney, president of Fargo Jet Center. "Our team takes great pride in transforming these aircraft into flying intensive care units. We understand that every detail matters when lives are on the line, and we're proud to deliver a platform that's ready to serve from day one."

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Shut Down the Engine?

by Joe Casey | Photos by Clint Goff/Casey Aviation

As a designated pilot examiner, I get a lot of questions from candidates and potential candidates before and during the BE300 type rating. Most of them are thought-provoking and many require me to do some homework to find the answer. I love receiving these questions, and I believe a discussion of these questions and answers could help you operate your King Air.

In the BE300 type rating practical test, are ATP standards required for a private pilot or commercial pilot applicant?

Yes, you must fly to ATP standards. Regardless of what license you hold, the Airline Transport Pilot Airman Certification Standards (ATP ACS) are used as the standards for a BE300 practical test. Even if you are a private pilot and only wish to add the BE300 type rating to your private pilot license, you still must meet the standards listed in the ATP ACS. Want to affix the BE300 type rating to your commercial pilot license? You still must fly to ATP standards. Fair? It doesn't matter. You must fly to ATP standards if you want the BE300 type rating.

The ATP standards are more stringent, narrow and difficult to fly. Some candidates are not ready for the very precise standards. On many maneuvers, headings must be held to within 5 degrees, not 10 degrees (as are found on the private, instrument, or commercial ACS). For a precision approach, the ACS standards are only ¼ scale deflection on the localizer or glide slope, and only 5 knots of deviation from specified airspeed. That is a narrow standard.

For landing, the airplane must touch down -250/+500 from the aiming point markings, even on the single-engine approach and landing. An applicant for the BE300 type rating must fly with precision, more precision than many expect when they first thought about flying a King Air. Often, pilots fail the type rating practical test because they don't know the more stringent ATP standards.

Another reason the Federal Aviation Administration mandates the ATP standards for a type rating is because a type rating follows the category as the pilot moves up in licensure. So, a private pilot – airplane multiengine land (AMEL) can earn the BE300 type rating and fly the King Air 300/350/360 as a private pilot. If that pilot earns the commercial pilot – airplane multiengine land (CP-AMEL) later in life, the BE300 type rating follows in that category. It is the same if the pilot earns the ATP-ME license. The type rating will follow the category as the pilot moves up in license.

Confusing? Possibly. Just know that regardless of the level of license you hold (private, commercial, ATP), you will still fly the BE300 type rating at the ATP level during the practical test, and that type rating will be with you for life, even if you move up in credentialing.

Is an engine shutdown really required on the BE300 type rating practical test?

During the BE300 type rating practical test an engine shutdown and restart is not required if the test is administered in the airplane. By this, I mean that the engine shutdown and restart can be simulated. In the ATP ACS, there is an actual task labeled "Inflight Powerplant Failure and Restart" that mandates a complete engine shutdown and restart. But, in the notes section the examiner (and candidate) is referred to Appendix 6 (Safety of Flight) and Appendix 7 (Aircraft, Equipment, and Operational Requirements and Limitations) of the ACS. In those appendices, there are nuanced notes. One sentence in that appendix reads, "If the practical test is conducted in an airplane that requires the applicant to hold a type rating, the applicant may perform a simulated power plant failure."

So, there is an out from actually shutting down the engine in a King Air 3XX. However, if the whole task is read and the entirety of appendices 6 and 7 is read, the overall impression is that the FAA really does want the applicant to completely shut down and restart the engine. They definitely want to see the candidate feather the propeller. I've shut down a King Air engine hundreds of times during training and practical tests. If you've not done so, I recommend you get with your flight instructor and do it, even if only for the experience. But, during the BE300 type rating, you do not have to shut down the engine in the actual airplane.

If you elect to receive training for the BE300 type rating in a full flight simulator (FFS), then there is another appendix that applies. Appendix 8 advises that the pilot candidate conduct a complete engine shutdown and restart.

I personally agree with the FAA and believe the engine shutdown and restart to be a valuable experience for the pilot. I think it is good to see the propeller feather, to see the various caution/advisory lights illuminate and to gain the confidence that the airplane will perform on one engine. But if you take your practical test in a real airplane, you do not have to demonstrate an actual engine shutdown and restart; it can be simulated.

Can a King Air be used for a commercial pilot practical test?

Effectively, no. A turbine airplane can be used for a single-engine commercial practical test but is not to be used for a multi-engine commercial practical test. There is a provision for exception (waiver), but the DPE would have to request that waiver through their local FSDO (flight standards district office) and the DPE would need to meet some specific criteria to be approved. Most FSDOs won't do it.

The FAA does not really like producing this exception. I asked my FSDO for a waiver and my request was politely declined. I was given an explanation that I believe to be proper. I agree with the FAA. The problem is performing some of the more dangerous maneuvers such as V_{MC} demos in such powerful airplanes. A V_{MC} demo requires full power (or takeoff power) to be applied to the good engine and the critical engine to be set at idle with the propeller windmilling. Then, the nose is raised so the airspeed decays, eventually reaching the airspeed where full rudder input cannot maintain directional control. Do you really want to do that in your incredibly powerful King Air? I don't. I won't. Neither will any other DPE with any wisdom.

So, if you want a commercial pilot – AMEL rating, obtain that in a piston-powered airplane. Then, go fly the King Air once you have earned the multi-engine rating. The King Air is not a training airplane, at least not for initial multi-engine training.

And, if you are thinking about buying a King Air and don't have the multi-engine rating, get that rating before buying your King Air. Insurance companies really don't like pilots who don't have a multi-engine rating prior to buying the King Air. Your insurance rate will be egregiously high, and you might not even be insurable. Put the multi-engine rating in your back pocket and then go for the King Air. That's the proper order.

Do I have to perform a V1 cut during a BE300 practical test?

Maybe! It depends on where you receive your training or evaluation.

There is not a V_1 cut task in the ATP ACS. But there is a "Powerplant Failure During Takeoff" task in the ACS, and it does advise the examiner to administer the engine failure immediately after V_1. But not when the test is administered in the airplane.

A V1 cut is not an official maneuver, but a colloquial term generated by the training industry to refer to the examiner administering an engine failure immediately after the airplane achieves V1 speed (takeoff decision speed). This has been considered a worst case scenario for a multi-engine pilot to lose an engine, and training center examiners (TCEs) in simulators administer a V1 cut to evaluate the toughest of scenarios.

However, the FAA does not want instructors or examiners to administer a V1 cut in an airplane because it is dangerous. The lowest altitude an instructor or examiner should administer an engine failure in a real airplane is 400 feet AGL.

Appendices 6 and 7 (mentioned earlier) of the ACS detail the criteria for administering an engine failure during a practical test, and it is clear that the FAA prohibits administering a simulated engine failure below 400 feet AGL in the airplane. In fact, don't let an instructor (or examiner) administer a V1 cut in your airplane. It is not safe. Period.

Said in colloquial terms, "The juice is not worth the squeeze." The risk is not worth the reward. If a pilot can show proficiency in handling an emergency engine failure at 400 feet AGL, the FAA assumes the pilot can handle the same emergency just after V1. The FAA got this one right. There is no such thing as a V1 cut maneuver in a real airplane.

Will you perform a V1 cut in a simulator? Absolutely. There's no threat to aircraft or people in the simulator, and the instructor will administer an engine failure at V1 while evaluating the "Powerplant Failure During Takeoff" task. In the simulator, there is no danger if the candidate pilot fails to perform. In the simulator, you must be ready just after V1.

I hope this discussion helps you! I look forward to writing the next edition, hopefully with questions from you. To submit a question, send an email with the subject line Ask the DPE to *joe@flycasey.com.* KA

Joe Casey lives in East Texas and operates Casey Aviation with locations at Angelina County Airport (KLFK) and Cherokee County Airport (KJSO). He founded the company, which specializes in PA-46/TBM/King Air training and offers a range of other services. He also helps manage four Part 91 King Air aircraft and has ferried King Airs across the globe. Joe has 18,600 hours of total flight time, more than 4,000 of which are in King Air airframes. He is a certified ATP-ME/SE commercial pilot with ASEL/ASES, rotorcraft-helicopter/instrument and glider ratings. He is also a designated pilot examiner (DPE) with BE-300 type rating issuing authority up to the ATP level. He holds CFI, CFII, MEI, CFI-H, CFI-IH and CFI-G certificates.

Grease the Squeaky Wheel

by Sandy Thomson

We've all heard the expression "Grease the squeaky wheel," but I'm guessing most of us have never thought much about its origin. Last summer, I came across the farm cart in the photograph (below right) near Helsinki, Finland, and couldn't help but wonder what kind of story it could tell. It was a form of transportation, as is the Beechcraft King Air, but from an earlier age – maybe 1900?

Sandy Thomson has been flying since he was 18 and later founded Marsh Brothers Aviation.

Our main business at Marsh Brothers Aviation is designing and making non-metallic polymer bearings and seals. While the wheel bearings on this cart were likely no more than a wooden hub on a wooden axle, if one started squeaking the fix was to jack up the wheel, knock out the retaining pin, pull the wheel and smear the bore with grease. Reassemble and it's good to go.

We will likely be developing wheel bearings for vertical takeoff and landing (VTOL) electric aircraft some day because they don't see high speeds. Right now, tapered roller bearings are as good as they get. However, many other bearings or bushings on an aircraft such as the King Air are made of bronze and are greased.

Several decades ago, I decided to make torque link bearings for my first airplane – a 1957 vintage Beechcraft Bonanza – out of a self-lubricating polymer our company produced. That might have been around 1970. It was a test. The Thordon bearings were tiny but they worked, and I was able to replace the grease zerks with plastic plugs.

Fast-forward to 2012. I had sold the Hawker Sea Fury I'd been using for business transportation. Hey, don't laugh! This airplane was pulled through the air with an 18-cylinder radial engine cranking out just about 3,000 horsepower. It was equipped with a glass panel and autopilot, and I flew IFR from Northern Canada to Mexico. Those were the days!

Anyway, I acquired my second Bonanza, a V-35 V-tail I used as my transportation ship while I was rebuilding my third Aerostar from the ground up, more or less. That Aerostar was in the shop for two years where it was completely upgraded with everything new I could get my hands on. This was

to be the platform where I would go all out with the objective of replacing every bronze bearing with our polymer AeroTough GF. Most installations were STCed and while we've had to make a few adjustments, the point has been absolutely proven. There is no necessity for a grease gun to come anywhere close to an airplane anymore.

We could do the same thing for the King Air, but the costs involved in making such wholesale changes would likely never be recovered.

Think about cars. In my younger days, dad would take his car into the garage for an oil and filter change and a grease job. Today that grease job is just a memory.

So why would anyone bother eliminating greased bronze?

Well, one benefit is weight savings. Bronze weighs seven times more than our AeroTough GF. On the Aerostar we were able to cut empty weight by 12 pounds. That's not a huge amount, but on airplanes every pound saved counts.

The next area of improvement comes with replacing dynamic O-rings with Thorseals, another self-lubricating polymer. While studying mechanical engineering at Northrop University, our fluid dynamics professor told the class: "If you're designing a cylinder, do not use O-ring seals for dynamic positions; specify V-seals." I've always remembered that and it's the reason most of the Aerostar dynamic seals were replaced by our Thorseals.

It's why we changed the piston rod seals in our brake master cylinder rebuild kits from O-rings to Thorseals. They're just better. They won't take a compression set, and in landing gears they can tolerate more radial movement of the piston rod or piston inside a cylinder or gland.

Flap rollers are an interesting study in upgrade opportunity. On the Aerostar, the OEM roller comprises a steel sleeve, a steel roller and two steel thrust washers bearing against each side of the steel flap track. It requires oiling the rollers and greasing the tracks. The MBA upgrade eliminates all lubrication because the stainless steel rollers are bushed with AeroTough GF. Thrust surfaces are machined AeroTough washers. No lubrication needed, period.

The King Air flap tracks are aluminum and the rollers are stainless steel needle bearings with a Teflon washer

Marsh Brothers Aviation's AeroTough King Air Flap Roller Bearing.

against a single flange. That washer is supposed to prevent wear on the softer aluminum track. It does that if it stays in place. The rollers will roll as long as the grease is not so viscous (due to super cold air) that they slide instead of rolling.

Our mission in developing the STCed King Air flap roller replacement was to reduce or eliminate flap track wear. Only time will tell if this objective has been met.

The development process involved building two test rigs where flap operation was simulated and loads and speeds duplicated. We were successful in running three times longer than the OEM average replacement cycle.

What we thought would take less than two years in development took us four years before finally being awarded STC approval.

We knew we would need to design a test rig capable of duplicating as accurately as possible the dynamic conditions the roller is exposed to through a typical flight cycle. However, the test rig we designed and built exhibited too much flexibility when side loads were imposed and it was necessary to totally redesign the rig and stiffen the structure, which took close to a year.

Then, we needed to allow Transport Canada to view the rig's operation in real time any time they wished and that required a remote video link. After finally receiving Transport Canada's approval, we applied for FAA approval. That process took longer than it typically does.

It's good to see the rollers that have now been supplied to customers and installed on aircraft are all performing as expected. However, verifying the reduction or elimination of flap track wear will take years of service. As I mentioned earlier, we could eliminate every grease fitting on every King Air if conditions support it. We know it's possible due to our Aerostar experience but the time and money to get there makes the business case difficult to justify.

It is easier for us to get 10-foot diameter main shaft bearings approved for a hydro-turbine than a project to replace the relatively tiny bronze bushings in King Air torque links!

Aircraft seals and bearings development has been driven more by a personal desire to do something good for aviation than by the promise of a financial return. It shouldn't be this way but it is because of the need to deal with regulatory bureaucracies with little motive for expediency.

In a world I know is technically achievable, I can imagine every King Air operating with no bronze or steel bearings in the landing gear, grease-free flap rollers and no O-rings sealing pistons or rods. It's possible, but unlikely.

Electric airplanes are different. Here, we have the chance to start from scratch. If the squeaky wheel is the designer or owner who says, "Let's get rid of these archaic engineering designs and look ahead to reliability and much-reduced maintenance cost," then maybe it will happen. The design will be from a clean sheet.

King Airs usually fly a lot more than many smaller general aviation aircraft and cutting operating costs and empty weight is important to owners. Initiative may come from fleet owners who want to cut operating costs; maybe there is hope. KA

George A. (Sandy) Thomson has been flying since he was just 18 years old, beginning with a 1950s vintage Beech Bonanza. He later went on to study mechanical engineering at Northrop University in Inglewood, California, and is now an ATP licensed pilot with more than 6,000 flying hours. Sandy is the founder of Marsh Brothers Aviation (MBA), a manufacturer of grease-free polymer bearings and seals for applications such as landing gears, actuators and other positions where a low friction, self-lubricating alternative to bronze could prove beneficial. MBA's new King Air Flap Roller Bearing kit has been approved by the Federal Aviation Administration for commercial use on USA-registered King Air aircraft. FAA approval, which follows Transport Canada approval in 2024, paves the way for U.S.-based operators and maintenance organizations to replace seizure-prone greased needle flap rollers with a more robust, self-lubricating, grease-free bearing solution.

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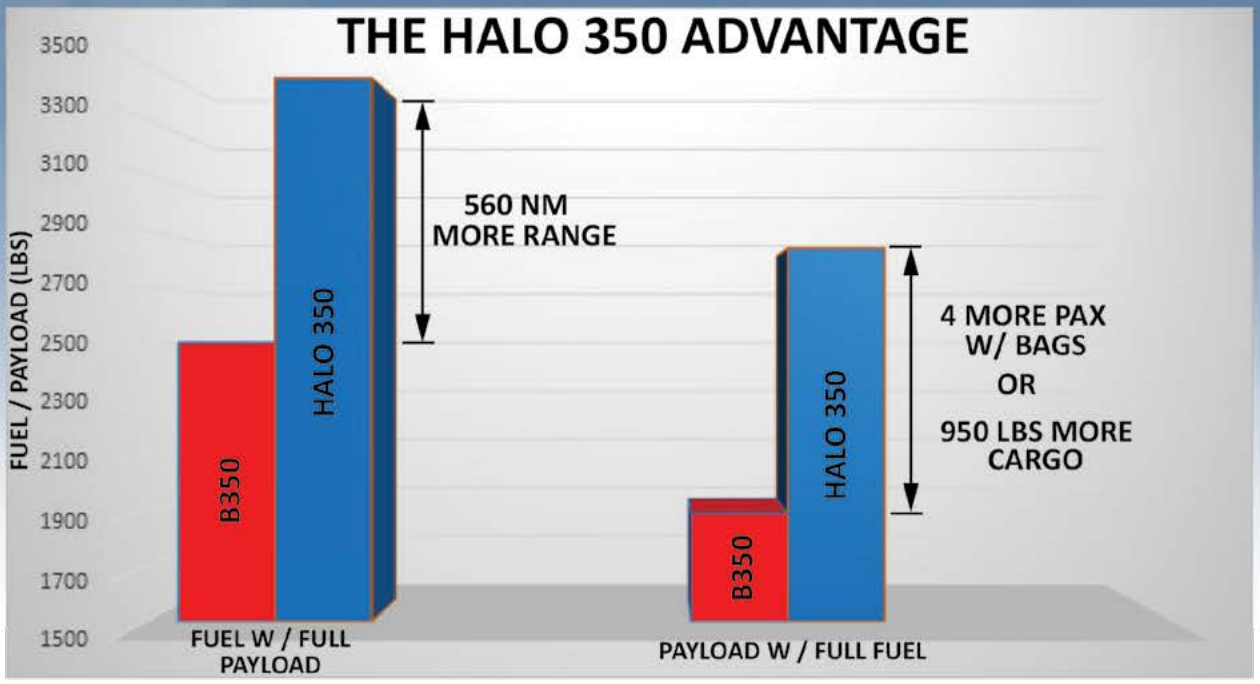

HALO 350 Information Chart

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Gear Doors at the Gathering

Sloppy and full of play – or no movement at all

by Dean Benedict

Dean Benedict and Travis Lamance offered a preflighting session from the perspective of maintenance techs during the 2025 King Air Gathering

Thinking back on the King Air Gathering this past March in Phoenix, it was great to have a portion of the event in a hangar on the airport with a King Air on display and available to everyone. I was there with Travis Lamance of Haven Aero to give a maintenance technician's perspective on certain things to watch for when preflighting a King Air. Tom Clements and Zach Cleaver were there to do the same from a pilot's perspective.

Tom and Zach went first, with Tom walking around the King Air and commenting on things he does routinely that are not necessarily called out on the standard preflight checklist. I had to laugh. Tom completely stole my thunder. He touched on everything I was going to say, starting with checking the flaps for a little bit of play.

When "meeting a King Air for the first time," my way of shaking hands is to jiggle the flaps. I want to make sure they aren't totally rigid – there needs to be some movement. If this sounds familiar, you probably read my article on this very topic in last year's October issue. Apparently, Tom is of the same mind. He and I go way, way back and through the years we usually found ourselves on the same page.

Tom and Zach continued their walk-around with many good tips, from checking the oil to closing the cabin door. When the topic of gear doors came up, it was mentioned that the main gear doors on a C90, like flaps, should have some play.

In fact, the main gear doors on the King Air C90 have quite a bit of slop when everything is done right. The linkages and hardware associated with these gear doors work great when the gear retracts and the doors close snugly. But when the aircraft is sitting on the ground with the doors open, this assemblage is quite loose, and this is normal.

Floppy gear doors win the day

I am reminded of a King Air C90 that was promptly ramp-checked by the Federal Aviation Administration after landing at KLAS in Las Vegas. The FAA inspector thought there was too much play in the main gear doors and grounded him on the spot. The owner/pilot was in disbelief but called back to the factory right away. He got through to Tech Support (this was a long time ago) and was assured that looseness in the gear doors on a C90 was normal.

When Beechcraft Tech Support learned the aircraft was in Las Vegas, they called me and asked me to help this owner. I called him while he was still with the FAA inspector, standing on the tarmac in front of his King Air. He put the FAA guy on the phone and we had a nice discussion on the rigging of gear doors on a King Air C90. The FAA had quite a few C90s back then; I had worked on a couple of them when they were in Las Vegas with squawks. This conversation did the trick. The owner and his King Air were subsequently absolved of any transgressions.

The thump test

At the recent King Air Gathering, we were still on the topic of gear doors when I reminded Tom of my post-maintenance tip on checking the main gear doors on 200s with standard gear. I give those gear doors a firm thump with my fist. If the door collapses inward, it's not rigged properly.

The main gear doors on a King Air with standard gear should not have any play. King Airs with standard gear include the following models: 100, A100, B100, 200 series, 300, 350 series and the F90.

These gear doors must withstand the air load on takeoff without being pushed inward before the gear comes up. If rigged improperly, the oncoming airstream during takeoff can push the door inward – just a little bit, a half-inch is enough – and as the gear retracts, the tire snags the door, smashing it into the wheel well. It's not pretty. Unfortunately, an example of this comes to mind.

Notice the scalloped edges on the main gear door of this C90. The inboard door has the same cut-outs. When the gear is retracted and the doors come together, the cut-outs allow for the tire to protrude. On a C90, the tires are not fully concealed by the gear doors.

The owners of a B100 (which has standard gear) took it to a shop with the following squawk: "Red light in gear handle stays on with landing gear in the up position." Normally, when the red light won't go out, one or more of the uplock switches is out of adjustment. This is a pretty straightforward issue, but the shop insisted the landing gear needed a full re-rig, and the owners did not know any better.

The shop rigged the gear. The owners came to test-fly the aircraft. They rolled down the runway, broke ground, put the gear up and got a red light. They tried to put the gear back down but it wouldn't budge and the red light stayed on. They tried to crank the gear down by hand and were unsuccessful at first. Eventually enough force was exerted on the hand crank to get the gear down manually. Once on the ground, they were horrified to see the outboard gear door on one side was totally mangled and crushed into the wheel well.

You can guess what happened. The pressure of the airstream on takeoff pushed that gear door inward just enough to get caught by the tire as the gear retracted. The gear door was crunched into the wheel well. This jammed the gear and prevented a full retraction; further, it prevented the gear from extending. They were lucky they could apply enough force on the hand crank to break the jammed gear free and extend the gear manually. Though I doubt they felt lucky at the time, at least they avoided a gear-up landing.

Gear door linkages must be adjusted to an over-center position to withstand the air load during takeoff. Failure to do so allows the above scenario.

The same principle applies to the gear itself. The drag legs must be adjusted to an over-center position to withstand the force created when the gear meets the ground on landing. The No. 1 cause of gear collapse on landing is improper rigging of the drag legs.

It gets worse

The shop working on this B100 ordered a new gear door, installed it and proceeded to check the rigging of the gear all over again. They jacked the B100, but this time they disconnected the gear door linkages, allowing the gear doors to hang freely. When it came time to swing the gear,

Nose gear doors are the same on all King Air models, whether a 90, or standard or high-float.

The main gear doors on this King Air 200 with standard gear qualify for Dean's thump test – give those gear doors a firm thump with your fist; if the door collapses inward, it's not rigged properly.

the *same* tire caught the *brand new gear door* and crunched it into the wheel well, again!

Apparently the gear door in question was hanging a little bit to the inside, just enough to get caught by the tire during retraction.

Doing it right

Disconnecting the gear door linkages was the correct move. On a gear swing retraction, you don't want the doors to shut because they'll cover up everything – you want to see everything in its retracted position. The big mistake by this shop was leaving the doors to hang freely. I always tied the doors back with safety wire. With the doors held open wide, I could get in there and see exactly how everything is retracting into the wheel well. Is the strut bumping into the spar? Are the tires rubbing against anything?

Once I confirm everything retracts properly, I would connect the door linkages and adjust as necessary, making sure all linkages are over-center and the doors are closing completely.

The main gear doors on the F90, the 100, A100, B100, the 200 series, the King Air 300 and the 350 series are all similar. Therefore, whenever those King Airs have had their landing gear worked on or rigged, I recommend you do the thump test before the next flight. This does not apply to King Airs with high-flotation landing gear.

High-flotation gear doors

High-flotation gear doors differ greatly from the gear doors for standard gear. They are physically connected to the gear strut. As the gear extends, it pushes the gear doors open. When the gear retracts, it pulls the doors closed. But take note: When the gear goes up, there is an unexpected twist to the gear door movement. As the gear begins to retract, the doors are pushed further open at first, before being pulled into their closed position. It will take you by surprise when you see it for the first time.

The doors for high-flotation gear generally have no play. There may be some very minor movement due to the composition of linkages and hardware.

Nose gear doors – The same on all King Airs

Let's not forget the nose gear doors. All King Airs have the same nose gear and therefore have the same nose gear doors. Even King Airs with high-float gear have the same nose gear and doors as all the other models. King Air nose gear doors are rigid; they have no play.

In closing, remember that slop is good on the main gear doors of a C90. If your King Air has standard gear, add the thump test to your preflight routine, especially when it's coming out of maintenance.

Fly safely out there.

Dean Benedict is a certified A&P, AI with over 50 years of experience in King Air maintenance. He was an inaugural inductee to the King Air Hall of Fame in 2022. He received the Charles Taylor Master Mechanic Award from the FAA in 2025. He owned and ran Honest Air Inc., a Beechcraft maintenance boutique with a strong following of King Airs, for 15 years. Currently, with BeechMedic LLC, Dean and his wife, Lisa, consult with King Air owners, pilots and mechanics on maintenance issues, troubleshooting and pre-buys. Dean performs expert witness work on request. He can be reached at *dr.dean@beechmedic.com* or 702-524-4378.

Are Your Ears Hurting?

A pressurization checkup

by Zach Cleaver

Pressurization can be one of the most frustrating things to figure out. Do I set it at my destination field altitude? Do I set it at my cruise altitude? Do I leave it at my departing field elevation if I'm going to return without another stop?

Let's look at setting the pressurization controller and then explore running a test on your pressurization system to make sure it is working the way it is supposed to.

Setting your pressurization controller – takeoff

When going through your run-up prior to departure, one of the checks the pilot's operating handbook, or POH, calls for is a pressurization check. Here is the procedure it lays out:

Pressurization.....CHECK AND SET
Bleed Air Valves.....OPEN
Pressurization Controller.....SET
Adjust cabin altitude knob to indicate 1,000 feet below field pressure altitude.
Set rate knob to 12-o'clock position.
Cabin Pressure Switch.....HOLD IN TEST POSITION
Cabin Altimeter and VSI.....CHECK FOR DESCENT INDICATION
Cabin Pressure Switch.....RELEASE TO PRESS POSITION
Pressurization Controller.....SET

The inner scale (ACFT ALT) should indicate planned cruise altitude plus 1,000 feet. This setting must not result in an outer scale (CABIN ALT) indication of less than 500 feet above departure field pressure altitude.

Once we have reached our cruise altitude, say FL250, we would have set 26,000 feet on our pressurization controller, resulting in a cabin altitude of a little over 6,000 feet at max differential (6.5 PSI) in a B200. With either flow pack operating, max differential should be able to be achieved; together they should easily be able to hold max differential.

Setting your pressurization controller – landing

The POH calls for setting the pressurization controller to 500 feet above the landing field pressure altitude. That works if the pressure is standard (29.92 inches Hg). What should we do if the field atmospheric pressure is not standard? We need to adjust our controller setting to account for non-standard pressure. Thankfully, we have been given a chart that does just that!

As you can see in Figure 1 (next page), going through all those lines on the chart while flying can be challenging.

We can also do the math in our head to get the correction to add or subtract from our destination field elevation. Remember the old private pilot rule: 1 inch of mercury equals 1,000 feet. We can also say: 0.1 inches Hg = 100 feet on a non-standard atmospheric pressure day. If the current local altimeter setting is 30.56, it is

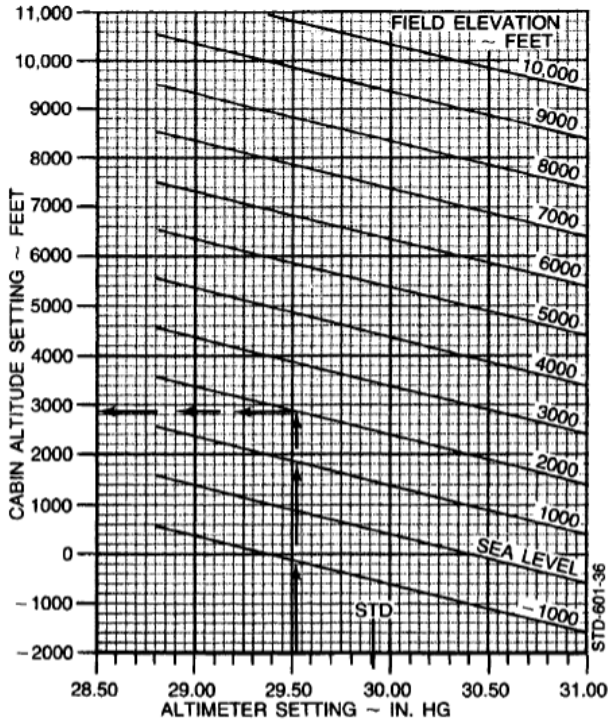


Figure 1

PRESSURIZATION CONTROLLER SETTING FOR LANDING			
Closest Altimeter Setting	Add to Airport Elevation	Closest Altimeter Setting (Cont)	Add to Airport Elevation (Cont)
28.00	+2400	29.50	+900
28.10	+2300	29.60	+800
28.20	+2200	29.70	+700
28.30	+2100	29.80	+600
28.40	+2000	29.90	+500
28.50	+1900	30.00	+400
28.60	+1800	30.10	+300
28.70	+1700	30.20	+200
28.80	+1600	30.30	+100
28.90	+1500	30.40	0
29.00	+1400	30.50	-100
29.10	+1300	30.60	-200
29.20	+1200	30.70	-300
29.30	+1100	30.80	-400
29.40	+1000	30.90	-500

Figure 2

.64 higher than the standard 29.92, resulting in 640 feet lower than standard. We round it to the nearest 100 feet.

Due to the controller's inaccuracy, we always start by adding 500 feet to the field elevation then correct for non-standard atmosphere.

Figure 2 shows a chart with the same information in an easier-to-read format.

Troubleshooting

Now that we have the normal setting of our pressurization for takeoff and landing covered, what happens if our pressurization system is not working the way we expect it to?

Is it a flow pack problem? Is it a leak rate problem? Is it a combination of both? How do we determine where to start looking?

What follows is a procedure you can use to check the health of your flow packs and the leak rate of your King Air.

1. Establish level cruise flight at maximum pressure differential (ΔP), using normal cruise power setting, between 15,000 and 18,000 feet. (To do this, set the controller's cabin altitude for a sea level or lower and climb until the cabin begins to climb also.)
2. Record:

   Aircraft pressure altitude: __ feet

   Indicated cabin altitude: __ feet

   Indicated differential pressure (ΔP): __ psid

   Indicated cabin rate-of-climb: __ fpm (should be 0)

   Engine speed: __ / __ % (L/R)

   Conduct steps 3 through 6 for the left side only, recording the results in the appropriate spaces. For now, leave the results concerning the right side blank.
3. Watch the cabin rate-of-climb indicator as you turn the left bleed air switch to the "Envir Off" (center) position. The indicator should rapidly rise to a maximum peak, then descend.

   Record:

   Cabin's peak rate-of-climb: _____ / _____ fpm

   (left off) (right off)
4. Rapidly move the left power lever to idle while watching the cabin rate-of-climb indicator. If the flow pack is properly shut off, there should be no change. Return to normal cruise power. Circle the appropriate answer on one line below:

   Does the left flow pack indicate that it is shut off completely? YES/NO

   Does the right flow pack indicate that it is shut off completely? YES/NO
5. When the cabin stops climbing or descending, with the rate-of-climb indication stabilized at its original reading:

   Record:

   Indicated ΔP (left pack off): __ psid

   Indicated ΔP (right pack off): __ psid

   (Should be maximum, same as before.)

6. Turn the bleed air switch back on. Wait until there is an indication that the flow pack has reopened successfully (such as a momentary cabin descent surge, louder airflow noise, rise in ITT or reduction in torque) and until all parameters return to their initial values. Sometimes this takes 10 minutes or more, and occasionally a flow pack won't reopen at all during this flight. In that case, terminate the check until another flight can be made.
7. Repeat steps 3 through 6 for the right side, recording the values in the places you left blank before.
8. With both bleed air switches back on and all parameters at their original values, watch the cabin rate-of-climb indicator as you move both bleed air switches to the center simultaneously. (DO NOT go to the bottom position, you will lose your door seal.) It should rapidly rise to a maximum, then show a slow, continual reduction. (With decreasing ΔP, the air doesn't leak out as fast, so the cabin doesn't climb as fast.)

   Record:

   Cabin's peak rate-of-climb: __ fpm

   This is your airplane's leak rate. It is excessive if it exceeds 2,500 to 3,000 feet per minute. However, it is not uncommon to find leak rates well above 5,000 fpm. This is not necessarily dangerous, but it does imply that were an engine to fail or a bleed switch be turned off in flight, the airplane would not be able to maintain proper pressurization. Also, with a high leak rate one can expect to experience more pressurization irregularities than are typical (e.g., a cabin climb when power is even slightly reduced during descents).
9. Optionally, you may wish to keep the bleed air switches off until the cabin climbs high enough to trigger the "Alt Warn" annunciator, to verify that it is functioning properly. It should illuminate at 12,500 feet ± 500 feet.

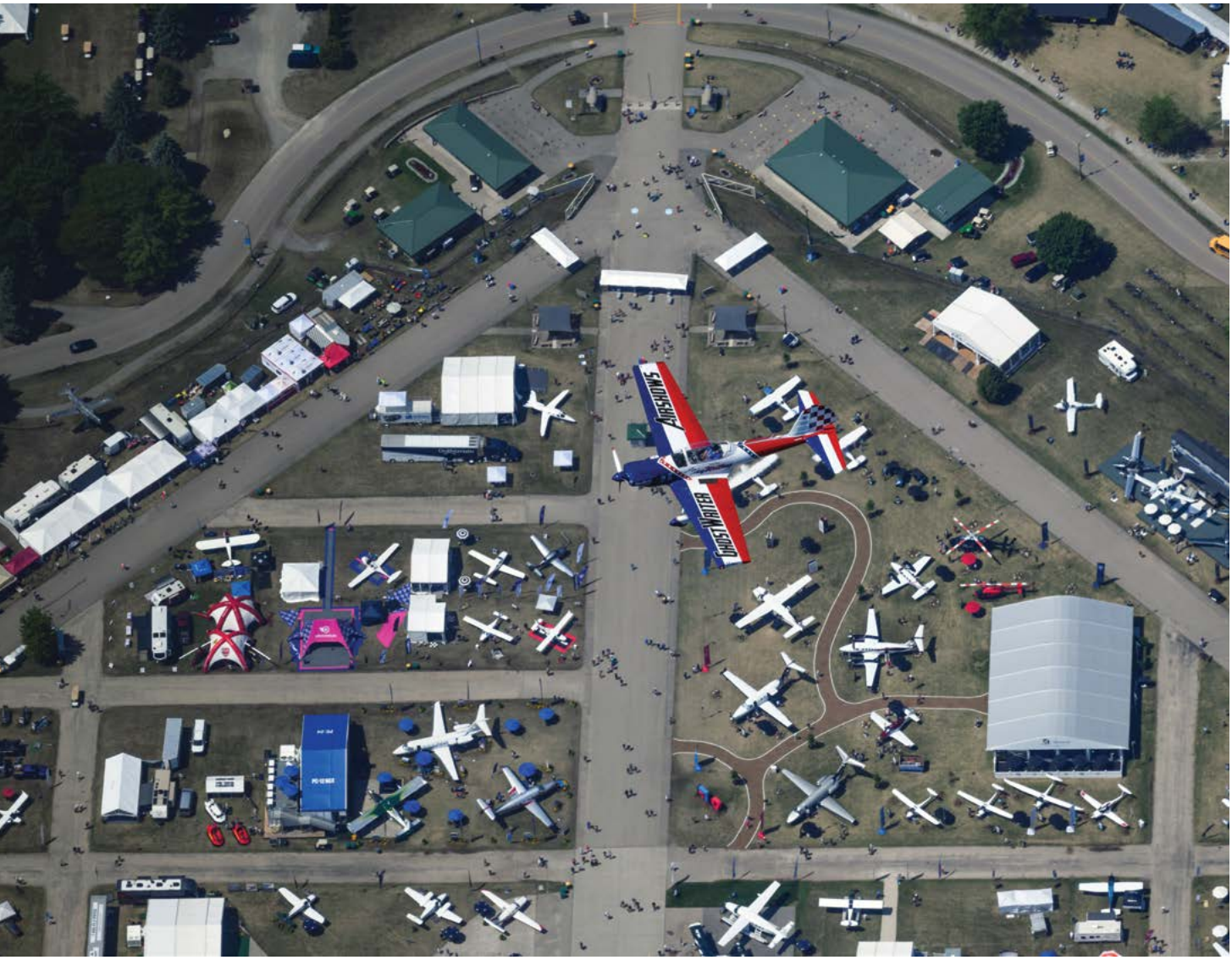
   To prevent the passenger oxygen masks from dropping if the cabin accidentally goes above 12,000 feet, pull the Oxygen Control circuit breaker, under Environmental on the right CB panel.
10. Turn the bleed air switches back on; the test is complete.

    This test will tell you if one of your flow packs is weak or not working and if your plane has an excessive leak rate. Another thing you can do is have a pilot with good hearing (they exist, right?) get into the cabin of your plane while at max differential and listen near the emergency exit and the door for leaks. This information can greatly help your maintenance shop diagnose and repair your pressurization system.

> " ... what happens if our pressurization system is not working the way we expect it to? Is it a flow pack problem? Is it a leak rate problem? ... "

With a pressurization system in good working order those painful ears should be a thing of the past! KA

Zach Cleaver, a Gold Seal flight instructor since 2009, started teaching in King Airs in 2010. He has worked for King Air Academy in Phoenix, Arizona, since 2013 and flies all models of King Airs.



CREDIT: CAMDEN THRASHER

EAA AirVenture Oshkosh 2025 Preview

Experimental Aircraft Association's 72nd annual fly-in convention is July 21-27

The 72nd edition of the EAA AirVenture Oshkosh fly-in convention is themed around the tagline "One Week: Endless Possibilities." Hosted by the Experimental Aircraft Association, the event runs July 21-27 at Wittman Regional Airport (KOSH) in Oshkosh, Wisconsin.

The event has grown from a small grassroots homebuilders air show in 1953 to the largest aviation gathering in the world encompassing all types of aviation, pilots and enthusiasts from across the globe. AirVenture saw record attendance of 686,000 visitors in 2024, including attendees from 94 nations.

Each July, KOSH becomes the busiest airport in the world and the surrounding grounds are full of airplanes and activity. A highlight for many visitors is the air show schedule: nine over seven days, including night and afternoon shows that draw the world's top performers.

Details are too numerous to publish; go to *eaa.org/airventure* for the latest air show lineup, aircraft scheduled for static display, exhibitors, events and personalities.

Here are a few highlights EAA has announced:

Centennial celebrations for Goodyear airship, Fairchild and Travel Air

Goodyear will celebrate the 100th anniversary of its famed airships by bringing two of them to EAA AirVenture Oshkosh. Also, Fairchild and Travel Air – iconic aircraft types from the golden age of aviation – will celebrate their centennial years with airplanes on the AirVenture flightline and additional programs and activities held in conjunction with the type clubs.

Although Goodyear's aviation efforts began in 1910 with the creation of its aeronautics department, the first branded airship flights in 1925 marked the start of a legendary icon. The appearance of two airships marks a unique occurrence in the more than 50 years that Goodyear has brought its blimps and airships to

CREDIT: DAVE SWARTZ

Each July, KOSH becomes the busiest airport in the world and the surrounding grounds are full of airplanes and activity.

CREDIT: SCOTT SLOCUM

FIFI and Doc, the world's only two flying examples of the Boeing B-29 Superfortress, first flew together in 2017 at EAA AirVenture Oshkosh.

Oshkosh. Plans are for the airships to participate in flying activities during the week, and at least one of them is scheduled to be parked near the EAA Aviation Museum when not flying.

Fairchild Aircraft was founded in 1925 as a builder of aircraft stable enough for aerial photography and mapping. While the company created a significant number of civilian passenger airplanes in its first 15 years, it was during World War II that the company turned to military aircraft production, especially trainers and transports. Its final major production aircraft was the legendary A-10 Thunderbolt II, also known as the Warthog, from 1972 through 1984. The EAA Aviation Museum currently has the oldest Fairchild aircraft in existence, a 1927 FC-2W model.

The Travel Air Manufacturing Company's short history was a partnership of three famous names in aviation history: Walter Beech, Clyde Cessna and Lloyd Stearman of Wichita, Kansas. The three men were part of the Swallow Aircraft Company but in 1925, struck out on their own to create versatile biplanes in a 30-by-30-foot space in downtown Wichita. The company was eventually absorbed into the Curtiss-Wright Corporation in 1929 and ended production in 1931 during the Great Depression. EAA has a Travel Air 4000, which is one of the oldest aircraft in the world offering passenger flights with its seasonal operations at the EAA Aviation Museum's Pioneer Airport.

B-29s will reunite

The world's only two flying examples of the Boeing B-29 Superfortress will be back at AirVenture supporting the 80th anniversary of the end of World War II and post-war aviation technology.

FIFI and Doc have made only about a half-dozen joint public appearances since first flying together at EAA AirVenture in 2017. The plan is for each airplane to alternate time featured on EAA's Boeing Plaza with offering flight

experiences at nearby Appleton International Airport. The two are scheduled to make a formation flight together the evening of July 23.

FIFI is owned and operated by the Commemorative Air Force's B-29/B-24 Squadron of Dallas, Texas. Doc is owned and operated by Doc's Friends, Inc., a non-profit based in Wichita, Kansas.

Humanitarian aviation on display

Public benefit flying will be a prominent theme by spotlighting the aircraft, crews and organizations that supply aid to victims of natural disasters, war, famine and other emergencies around the globe. The last DC-8 registered in the United States, owned by the international Christian relief organization Samaritan's Purse, will spend the week on Boeing Plaza. Nearby will be a selection of general aviation aircraft also involved in public benefit flying. Also scheduled to appear is the Air Care Alliance, a nonprofit organization that represents more than 50 volunteer pilot groups.

Korean War era aviation innovation highlighted

The aviation innovation and technology of the Korean War era, which this year marks 75 years since its beginning, will be in the spotlight with aircraft on display showcasing the transition from piston-powered aircraft to fighter jets. These aircraft will be included in air show demonstrations and on display in Boeing Plaza and the Warbirds area.

Among the Korean War-era piston-powered aircraft to participate are the Corsair, P-51 Mustang, B-29 Stratofortress, AD-4 and AD-5W Skyraiders, PB4Y and L-5. Jet aircraft include the P-80, F-84, MiG-15, MiG-17 and F-86 Sabre. This year also marks the 85th anniversary of the Corsair, the 80th anniversary of the A-1 Skyraider and the 75th anniversary of the MiG-17. KA

Updated Oshkosh NOTAM Available

The EAA AirVenture Oshkosh 2025 Notice includes several important Federal Aviation Administration-approved updates and is essential reading for pilots flying into KOSH or nearby airports. These arrival and departure procedures are in effect from noon CDT on Thursday, July 17 until noon CDT on Monday, July 28.

Pilots can download a digital version at *EAA.org/NOTAM*.

Textron Aviation Recruiting King Air Owners for 2026 Special Olympics USA Games

Textron Aviation has put out the call for owners and operators to come together for the ninth Special Olympics Airlift, a monumental event the company coordinates to transport hundreds of athletes and coaches across the country to the 2026 Special Olympics USA Games in Minnesota's Twin Cities.

The airlift mobilizes hundreds of volunteer Beechcraft, Cessna and Hawker pilots and aircraft from across the country to create the world's largest peacetime airlift and provide a once-in-a-lifetime experience for Special Olympics athletes. Owners and operators who sign up to provide flights on Friday, June 19, 2026, and Saturday, June 27, 2026, will enable champions from all corners of the nation to travel to and from the host city regardless of financial or logistical challenges.

Since the inception of the Special Olympics Airlift in 1987, Beechcraft, Cessna and Hawker owners have transported more than 10,000 athletes and coaches to various Special Olympics World and USA Games. Owners and operators in every state are needed to donate the use of Beechcraft King Air turboprops, Beechcraft Beechjet and Premier jets, Cessna Citation jets and Hawker jets.

"The airlift is more than just a flight; it's about giving these champions the chance to shine and achieve their dreams on a national stage," Ron Draper, president & CEO, Textron Aviation, said in a news release. "Seeing the excitement and anticipation on the athletes' faces as they embark on their journey to and from the games is incredibly moving. We need Cessna, Beechcraft and Hawker customers to join us in this heartfelt mission, volunteering their aircraft and time to make a profound and lasting impact on the lives of these athletes and their families."

During the 2026 event, participating aircraft known as "doves" are expected to touch down or take off from St. Paul Downtown Airport Holman Field (KSTP) every three minutes throughout a 10-hour period.

The 2026 Special Olympics USA Games will be one of the biggest U.S. sporting events of the year, drawing tens of thousands of fans to celebrate the ability of over 3,000 athletes from all 50 states as they compete in 16 Olympic-type team and individual sports. Happening at the University of Minnesota and the National Sports Center in Blaine, the sports competitions are a national celebration of inclusivity, changing perceptions and the ability of the human spirit to rise above limitations.

Visit *airlift.txtav.com* to learn how to become a dove for this nationwide aviation event.

Colombia Approves STC 5-blade MT-Propeller on King Air 200 & 300 Series

MT-Propeller has received acceptance from Aeronautica Civil Colombia of its European Union Aviation Safety Agency supplemental type certificate No. 10050861 for the installation of the 5-blade Quiet Fan Jet Propeller on the King Air 300, 300LW, B300 and B300C powered by Pratt and Whitney PT6A-60A/67A. The company also received approval in Colombia for the STC (No. 10036196) for the 5-blade Quiet Fan Jet Propeller on the

King Air 200 series aircraft powered by P&WC PT6A-41, -42, -52 and -61 engines.

In addition to EASA, installation for both STCs is already certified by the FAA, Transport Canada, ANAC Brazil, INAC Venezuela and DGAC Mexico.

According to the company, installation of the 5-blade MT-Propeller products provides aesthetic ramp appeal and general performance improvement (8% take-off & climb, 4-5 kts cruise on King Air 300/350 series aircraft and 5% take-off & climb, 3 kts cruise with 1,800 rpm for King Air 200 series aircraft), plus:

- Bonded-on nickel alloy leading edges for superior erosion protection of the blades
- No propeller speed restrictions on ground while operating in low idle
- More ground clearance for less FODs
- Significant cabin noise and vibration reduction
- No life limitation and are repairable in case of FOD.

McCauley High-Performance Propeller for B300 Series Certified in Brazil

McCauley Propeller Systems, a division of Textron Aviation, announced its newest C780 propeller for the King Air B300 series, featuring four aluminum swept blades and a 105-inch diameter, has successfully achieved certification from the National Civil Aviation Agency of Brazil (ANAC). Brazil is the second-largest installed base globally for King Air turboprops.

"The high-performance McCauley C780 propeller, with its lightweight scimitar blade design, will improve the flying experience for over 700 King Airs in Brazil," Jason Hull, vice president and general manager, McCauley Propeller Systems, said in a news release. "The propeller offers versatility and performance enhancements to equip customers in the region with smart solutions for their unique missions and circumstances."

The company said the C780 propeller offers B300 owners and operators propeller weight savings of more than 50 pounds compared to previous options, increased takeoff and climb performance, reduced noise in the cabin and cockpit, and extended time between overhaul of 5,000 hours or 72 months. Textron Aviation service centers or authorized McCauley service facilities offer installation without additional modifications required, and the C780 comes with Textron Aviation's 5,000 hours or 36-month limited propeller warranty.

Find more information at *mccauley.txtav.com/featured-products*.

Pilot Creates App for Finding Airport Eats

Rick Rzepka, a Northeast Ohio-based dentist and owner of a 1970 Beechcraft Bonanza V35B, combined two of his passions and believes other pilots can benefit from his work in developing what he believes is the only app dedicated to flying and eating.

"In my 22 years of flying, I have always loved an adventure that included both flying and eating," Rzepka said in a news release. "For years, I had been unable to find a comprehensive, real-time, up-to-date resource to connect those two favorite pursuits, so I decided to create one. Whether the plan is a quick there and back or a longer journey, Fly-n-Eat is designed to be a helpful travel companion when you're plotting a course for a satisfying meal along the way."

Fly-n-Eat is designed to put a wealth of restaurant information at your fingertips before you even leave the ground. The app connects you with up-to-date information on more than 340 restaurants (and growing) either onsite or within a short distance of county and regional airports across the continental United States. Features include:

- your choice of trip planning options: fly-eat-back to home base for short hops or point-to-point when traveling longer distances or even cross-country journeys
- airport locations (city/state/region), call letters, time zones
- restaurant names, addresses, phone numbers
- hours of operation and descriptions of décor, ambience and other amenities
- links to restaurant websites and menus

The app also includes a CFI/CFII database to help pilots connect with instructors. "If a pilot is enroute to a destination and realizes that he or she needs a flight review, Fly-n-Eat sets them up for the perfect combination – flight certification and culinary adventure in a single trip," said Rzepka, who has also flown a Cessna 182RG Turbo, Cessna 172, Piper Warrior, Piper Dakota and Piper Saratoga.

Fly-n-Eat costs $4.99/month or $49.99/year and is available on Apple and Google. Learn more at *fly-n-eat.com*. KA

AOPA Applauds FAA Withdrawal of Proposed Airman Medical Denial Policy

The Aircraft Owners and Pilots Association applauds the Federal Aviation Administration's decision to withdraw its proposed changes to the airman medical certification process – changes that would have replaced the longstanding practice of deferring incomplete medical applications with the issuance of immediate denials.

The policy, initially scheduled to be implemented in January, would have significantly increased complexity for many pilots. The FAA delayed implementation twice after AOPA, in partnership with other aviation industry organizations, voiced strong concerns about the policy's unintended consequences.

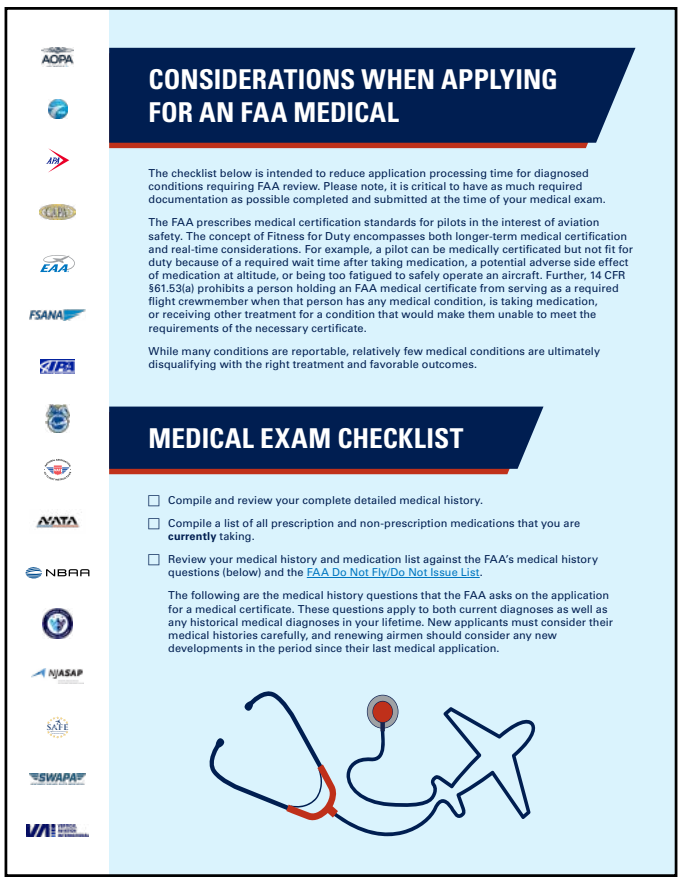
In response, the FAA held a listening session on April 23, during which Acting FAA Administrator Chris Rocheleau said the proposal would not be implemented. Instead, the FAA agreed to work with AOPA and other organizations on a pilot medical education campaign to help applicants prepare for medical exams and reduce delays.

As a result, the organizations have released a comprehensive medical checklist with guidance on what is needed when submitting a medical application.

In addition, during the same meeting, Federal Air Surgeon Dr. Susan Northrup and Deputy Federal Air Surgeon Dr. Brett Wyrick announced a series of forthcoming reforms aimed at making the medical certification process more timely, consistent and transparent, while also reducing delays for applicants.

First, updates to the FAA MedXPress system, the platform used to submit medical information, are in development and will provide clearer instructions for pilots before entering medical information. Additional future improvements will allow pilots and aviation medical examiners to upload and track cases more efficiently.

Second, as part of the pilot medical education campaign, the FAA is also working to develop simple instructions and



AOPA

CONSIDERATIONS WHEN APPLYING FOR AN FAA MEDICAL

The checklist below is intended to reduce application processing time for diagnosed conditions requiring FAA review. Please note, it is critical to have as much required documentation as possible completed and submitted at the time of your medical exam.

The FAA prescribes medical certification standards for pilots in the interest of aviation safety. The concept of Fitness for Duty encompasses both longer-term medical certification and real-time considerations. For example, a pilot can be medically certificated but not fit for duty because of a required wait time after taking medication, a potential adverse side effect of medication at altitude, or being too fatigued to safely operate an aircraft. Further, 14 CFR §61.53(a) prohibits a person holding an FAA medical certificate from serving as a required flight crewmember when that person has any medical condition, is taking medication, or receiving other treatment for a condition that would make them unable to meet the requirements of the necessary certificate.

While many conditions are reportable, relatively few medical conditions are ultimately disqualifying with the right treatment and favorable outcomes.

MEDICAL EXAM CHECKLIST

- ☐ Compile and review your complete detailed medical history.
- ☐ Compile a list of all prescription and non-prescription medications that you are **currently** taking.
- ☐ Review your medical history and medication list against the FAA's medical history questions (below) and the FAA Do Not Fly/Do Not Issue List.

The following are the medical history questions that the FAA asks on the application for a medical certificate. These questions apply to both current diagnoses as well as any historical medical diagnoses in your lifetime. New applicants must consider their medical histories carefully, and renewing airmen should consider any new developments in the period since their last medical application.

Yes/No		Yes/No	
☐ ☐	Frequent or Severe Headaches	☐ ☐	Substance Dependence or Failed a Drug Test Ever: or Substance Abuse or Use of Illegal Substance in Last Two Years
☐ ☐	Dizziness or Fainting Spell	☐ ☐	Alcohol Dependence or Abuse
☐ ☐	Unconsciousness for Any Reason	☐ ☐	Suicide Attempt
☐ ☐	Eye or Vision Trouble Except Glasses	☐ ☐	Motion Sickness Requiring Medication
☐ ☐	Hay Fever or Allergy	☐ ☐	Military Medical Discharge
☐ ☐	Asthma or Lung Disease	☐ ☐	Medical Rejection by Military Service
☐ ☐	Heart or Vascular Trouble	☐ ☐	Rejection for Life or Health Insurance
☐ ☐	High or Low Blood Pressure	☐ ☐	Admission to Hospital
☐ ☐	Stomach, Liver, or Intestinal Trouble	☐ ☐	Other Illness Disability or Surgery
☐ ☐	Kidney Stone or Blood in Urine	☐ ☐	Medical Disability Benefits
☐ ☐	Diabetes	☐ ☐	History of (1) any conviction(s) involving driving while intoxicated by, while impaired by, or while under the influence of alcohol or a drug; or (2) history of any conviction(s) or administrative action(s) involving an offense(s) which resulted in the denial, suspension, cancellation, or revocation of driving privileges, or which resulted in attendance at an educational or a rehabilitation program.
☐ ☐	Neurological Disorders; Epilepsy, Seizures, Stroke, Paralysis, etc.	☐ ☐	History of Nontraffic Conviction(s) (misdemeanors or felonies).
☐ ☐	Mental Disorders of Any Sort; Depression, Anxiety, etc.	☐ ☐	

Each item under this heading must be checked either "yes" or "no." For all items checked "yes," a description and approximate date of every condition the applicant has ever been diagnosed with, had, or presently has must be given in the EXPLANATIONS box. If information has been reported on a previous application for airman medical certification and there has been no change in the condition, the applicant may note "PREVIOUSLY REPORTED, NO CHANGE" in the EXPLANATIONS box, but the applicant must still check "yes" for the condition.

The FAA's online Guide for Aviation Medical Examiners, as well as the MedXPress User Guide, contain detailed dispositions of most diagnoses on this list, and **you should advise your AME of any "yes" response on this list PRIOR to your visit.** Additional information about the reporting of conditions can be found through pilot advocacy associations, unions, and commercial services.

- ☐ If you have any questions, concerns, or discrepancies, **please consult your Aviation Medical Examiner (AME) or pilot advocacy group with any concerns PRIOR to submitting your medical application.** Be wary of sources of information that may be dated or based on anecdotal accounts. FAA standards and requirements are regularly updated, and personal experience can vary based on several factors.
- ☐ Complete the MedXPress medical application and print it for your records. Because of the need to repeat the reporting of information from one application to the next, it is always advisable to keep a copy of your medical application for your records. You can also request your prior application(s) from the FAA Office of Aerospace Medicine.
- ☐ Schedule a physical examination with an AME. Supply your MedXPress Confirmation Number to the AME only when you are ready to commit to undergoing the FAA physical exam.
- ☐ Bring all documentation to your medical appointment. If you do not have the required documentation, the AME will likely be required to defer your application to the FAA for follow-up.
- ☐ If your medical is deferred to the FAA for follow-up, please supply any needed documentation as soon as possible.
- ☐ **When you are issued your medical certificate, fly safely in compliance with 14 CFR §61.53(a).**

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FAQs for various medical conditions to help pilots better understand what documentation the FAA will need before they apply for a medical certificate. Northrup also mentioned, in response to a participant's question, that the FAA may consider exploring the expansion of the Conditions AMEs Can Issue (CACI) protocols, which enable AMEs to issue medical certificates for applicants with certain medical conditions.

Lastly, Northrup committed to reducing the wait times for pilots with deferred special issuance cases from an average of 155 days to 90 days over the next three years.

"We wholeheartedly support the FAA's decision to move away from the medical denial letter policy and instead work with AOPA and others to help educate and provide much needed medical exam guidance to new and existing pilots," AOPA President and CEO Darren Pleasance said in a news release. "Dr. Northrup and her team are working to reduce delays in the FAA's medical system and improve clarity and transparency in the application process – changes which are long overdue and which we very much support. Clear and detailed guidance on what medical documentation is required up front will help in reducing that burden."

In addition to these changes, AOPA is participating in an aerospace medical working group, which Congress mandated as part of the FAA Reauthorization Act of 2024, focused on broader improvements to the medical certification process and addressing mental health issues among pilots.

Currently, the FAA receives more than 450,000 airman medical applications annually, 50,000 of which fall under special issuance categories. The FAA also said that half of all applications – 225,000 – experience delays, often because they lack the necessary documentation, which can add up to eight weeks to the process.

Textron Aviation Opens Career and Learning Center

In late April, Textron Aviation announced its new $40 million Career & Learning Center is complete and fully operational serving prospective, current and future Textron Aviation employees. The state-of-the-art facility on the company's East Wichita Campus expands the training footprint to more than 75,000 square feet.

"The Textron Aviation Career & Learning Center is an important investment in building the next generation of aviation manufacturing, support and professional talent," Ron Draper, president and CEO, said in a news release. "Recruiting, hiring and training a world-class workforce is vital to our ability to provide the best aviation experience for our customers."

The Career & Learning Center is divided into four areas: Career Zone, Pre-Employment Zone, Learning Zone and Design. Build. Fly. Zone.

Within the Learning Zone, there are professional and technical training rooms as well as a simulated manufacturing floor in the west bay hangar. With eight weeks of training and support, this industry-leading model is designed to mechanics new to aviation manufacturing with the technical knowledge needed to move seamlessly into permanent roles with increased confidence and productivity.

The Design. Build. Fly. Zone is dedicated to developing early interest in aviation as a career. The space accommodates age-appropriate, hands-on activities – including a Cessna Skyhawk 172 simulator – to engage K-12 students and educators.

"We are passionate about creating environments where future and current employees can be inspired and thrive," Maggie Topping, senior vice president, Human Resources & Communications, said in a news release. "The Career & Learning Center is equipped with the latest technology to provide realistic environments for training scenarios that mimic the reality of our manufacturing operations, setting our employees up for success from day one."

Textron Aviation also recently announced its sponsorship of the Heroes MAKE America Airframe & Powerplant certification training program in conjunction with The Manufacturing Institute, the workforce development and education affiliate of the National Association of Manufacturers.

The initiative is designed to bridge the skills gap between the military and manufacturing industries by equipping active duty, transitioning service members and veterans with in-demand qualifications and industry-specific certifications needed to excel in manufacturing careers. The six-week accelerated program, facilitated at Textron Aviation's Career & Learning Center, includes two weeks of training prep and career readiness, followed by four weeks of A&P certification training and testing.

Learn more about the center and the Heroes MAKE America A&P Certification Training program at *txtav.com/careers*. KA

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