King Air

A MAGAZINE FOR THE OWNER/PILOT OF KING AIR AIRCRAFT

NOVEMBER 2022 • VOLUME 16, NUMBER 11 • $6.50

King Air Activist

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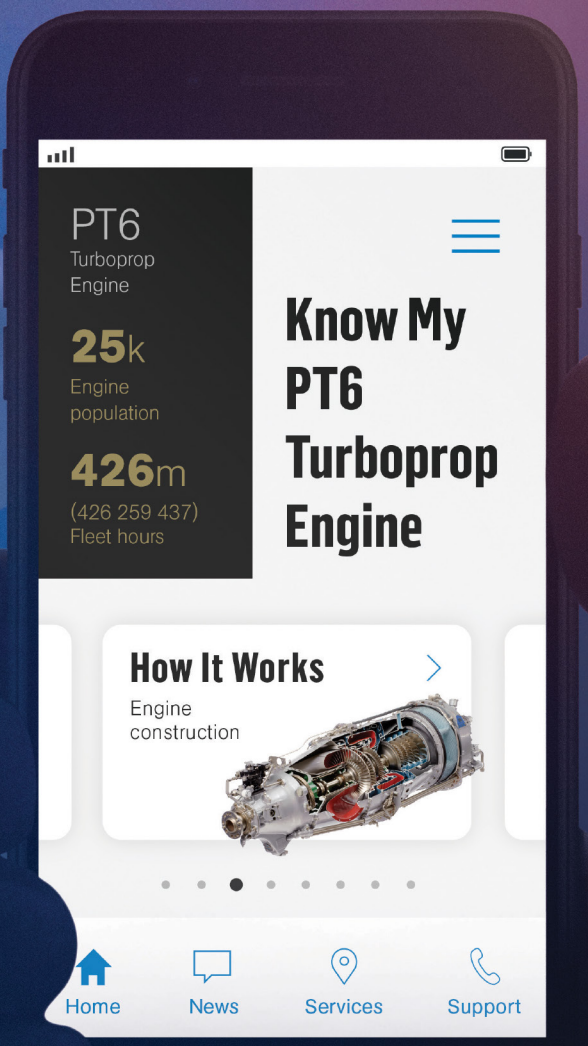

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Contents

EDITOR
Kim Blonigen

EDITORIAL OFFICE
2779 Aero Park Dr.,
Traverse City MI 49686
Phone: (316) 652-9495
E-mail: editor@blonigen.net

PUBLISHERS
Dave Moore
Village Publications

GRAPHIC DESIGN
Rachel Coon

PRODUCTION MANAGER
Mike Revard

PUBLICATIONS DIRECTOR
Jason Smith

ADVERTISING DIRECTOR
Jenna Reid
King Air Magazine
2779 Aero Park Drive
Traverse City, MI 49686
Phone: 316-409-7033
E-mail: jenna.reid@vpdcs.com

ADVERTISING ADMINISTRATIVE COORDINATOR AND REPRINT SALES
Betsy Beaudoin
Phone: 1-800-773-7798
E-mail: betsybeaudoin@villagepress.com

SUBSCRIBER SERVICES
Rhonda Kelly, Mgr.
Kelly Adamson
Jessica Meek
Jamie Wilson
P.O. Box 1810
Traverse City, MI 49685
1-800-447-7367

ONLINE ADDRESS
www.kingairmagazine.com

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COVER PHOTO

Courtesy of Sunset Logistics
(Credit: Kristine Leathers)

TURNING PA INTO ACTIO

Texan Makes His Mark on the Ground and in the Air

by MeLinda Schnyder

Photographs by Kristine Leathers

ASSION
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John Glidewell likes to imagine having been a fly on the wall in the early 1960s at Beech Aircraft Corporation during conversations between company president Olive Ann Beech, her engineering executives and engine supplier Pratt & Whitney as they were considering combining the proven airframe of the Model 80 series Queen Air with the gas turbine power of the new, innovative PWC PT6A turboprop engine.

“We’re fortunate that Mrs. Beech was willing to put her money and her name on the line when a lot of people were against the idea of the King Air. They didn’t realize they were building a turboprop that would outlast every other brand.”

“We’re fortunate that Mrs. Beech was willing to put her money and her name on the line when a lot of people were against the idea of the King Air. They didn’t realize they were building a turboprop that would outlast every other brand,” Glidewell said of the Beechcraft King Air Model 90 that entered service in 1964 and expanded quickly to a line of business turboprops that today tops 7,700 aircraft delivered.

“The way I look at it, we’re sitting here as owners and pilots reaping all the benefits of one of the most reliable airplanes ever built,” he added. “It seems like we should do something to honor the people who brought us these great airplanes.”

The King Air B200 owner and pilot was so sure other King Air devotees felt the same that he reached out to his friend Kevin Carson at King Air Academy, who founded and at the time was organizing the annual King Air Gathering events. They did some research and could not find a Hall of Fame dedicated to the King Air, so they got to work creating one. Both men were part of a selection committee that inducted the inaugural class of the King Air Hall of Fame at the 2022 King Air Gathering held at the Beechcraft Heritage Museum in Tullahoma, Tennessee. The inductees ranged from early pioneers including Mrs. Beech and LeRoy Clay, who added the T-tail to the King Air 200, to recipients who have continued to improve the King Air line or supported owners and pilots of the King Air family, including James Raisbeck and Tom Clements (see box on page 5 for a list of all recipients).

This wasn’t the first time Glidewell has gotten an idea he can’t shake until he sees it through. He was fascinated with big trucks as a kid and turned that notion into a successful career, he got the flying bug when he was 30 years old and now has 9,000 flight hours, and he says he’s been hooked on the King Air for the past two decades.

A passionate personality

Growing up on a North Texas farm, Glidewell knew he didn't want a career as a rancher. When he was 10 years old, he started riding in a semitruck with a family friend who hauled aggregate for concrete, including crushed rock and sand.

"He asked me one day what I wanted to do when I grew up and I told him I was going to buy him out. He just laughed but about 10 years later I bought his last truck," Glidewell said.

He started in the trucking business in 1975 when he was 21 years old with one semitruck. Today he is owner and president of Sunset Logistics, a Fort Worth-based transportation solutions company he founded in 1988. The company hauls crushed rock, sand and cement powder – all used to make concrete – in a variety of trucks. The Sunset Logistics fleet tops 500 including 300 company-owned and another 200 owner-operators and ranges from tractor trailer end

BEECHCRAFT KING AIR HALL OF FAME

The inaugural class of Beechcraft King Air Hall of Fame inductees included:

Olive Ann Beech

Dean Benedict

Don Cary

LeRoy Clay

Tom Clements

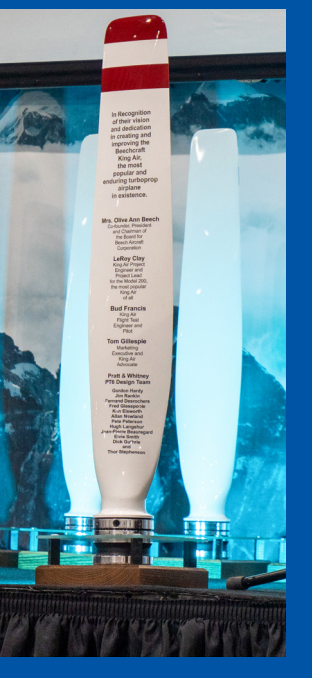
Bud Francis

Tom Gillespie

Pratt and Whitney's PT6 Design Team

James Raisbeck

Please see the article "Overdue Honors" in the June 2022 issue for biographies on all recipients.



dumps and tankers to super dumps and concrete mixers.

He said he got hooked on trucking because the big trucks were fun to drive and he enjoyed being on the go. He felt the same about airplanes when as a 30-year-old, he went up with a flight instructor at Meacham Field in Fort Worth. That was 1984 and by then Glidewell was no longer driving, but managing a growing fleet of nearly 20 trucks.

"I just got hooked on flying," he said. "I got my helicopter rating and was flying a lot. I couldn't get enough of it and realized I needed to figure out a way to use an airplane in the business. It turns out that was pretty easy to do."

"I couldn't get enough of it and realized I needed to figure out a way to use an airplane in the business. It turns out that was pretty easy to do."

Glidewell's flying career aligns with the largest growth period for his business Sunset Logistics, and he definitely refers to it as one of the tools in the company's tool box of success.

The 1981 King Air B200 Glidewell purchased in 2010 already had the Raisbeck modifications he wanted, including the Hartzell four-blade propellers and the ram-air recovery system.

Glidewell recently had his B200 repainted and the interior refurbished to look similar to the new King Air 260 model.

"We have terminals in Houston, San Antonio, Austin, Tyler, Fort Worth and West Texas, where a lot of the airports are fairly small ... The aircraft is dispatched for regular customer visits as well as unexpected service calls and safety surveys."

Combining flying and trucking

Glidewell moved from a Cessna 152 to a Beechcraft Bonanza A36 then to a Cessna 340 before buying his first King Air in 2000. He had the King Air E90 for 10 years before moving up to his current King Air B200 in 2010.

His flying career also aligns with the largest growth period in his business, which operates in every region of Texas – a large state with many areas that can take time to access by driving or flying commercially – and also crosses into Arkansas, Oklahoma and Louisiana.

"We have terminals in Houston, San Antonio, Austin, Tyler, Fort Worth and West Texas, where a lot of the airports are fairly small," he said. "The King Air plays a big part

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in customer service, sales, and all of our public relations activities. It's another tool in the Sunset toolbox and it's helped us be successful."

"The aircraft is dispatched for regular customer visits as well as unexpected service calls and safety surveys," Glidewell said. He also uses it to take customers on golf outings and pheasant hunts. He's flown throughout the continental U.S. as well as to Alaska and the Bahamas. He typically flies the King Air about 250 hours a year, though some years have topped 300 flight hours.

When he purchased the 1981 King Air B200, it already had the Raisbeck modifications he knew he wanted, including a ram-air recovery system, dual aft body strakes, wing lockers and Hartzell four-blade props. He added Garmin 650 and 750 touch-screen navigators and, in 2021, he had Murmer Aircraft Services in Houston repaint the exterior and refurbish the interior to look like a new 260 model.

Since he started operating King Air aircraft, maintenance has been handled at ProAviation at Meacham Field, where the aircraft is based. He has trained at King Air Academy since 2015 and has attended all of the King Air Gatherings along with about four Beech Party events in Tullahoma.

Is this his forever King Air?

"Well, I'm 68 years old and I've got it fixed up the way I want it," he said. "I'm comfortable with it and I have a lot of time in it. I think it'll probably be my last."

Who knows, though, he could get another one of his ideas. KA


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Proactive Planning

As the Aviation Insurance Market Evolves, So Should Your Strategy

by Kyle White

As Florida grapples with the devastation of Hurricane Ian, its impact on the insurance industry is already making the headlines. Estimates of "insurable losses" are between $25-$40 billion. While this is a big range, even the lowest of estimates is a meaningful, industry changing number. You will hear of possible litigation between the insurance companies and the policy holders to determine the cause of the occurrence. Was the damage caused by wind or flood? The results will determine which insurance carriers can afford to stay solvent, and those that will pull out of the Florida market altogether. This is not a new issue for the state. The Florida Insurance Guaranty Association (FIGA) was created in 1970 to help protect consumers. FIGA is funded through taxes on insurance policies, which now include aircraft policies. If an insurance carrier becomes insolvent and a court orders them to be liquidated, their outstanding claims are processed through the FIGA.

The taxes from FIGA are pooled together to provide some relief to those suffering a financial loss that may not be remedied otherwise. The aviation insurance industry is attempting to self-adapt so they don't end up in dire straits and at the mercy of state sponsored facilities like FIGA. You can learn more about FIGA at *www.figafacts.com*.

Insurance companies are, like most companies, in the business to make money. If they aren't making money in a particular industry segment, they leave it. For example, about 15 years ago you may remember the insurance carrier Travelers. It came to the aircraft insurance market and took on risk for a fraction of the price of its competitors. Unsurprisingly, they were taking on significant risk for inadequate premium, and pulled out of the aviation segment after about 18 months. The roller coaster of rates is not conducive to an owner trying to manage annual operating budgets.

Most of the day-to-day claims in the aviation market segment are measured in the thousands to tens-of-thousands of dollars. However, a "bell ringer" of a loss that ends up in the tens or hundreds of millions of dollars could cause a carrier to leave the aviation sector entirely. Many of the ultra-high-end net worth business jet owners and Fortune 500 companies have *at least* $500,000,000 of coverage. A major accident that results in loss of life and an additional $70,000,000 business jet, definitely classifies as a "bell ringer." As the aviation insurance carriers take a step back and evaluate their portfolios, they are becoming more strategic in managing the risk they assume. This strategy isn't necessarily new; the airlines have structured their coverage this way for years. It is commonly referred to as a "quota-share" placement. This means multiple carriers participate on one policy with a defined percentage of the risk. With large jury awards becoming more common and increasing costs of aircraft hulls, we are seeing more aircraft insurance companies evolving and making quota-share placements in the general aviation sector more commonplace.

In a perfect scenario, 10 carriers would each assume 10% of the global aircraft market. This would mean each

> *"An insurance carrier's appetite for certain risk profiles can also change over time. What they once viewed as an opportunity, may now seem like an unwanted exposure."*

carrier would only be liable for 10% of any given loss, thus protecting them from the potential "bell ringer" claims. In the King Air market there are many liability limit variations between each carrier, but a good rule of thumb for a single pilot operation seems to be $10,000,000. This means if you have a $5,000,000 King Air and the $10,000,000 in liability coverage, the total carrier capital exposure is $15,000,000. This is a great opportunity to do a quota-share placement and avoid a plethora of declinations to quote from underwriters because the risk is seen as too large.

Quota-share placing brings more stability to the consumer, as well as the marketplace. For example, if Travelers had come to market and subscribed to just a 25% share of a $40,000 policy premium, their piece would have been $10,000. If, at renewal, they felt they needed more money, they could have increased their pricing by, perhaps, 15% or $1,500. If other carriers left their pricing the same, this equates to a 3.75% increase to the King Air owner. Much more palatable than a 15% increase. On the flip side, if Travelers kept their 25% stake, but reduced their premium at renewal to $8,000, the total premium reduction would be just over 5%. Both scenarios offer more stability for annual budgeting of aircraft costs versus the unsustainable price decreases we saw 15 years ago, followed by the shocking increases that came to fruition a few years ago as the market attempted to correct.

An insurance carrier's appetite for certain risk profiles can also change over time. What they once viewed as an opportunity, may now seem like an unwanted exposure. For example, I recently saw a post on social media where an aircraft owner stated, "My insurance agent said my premiums went up because I'm over 70. But that doesn't make sense because I've been over 70 for five years now!" Five years ago many carriers were comfortable taking on this risk profile, but it is changing in the current market.

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"As the market is evolving, we must pause and evolve our own navigation of the aviation insurance marketplace. This means our strategy must change too."

This is where quota-share can, once again, work in your favor. If your carrier appetite has changed where your risk profile is concerned, such as pilot age, a quota-share placement makes it much easier for your broker to remove a participating line carrier and find a replacement, as opposed to finding you a new carrier to assume 100% of the risk, or worse, not being able to find any coverage.

As the market is evolving, we must pause and evolve our own navigation of the aviation insurance marketplace. This means our strategy must change too. You, the King Air owner/operator, should consider how to capitalize on the market and its options, such as having multiple carriers on your placement. The aviation insurance industry is small, and the underwriters are taking notes. You may not realize it, but you have a reputation amongst the aircraft insurance markets; humans are building out your quotes, not computers. Use this human element to your advantage. Start aligning yourself with a "brand ambassador." One of the easiest ways to start building your "brand" is by showing loyalty to your current carrier. If you open your policy up to a quota-share placement, you allow other carriers to have a slice of your business, while keeping them competitive on pricing and still show loyalty to your "lead" carrier.

Your broker is another major representation or ambassador of your brand. They should be respected by the underwriters they work with and viewed as conducting business with integrity and trust. You also want to be confident they understand your specific needs and develop a strategy, with your input, to place your coverage.

Recently, I was on a phone call with a King Air 200 operator who said, "I am amazed that a simple two-page insurance questionnaire is what so many underwriters use to determine my insurability and assume millions of dollars of risk." He is right. The strategy and effort

to evolve with the market and place your coverage requires details and personalization. Transition pilots especially should put a considerable amount of effort into building their marketing submission. The official application still needs to be completed and submitted, but you can provide so much more information to be more than just a name with numbers transposed from a logbook onto a PDF document.

We've all heard about the shortage of homes for purchase across the country over the last five years. Potential buyers started including letters with their purchase offers, hoping to pull the heartstrings of the current owners. Whether it was a newly married couple wanting to start a family in a home that the current owners are selling because they have outgrown it themselves, or a family looking for the "perfect" backyard for their kids to play and dogs to run. Become the letter writer; write your story. Start with describing your aviation background; become relatable to your underwriter. Most aviation underwriters are in this business because they have a passion and interest in aviation, as well. Who knows, maybe you had your first airplane ride as a child in the EAA Young Eagles Program, just like that underwriter. Or maybe you volunteer as a Young Eagles pilot and they were a recipient of one of those donor flights as a youth. The story and details in your letter may have a technical aspect, such as you have a minor in meteorology. To an underwriter, this could be a big attribute that wouldn't be found on the application. We all know King Airs do a great job of getting us just high enough to be in the thick of icing and thunderstorms. Having a strong background and understanding of weather may hold a great deal of appeal to some underwriters. Speaking of weather, maybe you are an owner who is more risk adverse and have self-imposed weather minimums or duty days. Highlight those standards in your document. For example, assume you are a restaurant franchisee in the northwestern part of the country. You have 10 locations that you visit every two weeks. As a busy entrepreneur you also rarely use your King Air for personal use. Share all this information with your underwriter. On their desk it will read as:

- Same 10 airports every two weeks = they know the airport environment and the approaches intimately
- Using the aircraft for business = limited third party passenger exposure, probably employees on board so they will have workers' compensation coverage

- Well established business owner who regularly sees their properties = if the weather is bad they'll go the next day and not push themselves with "get-there-itis"

Your broker can help you with this also, pointing out things that are worth noting in your letter. It should be part of your broker's submission to the markets. After you've built out your profile with the underwriters with your formal applications and letter, reflect on what you are looking for in terms of ancillary coverages, liability limits, deductibles and conditions, for example, training requirements. If you're looking for a quota-share placement, determine which carrier you would like to have lead your policy and which carriers would be a good fit for a following line. Sometimes the pricing/rates are the same for all the participating carriers. Sometimes their pricing will vary, and oftentimes the lead carrier charges a "lead fee" since they are issuing the policy, conditions, exclusions, endorsements, and will administer a claim should one arise.

Before you go to market on your next renewal, have a pre-renewal strategy meeting with your broker. Discuss the current market conditions and the success your broker has had in the last 90 days with risks similar to yours. When reviewing your specific risk, review your ancillary coverages and risk profile. See if they are still adequate, accurate and relevant. Being proactive with your broker and the renewal process will result in managed expectations and more favorable long-lasting results, especially for our aging King Air owners and those seeking higher liability limits with single pilot authority. KA

Kyle P. White is an aviation insurance specialist for a global insurance brokerage company. He has professionally flown King Air 90s and B200s and holds an ATP and multi-engine instrument instructor license. You can reach Kyle at *kpwhite816@gmail.com*

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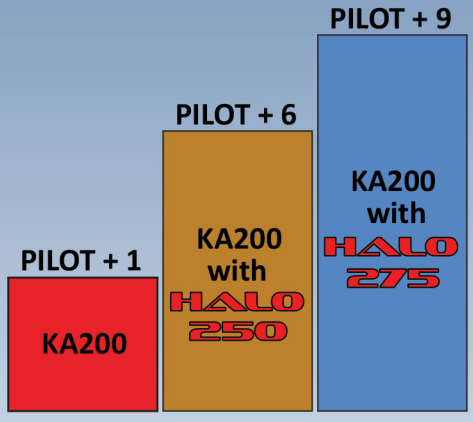

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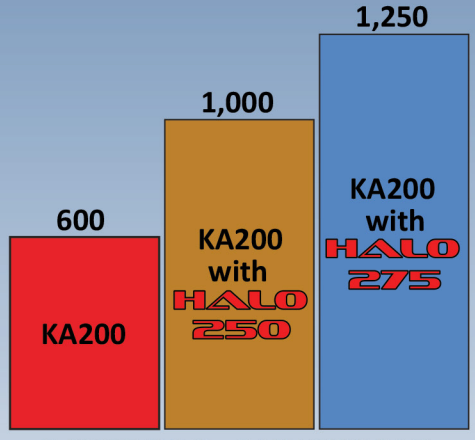

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Save the Date!

King Air Gathering

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Mark your calendars now for King Air Gathering 2023 being held at the World Golf Village in St. Augustine, Florida.

The upcoming Gathering will be a bit different from others in the past, as all seminars and exhibits will be held at the World Golf Village. The resort not only features two championship golf courses collaboratively designed by Arnold Palmer, Jack Nicklaus, Sam Snead and Gene Sarazen, it also includes an IMAX movie theater, outdoor pool, spa, fitness center, and complimentary shuttle service to downtown St. Augustine. Special pricing for rooms will be available for those attending the King Air Gathering (KAG).

Attendees will fly into Jacksonville Executive at Craig Airport (JAXEX) in Jacksonville, and utilizing the services of Sky Harbor Aviation FBO. JAXEX is located about 30-45 minutes north of World Golf Village, and complimentary transportation will be provided by King Air Nation during designated times.

King Air Nation is now spearheading the KAG, which would not be possible without the support of all the exhibitors and sponsors, especially the Platinum sponsors: Blackhawk Aerospace, BLR, Raisbeck Engineering and Stevens Aerospace and Defense Systems.

"The upcoming Gathering will be a bit different from others in the past, as all seminars and exhibits will be held at the World Golf Village."

Details are still being finalized, but updates and more details will be included in upcoming issues of this magazine as well as the website: *www.kingairnation/gathering*

For now, be sure to block off April 12-14, 2023, on your calendar because you won't want to miss this event!

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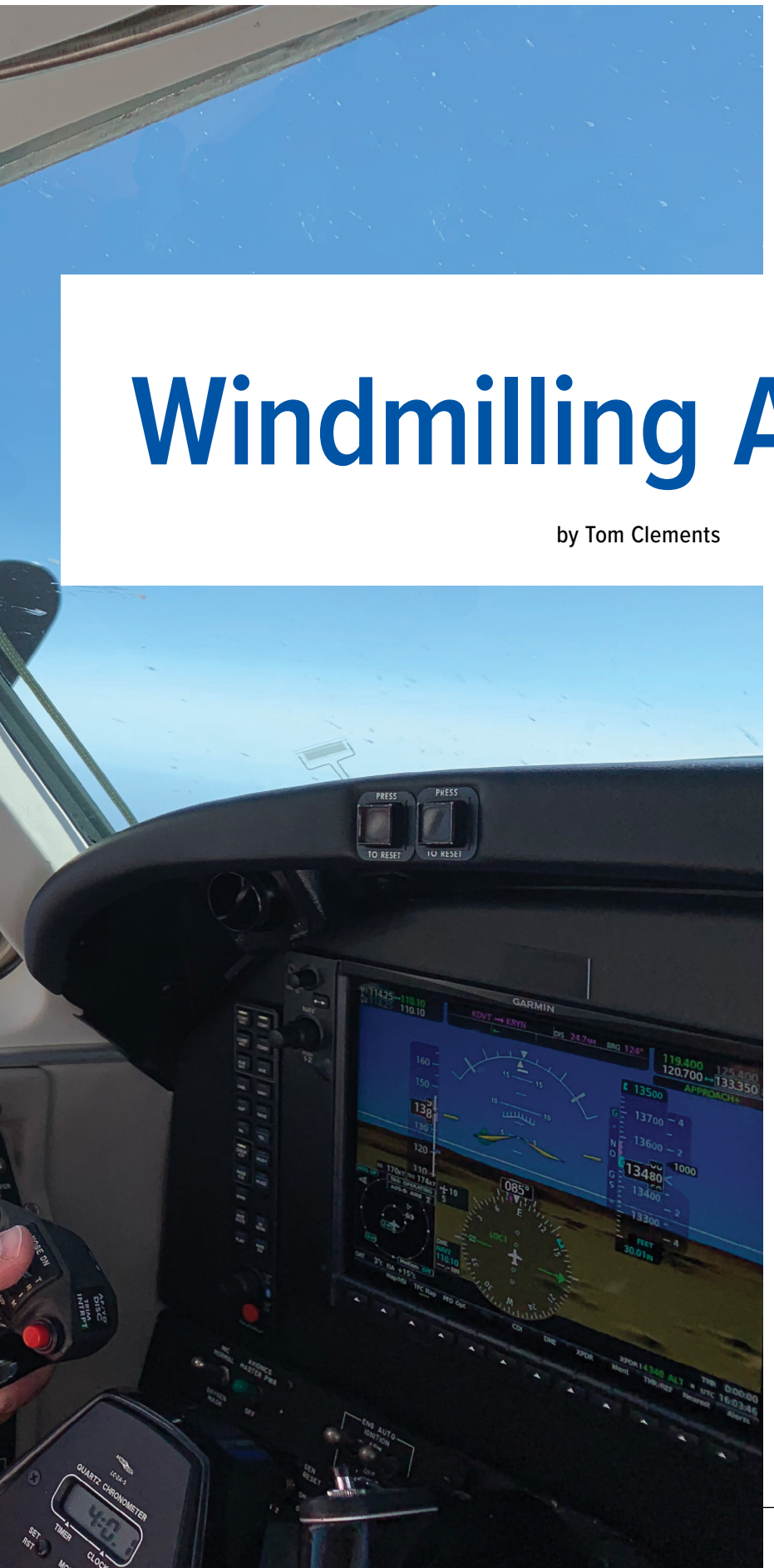

Windmilling Airstarts

by Tom Clements

I recently had a conversation with a representative of one of the propeller manufacturers and it became apparent that he had a couple of misconceptions about the behavior of the King Air propeller both during in-flight shutdowns and airstarts. That prompted me to write this article in an attempt to provide clarification.

As we have discussed in some past articles, the propeller on a PT6 will feather itself after shutdown on the ramp due to lack of oil pressure. Safety is compromised by doing so, however, since the King Air propellers spin for a much longer time than when we feather them manually … that long time period of lethally spinning propellers makes it more likely for a passenger or line person to get injured or killed.

The more headwind there is on the ramp, the longer the propellers will spin, being driven by the wind. Well, when we shut an engine down in flight, there is a lot of headwind, right? This does

"I prefer to always have a propeller windmilling at takeoff RPM while conducting a windmilling airstart, since it leads to very comfortable starting ITTs."

two things of interest involving the propeller. First, the windmilling blast will keep the propeller turning. In fact, hard to believe at first, but at any airspeed above about 140 KIAS, the propeller can windmill as fast as takeoff RPM even with no fuel flow! Second, the cowling design provides ram air to the compressor inlet and the rotating power turbine (the one connected to the propeller) helps suck air through the engine from the compressor out through the exhaust stacks. This combination of push (from the ram air in the cowling) and pull (from the power turbine) keeps the compressor from ever stopping … yielding an N1 or Ng speed of 12% or more, depending upon altitude and airspeed.

So not only does the oil pump inside the propeller governor keep turning at high speed and hence providing normal propeller oil pressure, but also this pump keeps getting fed new oil supplied by the oil pressure pump in the accessory gearbox. Granted engine oil pressure will have dropped well out of the normal range since the pump is only turning at 12% speed or so, but that is still enough speed to get the oil from the tank to the propeller governor and also to scavenge the oil from the nose case back to the tank.

Unless we manually feather the propeller (dumping propeller oil into the nose case through the primary propeller governor) or have autofeather activate (dumping oil through the overspeed governor) the propeller will continue to windmill indefinitely following a fuel shut-off in flight.

You probably know how much I like autofeather, but if you are flying a model without it, expect significant windmilling propeller drag until you manually feather.

So what happens to propeller rotation when we feather? Well, duh, it stops, doesn't it? Not always.

You see, unlike a piston engine, the free-turbine PT6 has almost no resistance to propeller rotation. So unless the feather blade angles are set exactly correct and we are flying without sideslip, it is not uncommon to see slight propeller rotation after feathering a shutdown engine in flight. Sometimes the propeller rotates in the forward direction, sometimes it goes backwards and, yes, sometimes it does completely stop. The Raisbeck-Hartzell "Quiet Turbofan" propellers almost always rotate quite aggressively in the normal direction when feathered … about 20 RPM. My friend James Raisbeck taught me years ago that his propellers have such a large amount of twist in them that airframe drag would actually be higher if he designed the feather angle such that they would truly stop.

Once the feathered propeller stops or at least almost stops, the sucking or pulling action of the power turbine that was helping move air through the engine then goes away. Without it, the only factor making the compressor rotate is the ram air supplied by the cowling. It is my experience that the N1 we see now will vary from roughly 3% to 10%. The lower numbers will be seen in level flight at typical single-engine airspeeds. The higher numbers will be seen only in a dive, with IAS above 200 knots. Also, the thicker air at lower altitudes provides more ram effect and tends to rotate the compressor faster. If the propeller had never been feathered, the windmilling compressor speeds will tend to be about 10% faster due to the sucking action of the power turbine. In other words, instead of a range of 3% to 10%, now we will see probably 13% to 20%.

Pop quiz question: What is the minimum N1 required before introducing fuel during an airstart?

Did you answer 12%? Most people do, but they're wrong. Yes, 12% is stated in the POH as the minimum compressor speed needed before introducing fuel during a ground start. If we can get that much or more for an airstart, great. However, there is no minimum speed limit listed for an airstart. I believe the King Air 300-series' POHs "encourage" obtaining at least 10%, but it is not an actual requirement.

Can you guess where I am going with this? Here it is: Can we do a windmilling (no starter assist) airstart with the propeller feathered? The answer is a qualified "Yes."

Only in the 300-series – with their splendid performance and their pitot-cowls – is the title of the appropriate procedure "No Starter-Assisted Airstart (propeller feathered or windmilling)." For the other models, the title is "No Starter-Assisted Airstart (windmilling engine and propeller)." Getting the "encouraged" 10% N1 or more before introducing fuel is easy with a windmilling propeller but much more difficult with a feathered propeller. The windmilling airstart envelop for all King Air models is a minimum of 140 KIAS and below 20,000 feet. Of course, the higher the speed and the lower the altitude (within reason!), the more N1 speed we will obtain. Hence, diving at high speed down below 10,000 feet can yield just as much compressor speed with a feathered propeller than having, say, 150 KIAS at 17,000 feet with a windmilling propeller.

Folks, let's be realistic here. Are you going to actually do this? Do an airstart with a feathered propeller? I bet not. First, how many times would you choose to restart an engine that you decided to shut down in flight, other than during a training session? Second, if the propeller had been feathered – as it almost certainly would have been when completing the shutdown procedure – why wouldn't you just go ahead and use the starter? Third, only if the starter chose this particular time to become inoperative would there be any need for a windmilling airstart with a feathered propeller!

Even during flight training this is not a very desirable procedure to practice or demonstrate. Why? Because although the peak ITT will likely be well below the starting limit, it will be quite a bit higher than you are used to seeing. Why subject your hot section to that higher temperature?

So, for me, I prefer to always have a propeller windmilling at takeoff RPM while conducting a windmilling airstart, since it leads to very comfortable starting ITTs.

Now I'll let you in on a little secret. Remember those Raisbeck-Hartzell propellers that rotate about 20 RPM when feathered? Or, even another propeller that happens to have its feather blade angle set such that it rotates in the forward direction? Well, move the propeller lever from feather to the full forward position and lower the nose to pick up some extra airspeed. See what is happening? The propeller is unfeathering itself! (You remembered to turn off the Autofeather switch as part of the inoperative engine cleanup procedure, didn't you?)

No King Air has ever been built with unfeathering accumulators, a popular option on some piston twins, especially ones used for multi-engine training. Without that type of device, the only way in

which oil pressure can be created and sent into the propeller dome to drive the propeller blades to lesser angles is to use the pump inside the primary propeller governor. Since that governor is driven by the propeller shaft, no propeller rotation means no oil pressure. Only with propeller rotation can we create the oil pressure necessary for unfeathering.

I have seen situations in which the forward rotation of the propeller was just too darn slow to accomplish the unfeathering. But if you have about 10 RPM or more, it will work. Just place the propeller lever forward, be patient, and soon you will observe the propeller is starting to rotate faster. And the faster it goes, the more oil pressure is created so it speeds up even more rapidly.

If you leave the propeller lever fully forward as the propeller increases its speed, it will eventually hit the speed at which the governor is operating. With the lever fully forward that is takeoff RPM, of course. There will be quite a bit of surging as the governor takes over and a lot of drag since, with no fuel flow yet, the blade angle will be quite small in order to reach takeoff RPM.

A technique I use is to pull the propeller lever back to where it is just touching, but not into, the feather detent once I see the propeller starting to increase speed. This sets the governor at the minimum possible speed. Now when the unfeathering propeller hits the governor, it will be at a lower RPM and with a bigger blade angle … yielding less drag and with the propeller speed never surging past redline.

With the propeller stabilized at minimum governing speed, slowly move the propeller lever fully forward to get as much airflow through the engine as possible before advancing the condition lever – the next step in the windmilling airstart checklist. As soon as N_1 starts increasing and ITT starts to rise, we have verification that lightoff has occurred and it is a good time to start leveling off from the dive we have been in to get maximum airflow.

Speaking of the checklist, I believe that the airstart procedures – both no starter-assisted and starter-assisted – contain more steps than any other abnormal procedure. Since this is something done rarely, take your time and go through the checklist slowly and methodically. A benefit of doing the windmilling (not the starter-assisted) procedure is that no large electrical demands and voltage transients are experienced so there is no need to turn off things like EFIS tubes, windshield heat, Cabin Temp Mode selector, etc. But make sure you remember to move the auto-ignition switch to "Arm" when it is specified, or the fuel and air mixture has no source of ignition!

So, Mr. Propeller-Manufacturer-Service-Tech, please realize that (1) a PT6 propeller will never feather itself in flight, it must have a pilot or the autofeather system to do so, and (2) it will never unfeather itself in flight until propeller rotation occurs. KA

This article was republished from the August 2013 issue.

King Air expert Tom Clements has been flying and instructing in King Airs for over 50 years and is the author of "The King Air Book" and "The King Air Book II." 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 books, contact Tom direct at *twcaz@msn.com*. 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 *editor@blonigen.net*.

PWI Announces New King Air Lighting Products and AFAC Approval of King Air 300, B300/350 LED Cabin Lighting

Recently at the National Business Aviation Association (NBAA) convention PWI announced new King Air lighting options:

- The soon-to-be PMA-approved LED Logo Light which illuminates the pilot side of the vertical surface of the tail, often bearing the company logo of business, charter, special missions, AirMed and cargo operators.
- The Door Entry LED for King Airs which leverages LED benefits for entry and exit of the aircraft. Mounted below the wing on the exterior cabin door side, it illuminates the ground below the opened door. Unlike the step lights built into the door steps, this light allows passengers to see the ground before entry and again when disembarking the aircraft. Safety and long life make this upgrade ideal for any mission.
- The Ice Light Window and the Seat Belt/Smoking sign which were publicized earlier this year.

PWI also announced earlier in October that it obtained approval from the Agencia Federal de Aviación Civil (formerly DGAC) in Mexico for its LED cabin lighting for the Beechcraft King Air 300 and B300/350 models. These LED light kits previously earned STC, EASA and ANAC certifications.

PWI designed and manufactured King Air fluorescent cabin lighting supplied to the factory as an OEM vendor. Since then, it has developed LED cabin lighting that is a direct replacement for these original fluorescent lights. These rectangular headliner lights are a plug-and-play installation without soldering. The original wiring and cockpit dimming controls work with the new LEDs as well.

The King Air 300 series features a cabin aisle headliner with 36 rectangular lights (model 300) or 42 lights (model B300/350) and the option for 4100K Warm White or 5100K Cool White LEDs.

The company says King Air LEDs continue to be a popular upgrade for King Air 300 series owner and operators. The low power draw and extremely long life appeal to business flying as well as charter and special missions operations. Also, pairing those LEDs with its PMA-approved LED Reading Lights creates an entirely refreshed cabin experience.

PWI is the OEM for most King Air interior lighting. Aviation products can be purchased through the company's dealer network found at *https://pwi-e.com/business-partners/*. For more information, contact PWI at +1 (316) 942-2811 or contact sales at *sales@pwi-e.com*.

Bluetail Introduces Time-Saving Module to Conform Part 135 Charter Aircraft

Bluetail, the leading modern aircraft records platform for business aviation, recently announced that it has completed developing MACH Conformity, the newest module within the Bluetail software portfolio, which will help reduce the time it takes to perform conformity inspections by up to 50%.

Bluetail says the company is building an impressive customer list of charter operators who rely on their industry-leading software innovation team to create a way for them to handle all of their conformity requirements more efficiently and effectively. In fact, to develop MACH Conformity, the company used the assistance of a design group comprised of leading Part 135 operators, including Solairus Aviation, Wheels Up, Jet It, Wing Aviation and Mach Point Aviation.

Based on Bluetail's industry-leading secure and scalable software platform and MACH Search capability, MACH Conformity delivers a host of timesaving and revenue recapture features, including:

- Easy-to-use conformity binder builder needed for the applicable FAA Flight Standards District Office (FSDO).
- Digital paper clip-related lead documents, including Form 337s with supporting 8130-3 forms, into single units of work.

- Upload Airworthiness Directives (ADs), as well as Chapters 4 and 5 requirements, and link supporting documents to the appropriate AD and OEM requirements.
- Track the status of each binder chapter through a color-coding task manager.
- Easily save the final conformity binder for future use and export the documents into a standard format for the FSDO's review.

The leading Part 135 operators and management companies who participated in the design group for Bluetail's new MACH Conformity Module said it would help reduce their conformity processes by up to five days, which would translate to tens of thousands of dollars in added revenue per each newly conformed aircraft.

For more information about Bluetail's new MACH Conformity Module, which can be purchased as a software subscription, visit *https://bluetail.aero/conformity*

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