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King Air 350 prepares RCAF trainees for the heavies



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King Air is distributed at no charge to all registered owners of King Air aircraft. The mailing list is updated bi-monthly. All others may subscribe by writing to: King Air, P.O. Box 1810, Traverse City, MI 49685, or by calling 1-800-447-7367. Rates for one year, 12 issues: United States \$15.00, Canada \$24.00 (U.S. funds), all other foreign \$52.00 (U.S. funds). Single copies: United States \$6.50, Canada/Foreign \$9.00.

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One of the RCAF's King Air 350s used to train candidates to move up to heavies. (Credit: JetPhotos)

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King Air is wholly owned by Village Press, Inc. and is in no way associated with or a product of Textron Aviation.

King Air (ISSN 1938-9361), USPS 16694 is published monthly by Village Press, Inc., 2779 Aero Park Drive, Traverse City, Michigan 49686. Periodicals Postage Paid at Traverse City, Ml. POSTMASTER: Send address changes to King Air, Village Press Inc., P.O. Box 1810, Traverse City, Ml 49685. Telephone (231) 946-3712. Printed in the United States of America. All rights reserved. Copyright 2023, Village Publications.

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Headed for the He

RCAF uses King Air 350 to economically train its pilots in preparation for flying heavy aircraft



The path for all Royal Canadian Air Force pilots to the King Air 350 begins with primary flight training on German-designed Grob G 120As. At completion, all will transition to heavies such as the Lockheed C-130 Hercules or Boeing CC-177 Globemaster (shown in background).



s the four-blade aluminum propellers of the Beechcraft King Air 350 spun to a stop at Alaska's Ted Stevens Anchorage International Airport's North Terminal, freight handlers stared at the aircraft's civil lettering and red maple leaf roundels. When the cabin door opened, three men in military flight suits stepped from C-GSYC. As they unloaded training manuals and personal overnight kits, each knew they would spend their evening reviewing aircraft systems and the peacetime complexities of international border crossings.

Unlike most visitors to the second busiest airport and cargo hub in the United States, the small group did not arrive as tourists. They serve with the Royal Canadian Air Force (RCAF) at 8 Wing Canadian Forces Base (CFB) Trenton, 174 miles southwest of Canada's capital city of Ottawa. The touchdown of the King Air 350's main landing gear moments before marked another segment of a multi-phase educational mission.

Alaska happened to be in the extreme northwest corner of the continent and most Trenton-based flight graduates had experienced little beyond southern Canada. The long-range odysseys provided opportunities to exercise crew resource management and familiarization with their defense neighbors. No longer novices, the pilots in training learned independence and developed abilities to perform minimal approaches through various weather conditions directed and monitored by air traffic controllers.

" ... airborne delivery ships require high time 'drivers,' but no organization, civil or military, can justify unlimited training circuits."







After an overnight rest, these ardent professionals flight planned a return to CFB Trenton 3,300 miles southwest of Anchorage. The base consists of 3,000 men and women and 500 civilian members dedicated to service within the heart of Canada's air mobility forces. The pilots of C-GSYC were destined to occupy the prodigious cockpits of large lifters such as the RCAF's Boeing CC-177 Globemaster IIIs or what aviation journalists' term "indispensable," the Lockheed C-130 Hercules.

These massive aircraft participate with world-renowned RCAF squadrons such as the 424, 429, 436 and several others in military missions tailored to support High Arctic weather stations and rescue and humanitarian relief around the globe. Complex and costly - a Boeing CC-177 markets for \$288 million with Pratt & Whitney PW2040 turbofans consuming 20,000 to 21,000 PPH (pounds per hour) of fuel. These airborne delivery ships require high time "drivers," but no organization, civil or military, can justify unlimited training circuits. Instead, procurement planners decided to lower fuel and maintenance costs by leasing King Air 350 aircraft C-GSYC and C-GPDC.

The Training Regimen

Before Trenton's contingent of pilots are able to train in the model 350, they undergo screening from a list of 1,200 aspirants interviewed throughout Canada. At least 150 successful candidates attend elementary flight training commencing with Phase I of a four-part program on carbon composite Grob G 120As powered by six-cylinder piston engines with 2 Canadian Forces Flying Training School (2CFFTS) in 15 Wing Moose Jaw, Saskatchewan. After a second phase, they move into Phase III – jet, multi-engine or rotary wing. Twin-engine selectees then begin tenures flying Beechcraft C90Bs.



Pilots such as Multi-Engine Utility Flight's Captain Joseph McNally arrive as students from Canadian Forces primary flight schools with minimal exposure to twin-engine aircraft. At CFB Trenton, they function as a team where cockpit resource management (CRM) is solidly indoctrinated into procedures which enhances safety.

"Every candidate, regardless of their path through the strenuous training pipeline, is considered the 'best of the best."



"... the King Air 350 fills the requirement to bridge the gaps in proficiency."

Newbies assessed into Phase III arrive at CFB Portage La Prairie with backgrounds in single-engine airframes with no experience as first officer/co-pilot. They quickly absorb the elemental fact that training practices include far more than the simple manipulation of aircraft controls. By the time they move into operational units with heavy transports, they understand crew resource management and meticulous teamwork.

Every candidate, regardless of their path through the strenuous training pipeline, is considered the "best of the best." However, with little more than 150 hours of certified flying time in their newissue logbooks, they still lack some "real world" experience and could benefit from further training before being dropped into the labyrinths of world-ranging heavy aircraft. A filler assignment by design on the King Air 350s helps alleviate the shortage of exposure beyond the sight of airport runways and enhances and retains perishable skills assimilated during training to WINGS standards.

"Multi-Engine Utility Flight (MEUF) was established to serve a dual purpose since our pilots could find themselves in something like a CC-177 the day after graduation," explained Major Mina Keriakos. "While waiting for operational assignments, the King Air 350 fills the requirement to bridge the gaps in proficiency."

Until arrival at CFB Trenton, pilots have recorded little more than local air work above the flatlands near Moose Jaw and Portage La Prairie. No aircrew members stay idle for long. Instead, they become involved in a variety of relentless MEUF missions under the guidance of 8 Wing. After grueling months at basic flight training establishments, they settle into the cockpits of C-GSYC and C-GPDC. At first, the King Air 350s may seem to lack connection to the air crew's future transports; however, they later find that the boosted controls of the larger aircraft depend on identical operational principles as the 350s.

The King Airs deploying from CFB Trenton's 10,000-foot runway depart

on tasks unlikely envisioned by designers at the OEM's headquarters in Wichita, Kansas, before the prototype underwent its first flight in Sept. 1988. By no means does RCAF management consider them strictly as corporate carriers. Both aircraft rate as working machines averaging 1,000 hours annually, moving personnel to remote regions for specialized training one day and the next, carrying a cabin full of greasestained emergency components for mobile repair parties striving to return disabled aircraft to service. Even tightly sealed munitions boxes or fastidious VIPs sometimes occupy the King Air. Every moment in the aircraft logbooks represents costsavings in fuel and overhaul times even the relatively low-priced "Heres" gulp 4,400 PPH in cruise at FL230.

"Part of the program is targeted to get members on the road for days at a time and show them how to take care of and return an aircraft," said Keriakos. "We keep them flying to raise their multi-engine hours and provide experience in ICAO procedures, so they understand how to operate within international rules and develop airmanship."

Pilot conversion courses for C-GSYC and C-GPDC begin on base under supervision of officers such as Keriakos. For a refresher, the RCAF dispatches candidates to Wichita's ground school and simulators. From CFB Trenton, the King Air 350s disperse throughout North America and the Caribbean. MUEF trainees absorb the realities of environments beyond primary flight schools. In an operational environment, crews deal with people, cargo and center support systems. Some missions have been tasked to observe forest fires during Canada's smoke seasons.

Most MEUF members train in King Air 350s for no longer than six months and average 300 hours per posting. Departure from CFB Trenton's fast-paced environment varies. Keriakos describes the King Air 350 as a

reliable platform for the lead-in role, which enables RCAF aircrew to safely harmonize missions into the same airspace and instrument approaches as their civilian "brothers."

The 350 "Trainers"

The King Air 350 aircraft allotted to MEUF represent stock versions under a lease agreement with established commercial air service provider Air Tindi since 2021. The selection of Air Tindi resulted from the company's practical background operating various Wichita-produced aircraft types throughout Arctic regions and the ability to provide on-site maintenance engineers. When a crew and their aircraft are assigned to temporary bases, Air Tindi's maintenance engineers accompany the aircraft.

Each MEUF aircraft arrived with Raisbeck aluminum four-blade Hartzell swept propellers that, explained Air Tindi Director of





"Although MEUF's aircraft use high flotation tires and gravel kits ... mission profiles have not yet deployed to unprepared airstrips." Maintenance Mark Doucet Marisak, allow a quieter ride, "curb appeal" and generate increased thrust. King Air 350 C-GPDC also has Raisbeck wing lockers aft of the 1,050 SHP Pratt & Whitney PT6A-60 engines.

Although MEUF's aircraft use high flotation tires and gravel kits, one publication claimed the versatile King Air 350s can operate into 3,000 feet of non-paved surfaces. Nevertheless, mission profiles have not yet deployed to unprepared airstrips. Each aircraft carries approval for 15,000 pounds MTOW and average 377 PPH fuel consumption at FL350. Despite being range-capable, overseas



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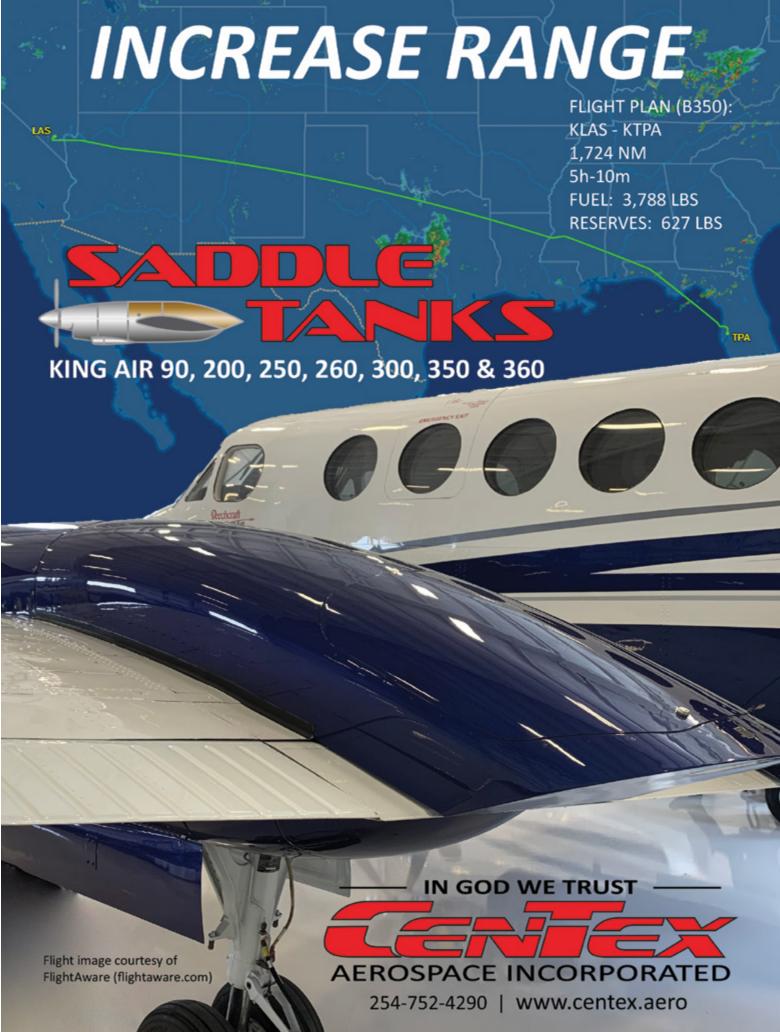


Base employees fueling up one of the MEUF's King Air 350s for its next training mission. Its reliability, fuel load and ability to fly extended missions allow for training pilots more economically for their next step up to the "heavies," flights have not been assigned and factory-installed pneumatic deicing equipment is identical to any Beechcraft product operating in frigid regions. When asked if any problems occur on CFB Trenton's King Airs, maintenance engineer Jeremy Vlasschaert responded, "Nothing really comes up."

On previous contractual agreements, MEUF accepted King Air 200 aircraft, which the team reports also functioned almost faultless. Keriakos pointed out one shortcoming was the ability to carry only 544 gallons of fuel – the current King Air 350s board 1,638 gallons for legs as long as 1,828 NM.

The high-caliber pilots destined for Lockheed C-130s, Boeing CC-177s, or perhaps the RCAF's CC-150 Polaris (Airbus 310-300) add to their skills daily. Not pampered, they will eventually find themselves driving onward through forest fire smoke to evacuate isolated Indigenous villages or sense the caress of a CC-177's 14 tires near earthquake-stricken cities. In any case, they will not forget the connection between CFB Trenton's T-tailed King Air 350s and the behemoths they now command.

Robert S. Grant has published over 2,500 articles featured in magazines, journals and newspapers within six countries, as well as producing five books. He flies contract aircraft from his home near Ottawa, Canada, when possible and his logbook shows over 22,200 total flying hours which include 500 hours in the Beechcraft King Air 100A and King Air 200 models. Having worked worldwide in various aircraft types, Grant prefers flying in African countries in addition to Canada.





by Kyle White

ast August, I had lunch at a restaurant overlooking Centennial Airport (KAPA) with the chief underwriting officer of a major aviation insurance carrier. The view was mesmerizing. The blue sky and Rocky Mountains in the background, a variety of aircraft below us - some just landing, some preparing for takeoff and others parked in perfect rows. Over lunch we discussed the challenges the aviation insurance industry is facing with the rising cost of claims and the premium squeeze owners are feeling. The underwriter began telling me about their portfolio of active claims. He said the most stressful claim they have is the one when a "reservation of rights letter" must be issued, and then, ultimately, followed with a claim denial letter.

A reservation of rights letter is a document that an insurance company provides to an insured client indicating that a claim may not be covered under the policy. The letter is not denying the claim; it simply states that the insurance company is looking at all the facts and policy language and reserves the right to deny the claim if they feel it is not covered under the policy.

As we looked out the window, we watched aircraft crews, and what appeared to be individual owner/pilots preparing for flight or deplaning. He commented, "You'd be surprised how many of those pilots do not meet their pilot warranty."

This statement shocked me. It was startling to hear that he believes there are that many pilots operating aircraft in violation of a policy condition. However, as I considered his comment, I also know that over the last 20 years of my aviation insurance carrier, the most frequent reason I have seen for claim denial is the pilot warranty or the aircraft being out of inspection, i.e., not airworthy. Perhaps he is correct, I just hadn't thought of it in such blatant terms.

Aircraft insurance is complex and laced with details. "Hangar talk" attempts to simplify what it is, but ultimately the aircraft insurance policy is a legal contract that states what you have coverage for, and what you must do and must not do so the coverage is there when you need it. There are specific "rules" within the policy that must be adhered to, and each section has its own importance in outlining your coverage. While policyholders typically review the "Exclusions" section, the "Conditions" or "General Provisions" is often overlooked, while the "Endorsements" can also take away, extend or amend coverages and conditions.

Along with nearly every aspect of the policy, the "Pilot Warranty" or "Open Pilot Warranty" is often amended in your "Endorsements." Sometimes a pilot meets the

license and flight time requirements, but have let the insurance required training lapse, or their medical inadvertently expire. Both are cause for the insurance company to deny a claim, even if the accident occurred because of mechanical issue, not because of pilot error. The incompliance is the loophole for coverage. You should never assume that because you meet the FAA's requirements to fly that you also meet the requirements of the insurance policy on that specific aircraft.

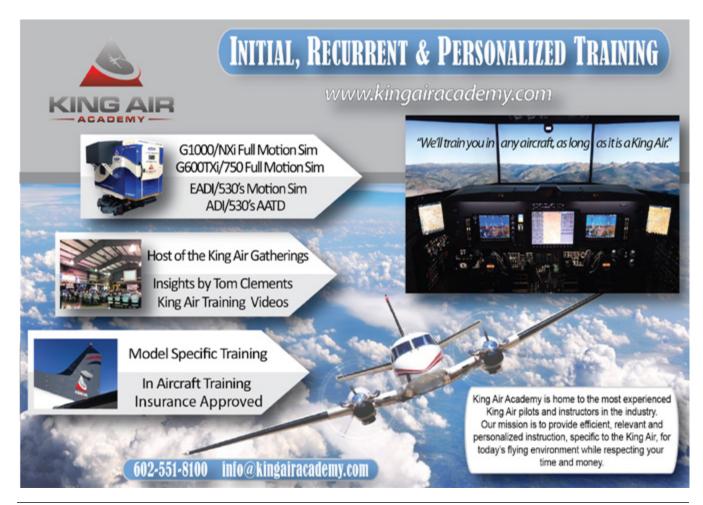
In addition to the pilot warranty, there are many others you should pay particularly close attention to. They are typically scattered throughout the policy and endorsements. The aircraft policy is broken down into sections:

- Declarations
- Liability Coverages & Exclusions
- Medical Coverages & Exclusions
- Physical Damage Coverage & Exclusions
- Conditions, Exclusions & Endorsements

The "Declarations" page at the beginning of your policy lays out a basic overview of coverage. Who the

policy is intended to cover, "Named Insured." The address, policy effective date, maybe the pilot warranty, policy territory, purpose of use, the annual premium, schedule of attached endorsement forms and limits of liability. Each of these items are important, as they may directly impact coverage that is described throughout the policy. For example, the purpose of use may be stated as "Pleasure and Business." If you are leasing or renting the aircraft out to a third-party, you don't have coverage unless an endorsement has been added stating otherwise.

The next section is the "Liability Coverages." Here you can review the list of many ancillary coverages. This is a good overview of specific limits associated with each ancillary coverage; however, you will need to read further into the policy to see what conditions must be met so you do not inadvertently breach the policy. You may have a coverage known as "Host Liquor Liability." This can be useful if you allow passengers to enjoy alcohol onboard the aircraft, or if you are having a hangar party where alcohol is served. However, if your business is alcohol based, such as beer distribution, you may not have Host Liquor Liability coverage. Some, but not all,



policies have an exclusion for host liquor for those in the business of manufacturing, distributing or selling alcohol. It is important to know your policy specifies, so you stay in compliance with the policy terms.

Another area within the "Liability" section that is frequently overlooked is "Contractual Liability." Many King Air owners sign hangar leases, FBO contracts, pilot service agreements or third-party dry leases. If your policy includes Contractual Liability coverage, you need to read through and understand the conditions of that coverage. Many policies require you to notify your insurance carrier, in writing, within a specific time period of a signed contract. It is good practice to send the contracts to your broker and have them reviewed by the insurance carrier before signing. One of the conditions in Contractual Liability states you cannot assume liability that the carrier would have otherwise not had without approval. You also cannot waive rights of recovery by the insurance company without written approval by the carrier. Two frequent places we see this overlooked is in FBO contracts and those letting friends and family dry lease the aircraft. We have seen numerous claims denied due to failure to report these signed contracts.

If you employ pilots to fly your aircraft, pay particular attention to the "Medical Coverages" section. Your policy may state you have medical coverage, "including crew,"

but there are several conditions that must be met to have this coverage active. A major factor to be considered is worker's compensation laws. If you hire a pilot and are obligated to have them covered under worker's compensation, then the medical payments may not pay out under the aircraft policy. Also noteworthy, some policies state that all medical claims must be submitted within a specified time frame or they may be denied.

Conditions in the "Physical Damage" section can also be buried. For example, if fuel leaks out of the wings and goes down a sewer drain, do you have coverage? At first glance, you may think so. However, the claims adjuster will need to determine what caused the fuel leak. If the leak was caused by an old, dry rotted O-ring, the claim will be denied under the "wear and tear and mechanical breakdown" exclusion. If the leak was caused by a tug running into the wing, then yes, it is most likely covered. There are many conditions to review within the physical damage section to ensure you have the coverage you want.

Towards the end of the policy, you will find the "Exclusions" section. At first glance, aircraft hull and liability policies are very broad and inclusive. However, I frequently tell clients, "it's covered ... unless it isn't," and in the Exclusions portion of the policy you will find there are many things that aren't covered. The policy I'm referencing for this article has 91 pages,



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eight which are the exclusions. Some are duplicates of what is already stated in the policy. For example the "Contractual Liability" exclusion of this policy reads as: "This policy does not apply: A) to liability assumed by the insured in any type of agreement except as provided by Coverage J Contractual Liability;" or "B) to any obligation which the insured or their insurance carrier may be held liable under any workers' compensation, unemployment compensation, disability benefits law or under any similar law." It is imperative you read through, and understand, your policy exclusions.

Like the Exclusions portion, the "Endorsement" section of the policy can undo the first 50 pages of coverages, depending upon the conditions of each item. The "Mexico Warning Endorsement" is an excellent example. In the Declarations section the coverage territory states "world-wide." Most would assume that indicates your policy is effective anywhere you go. However, the "Mexico Endorsement" states that "Unless you have aircraft insurance written by a Mexican insurance company you may spend many hours or days in jail if you have an accident in Mexico." While I would enjoy an allinclusive at a resort in Mexico, I am not interested if that all-inclusive is a Mexican prison.

Many pilot warranties are also found in the Endorsement section, so be sure to check for amendments. You can also find exclusions that have been written back into the policy, like the "War Hull" or "Terrorism" exclusions. The Endorsement section can change the policy in many ways. Don't be fooled by just reading the "guts" of the policy without combing through the endorsements or you may find yourself in a situation without the coverage you had assumed.

These are just a few of the numerous conditions in your insurance policy. While each section of the policy is important, it is imperative you understand the Pilot Warranty and Contractual Liability portions and how the Exclusions and Endorsements may alter them. A good broker will explain each item in your policy, so you can be well informed and understand your coverages and exclusions. Your knowledge of your insurance policy and exposures should be as high on the priority list as a safe flight.

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*





Goodbye to Two Old Friends

by Tom Clements

've lost two old friends in the last few months. Gary Banker, the wonderful gentleman for whom I have flown and managed his King Air since May 2006 passed on in February and now my other "old friend," Gary's 1988 King Air C90A that I managed and flew. Gary's family – daughter-in-law and grandsons – had no desire or need for the airplane so I was put in charge of selling it. I started by listing the airplane in the "For Sale – Aircraft" section of the *BeechTalk* forum.

Getting zero response from that post – although with a lot of very kind and complementary comments from other Arizona pilots who had flown the airplane with me – I placed an advertisement in *The Controller* and immediately started getting some inquiries.

I was surprised that many of the inquiries came from South America and Canada and relatively few from the United States. The price we were asking was \$975,000. The airplane had less than 7,000 hours total time, had

700+ hours remaining before the second engine overhaul recommendation on its original PT6A-21 engines, had the Raisbeck modifications that gave it a 10,500 pound maximum takeoff weight, had dated but perfect avionics, had 120V outlets in the cabin for phone or iPad charging, and a new C90B-style interior installed in 2007 – the one with the cupholders over the tables and no longer in swing-down holders on the sidewalls. She has been managed/overseen by yours truly and kept in a hangar



in the dry Phoenix area for all 17 years. To add even more icing on the cake, she was maintained by "Dr. Dean" Benedict for the years he had his shop at Boulder, Nevada, and then the last few years at Dante Marinelle's excellent Northstar Aviation maintenance facility on the Lake Havasu airport in Arizona.

Plus, she's the star of multiple videos available on the King Air Academy channel of YouTube. I'll wager she's been seen/viewed by more pilots than almost any other King Air. Allow me to reminisce on some of the enjoyable flights this fine airplane, her owner, passengers and I have taken over the years.

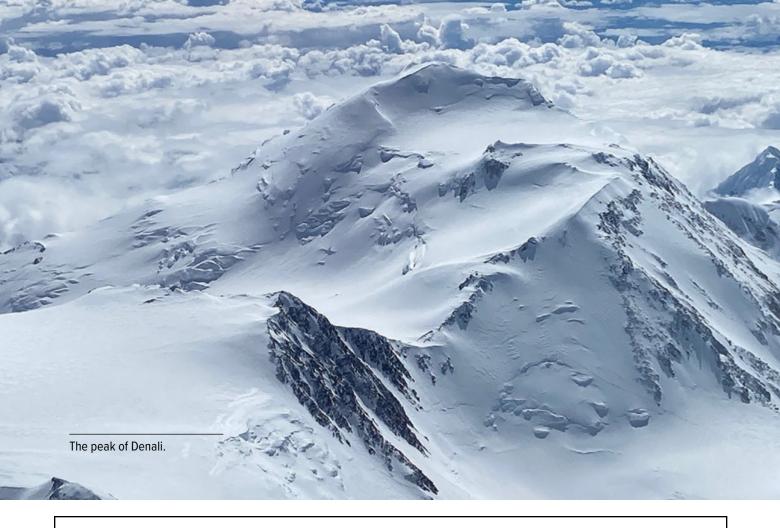
Five trips were to/from Alaska. The King Air is the perfect airplane for this trip. Why? First, because we can easily overfly Canada on the leg from Oregon or Washington to Ketchikan and avoid any delays or snags in complying with Canadian customs procedures. Second, the King Air is excellent for operation on the few shorter/less-improved runways that we sometimes used.

The first of these trips – with Gary's brother and some business associates on board – concentrated on fishing. I'm not an avid fisherman but it is impossible not to find Alaska fishing to be totally enjoyable and satisfying. Not only are the fish seemingly anxious to sacrifice themselves on our hooks but also the setting, the scenery and the wildlife we experienced was splendid. Returning in the fishing boat one day to our launching point near

Kenai, our guide called out to "his" Eagle friend perched in a tall tree near the harbor, whistled the signal, and we all were stunned by the magnificent bird swooping down and catching the thrown fish remains in his talons as he made his low pass. Wow!

On another trip to Alaska, Gary and his brother Cal had their spouses on board – and my wife, Pam, as the other pilot - we made the fine Captain Cook hotel in downtown Anchorage our base and took various day-trips to different locations around the state. During this trip and one other, Gary contracted with Mark Madura who charters his beautifully restored DeHavilland Beaver on sightseeing excursions to remote lakes on the west side of the Cook inlet. One time we landed on Twin Lakes near Dick Proenneke's hand-built cabin, had a yummy shore lunch there and got to experience firsthand this remarkable hand-built abode ... that is now a piece of the National Park Service. (Proenneke's book "One Man's Wilderness" is a fascinating story of his solitary adventure and there are some great videos - made from his own 16mm movie camera, often on a tripod filming his work – that can be found searching YouTube.)

As an example of the "small world of aviation," Mark had been a recurrent training customer of mine back in the 1980s when he operated a Beechcraft B60 Duke in Southern California. Mr. Madura is an excellent pilot both on land and sea, a fine companion and guide, as well as a darn good lunch cook/provider!



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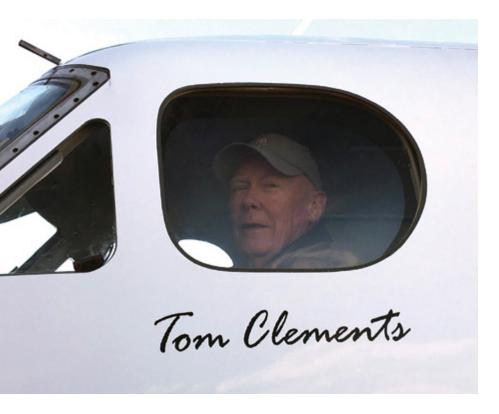
The highest mountain in North America – Denali is its name now, after years of being Mount McKinley – is of course a major attraction of our 50th state. Too often, sadly, visitors never get to see it because it's engulfed in clouds. We have been fortunate however in that out of our five Alaska trips we have had two in which Denali was in the clear with hundreds of miles of unlimited visibility.

The first time this happened we had taken off from Yakutat heading to Anchorage, on an IFR flight plan. Looking to the northwest I didn't see any clouds so I asked Anchorage Center if they were in contact with any airplane near the mountain. If so, what do they say is the cloud/visibility situation. "Clear as a bell" was the response. "Then how about amending our flight plan to include Denali before we head to Anchorage?" I asked. "Sure, N3190S is cleared to Anchorage via direct MOUTN, direct, maintain Flight Level 220."

We found that MOUTN intersection is basically right above Denali's peak, hence the name. As we closed in on the intersection, with Denali's magnificence having its huge impact on all our eyes, we were asked by Center if we could climb to FL240, the lowest IFR altitude over the mountain. "No problem" was our reply and we were cleared to 240. Just about when I was preparing to request a delay over the mountain, Center, without being prompted, said "90S you're cleared to delay near MOUNTN as long as desired. Just tell me when you want to head to Anchorage." And so we did. Wow, what spectacular views we enjoyed!

Another year and another trip was to the Pacific Northwest. This included a landing at Paine Field and a tour of the Boeing "big airplane" assembly plant. One thing we observed from a factory balcony overlooking the assembly line of the 777 model was that the airplane closest to the exit door from the





assembly line out to the ramp looked rather complete – we could see that even the interior was installed – yet no engines were yet hung on the wings. We asked our guide about this and her response was an eye-opener: Since each engine costs about \$90 million, Boeing doesn't want to "buy" them until the last feasible moment.

On that same trip we spent a couple of days in Sandpoint, Idaho, visiting with our friends Loel and Olson Fenwick. Through them, we also met, lunched with and toured Dr. Forrest Bird's aviation and invention museum on his private airport, home, laboratory and assembly plant, a short drive from Sandpoint. I strongly suggest you search Dr. Bird's name on your computer and learn about this one-of-a-kind pilot/inventor. His "60-Minutes" interview – "Idaho's Bird Man" – on YouTube, is especially enlightening. It may not be a stretch to say that his invention – the portable medical respirator or breathing machine – has perhaps saved more lives than any other single device.

Loel Fenwick is also amazing. He invented the "birthing bed" and the birthing room system that has changed the American way of childbirth. He and his wife, Olson, are marvelous individuals and both are pilots. Their stunning home is on the shore of Priest Lake, and they have a hangar that stores their amphibs ... including a Grumman Mallard and a Lake Buccaneer. Each year they host a summer "Splash In" that attracts float planes from far and wide. It, too, can be found on YouTube.

Gary's most common trips in the C90A were from Phoenix to Catalina Island and back to host his friends for lunch, three at a time, in the town of Avalon. For many years Gary was a member of the Executive Association of Greater Phoenix or EAGP, which when pronounced sounds like the African country. His goal was to treat all its members to this marvelous day of enjoyment and camaraderie. We made 59 trips! The July 2022 issue of this magazine has an article about our operation into and out of "The Airport in the Sky." Only once in those 59 trips did we need to land at our alternate – Long Beach, California, (KLGB) – because of IFR conditions at Avalon. But guess what? We were never in clouds!

How could that be?! The VOR/DME or GPS-B approach has a procedure turn altitude of 3,400 feet, a Final Approach Fix (FAF) minimum of 2,300 feet and an MDA of 2,220 feet ... a mere 80-foot step-down from the FAF! Airport elevation is 1,602 feet. That day the cloud tops were at about 2,000 feet. We

were in bright blue sky at MDA but with a solid layer of dense cloud between us and the runway! Weird!

When Gary purchased the airplane back in 2006 he planned to use it mostly to transport himself and other management personnel of his insulation company to their far-flung operating locations. We had many flights to Carlsbad, California; Tacoma, Washington; and Albuquerque, New Mexico. Initially, very few personal flights were made; almost all were for business. But then the economic "crash" of 2008 occurred and Gary's business needed to contract into a much smaller entity and the outlying facilities were mostly closed. After that took place, Gary bought the airplane from his company and registered it as his personal aircraft. That's when the "fun" flying started!

In 2006 I was 61 years old and now I am 78. How fortunate I have been to fly a great airplane for a great man as my flying activity slowly comes to its end! My associations with King Airs and with Mr. Gary Banker have been true blessings that I will always appreciate!

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*.



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The Staggerwing Grows Up

During the mid-1930s Walter Beech and his engineers developed a new series of Model 17s that added laurels to Beech Aircraft Company's reputation and black ink to its battered balance sheets.

by Edward Phillips

he decision in 1933 to downsize the bullish Model 17R into the popular Model B17 series had proved to be the correct one for Walter Beech and his company. Although the B17 was still selling well in 1936, it was time to upgrade the venerable biplane to keep the basic design marketable.

For the 1936 model year, Ted Wells and his staff improved the B17 into the C17 series that featured four different versions. The entry-level C17L was priced at \$8,550 and was powered by a Jacobs L-4 air-cooled, static radial engine, while the more expensive C17B was powered by a seven-cylinder, 285-hp Jacobs R-830 radial engine and sold for \$9,250. Priced at \$10,000, the C17E used a 285-hp Wright R-760E and the C17R cost \$18,500, in large part because of the 420-hp Wright R-975E powerplant.

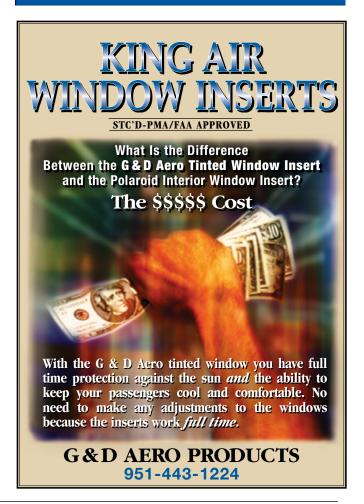
In addition, key changes made to the C17B and C17L included relocating flaps to the lower wings from the upper panels, but the flaps remained on the wing panels for the C17E and C17R. Thanks to lessons learned from certification of A17F, the incidence angle of the horizontal stabilizer's leading edge was decreased slightly in an effort to improve pitch control during landing. Unfortunately, the change had little effect on handling and was exacerbated if the airplane's center of gravity was near the forward limit.

Whereas the C17B and C17L featured a single elevator trim tab, the C17E and C17R incorporated two, as did the rudder on those airplanes only. The electrically-operated landing gear system remained essentially the same but added two small light bulbs that indicated gear position – a green light to indicate that gear was extended and locked, and a red light to warn if the gear was not.

Fuel capacity varied from 46 gallons for the C17B and C17L (optional tanks were available), 75 gallons for the more powerful C17E and 98 gallons for the C17R and its fuel-thirsty engine. All four versions of the C17 had received Approved Type Certificates by August 1936, although the first production airplane had rolled off the assembly line in February of that year.

It is interesting to note that the last B17R built before production of the C17 commenced, was constructor number 66, registered as NC15811 for export purposes but later registered in France as F-APFD. It briefly led a somewhat cloak-and-dagger life that smacked of international intrigue. French pilot Rene Drouillet reportedly planned to use the Beechcraft in a proposed









plot to fly Ethiopian Emperor Haile Selassie out of that country if the Italian army overran Ethiopia.

In May 1936, the Italians did just that, capturing the capital city of Addis Ababba and forcing Selassie to flee the country by train instead of the Beechcraft. According to historian Peter Berry, the B17R later served with Republican forces during the Spanish Civil War, was returned to France and was captured by the Germans in 1940. The airplane was reportedly destroyed by Allied bombing raids on the city of Nanterre.

In terms of performance, the C17R reigned as the fastest of the four versions, and the C17E was the most rare with only two built at the Beechcraft factory. These were shipped to Japan and served as templates for another 20 that were reportedly built under license between 1938 and 1940. Plans called for using the Beechcrafts to fly passengers and mail on proposed routes within Japan, according to historian Rene J. Francillon. It is unknown whether any of the C17Es built in Japan survived World War II.

Perhaps the most famous C17, however, was C17R constructor number 77 flown to victory in the 1936 Bendix Trophy coast-to-coast race by pilots Louise Thaden and Blanche Noyes. The two women took off

from Floyd Bennett Field in New York City and arrived in Los Angeles after flying for 14 hours 55 minutes. It was a triumph for women aviators and the Beech Aircraft Company, a triumph made all the more sweet because the C17R had defeated some potent competitors such as Joe Jacobsen in a Northrop "Gamma" monoplane, Benny Howard in his "Mr. Mulligan" and Amelia Earhart and Helen Richey flying a twin-engine Lockheed "Electra."

Never content to rest on his company's laurels, in 1937 Walter Beech unveiled the Model D, E and F17 series that possessed significant improvements not found on the C17 biplanes. Of these, the D17 would prove to be the most popular with Beechcraft customers and featured a majority of the upgrades.

First and foremost among these was the fuselage. It was lengthened by 13 inches and greatly improved landing characteristics, enabling pilots to make three-point landings with ease. Another significant change was installation of a full-cantilever empennage assembly that eliminated the strut bracing of the C17 series. Other changes included toe-operated brakes on the rudder pedals and new main landing gear shock struts.

Four versions of the D17 were offered: D17A, D17S, D17R and D17W. The chief differences centered on



The D17 series were built in larger numbers than any other version of the Beechcraft Model 17. The U.S. Navy bought the D17 and designated it GB-1 and later GB-2. U.S. Army versions were known as the UC-43. Both types served with distinction during the war in the European and Pacific theaters of operations.

(Special Collections and University Archives, Wichita State University Libraries)



the engine, the most powerful being the D17W with its geared, supercharged Pratt & Whitney R-985 SC-G rated at 600 hp at 2,850 RPM. By contrast, the D17A featured the 320- or 350-hp Wright R760 engine, the D17S used a Pratt & Whitney R-985 of 420 hp, and the D17R was powered by a 420-hp Wright R-975 engine.

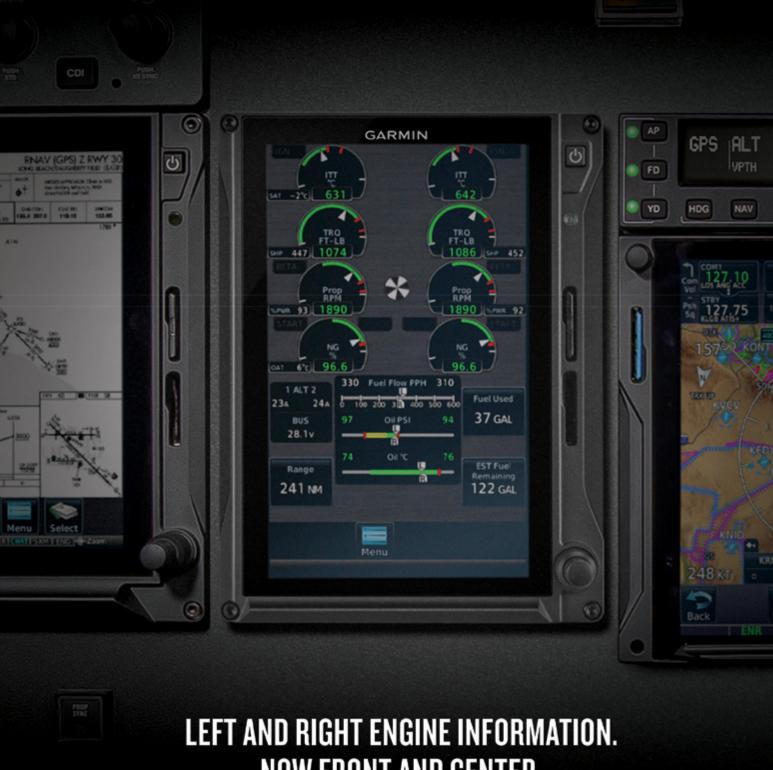
Developed in concert with the D17 series were the less powerful (and less expensive) E17L, E17B and the F17D. The latter airplane, with its higher cruise speeds and load carrying ability, filled a gap in the Model 17 product line and fit nicely between the entry-level E17 series and the top-of-the-line Model D17.

As the economy in America continued to expand and slowly recover from the ravages of the Great Depression, the production lines at the Beech Aircraft Company expanded as well. From 1936 to 1940 more than 65 C17 series airplanes had been built followed by more than 100 D17 series ships, 55 E17 series and 60 F17 series aircraft.

By late 1939, it was becoming increasingly evident that England and France were bracing for a second war with Germany. It was only a matter of time before Chancellor Adolph Hitler would unleash his "Blitzkreig" " ... the D17 would prove to be the most popular with Beechcraft customers and featured a majority of the upgrades."

warfare on a nearly defenseless Poland. Late in 1941, any hopes of America maintaining its policy of isolationism were crumbling, and when war finally came to America on a peaceful Sunday morning in Hawaii, Walter Beech and the Model 17 stood ready to serve their country.

Ed Phillips, now retired and living in the South, has researched and written eight books on the unique and rich aviation history that belongs to Wichita, Kansas. His writings have focused on the evolution of the airplanes, companies and people that have made Wichita the "Air Capital of the World" for more than 80 years.



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Textron Aviation Enhances King Airs with Lee Aerospace's CoolView Windows

Textron Aviation recently announced a noteworthy upgrade for its Beechcraft King Air 260 and 360 turboprops with the introduction of new CoolView® windows to minimize heat transfer into the cabin on the ramp and offer an unprecedented level of passenger comfort and cabin cooling.

According to Lee Aerospace, the manufacturer of the windows, independent testing showed the addition of a thin metallic inner layer, allows the windows to significantly reduce the amount of infrared light entering the cabin, ensuring a cooler and more comfortable environment during ramp operations.

The CoolView windows also feature a frost pane with an integrated window tint. This advanced design enhances visibility while reducing unwanted sunlight and glare, creating a pleasant and visually appealing

cabin atmosphere for passengers and crew. The frost pane also helps reduce or eliminate unwanted ice buildup during long flights.

Combined with Textron Aviation's standard Electric Air Conditioning System with Ground Cooling in the King Air 360, the CoolView windows will help provide customers with a cool and comfortable cabin environment, even in challenging ramp conditions.

Textron Aviation says the introduction of CoolView windows reflects its commitment to innovative solutions that enhance the flying experience for both pilots and passengers.

Beginning in early 2024, all new King Air aircraft will be first in the category to be equipped with CoolView windows. The windows are also now available as an aftermarket upgrade for Beechcraft King Air turboprops at Textron Aviation Service Centers or for purchase exclusively from Textron Aviation's parts website: https://www2.txtav.com/Parts/



Garmin's PlaneSync Now Available for Retrofit Installs

Garmin has announced that PlaneSyneTM is now available for retrofit installations to bring new levels of connectivity and convenience to aircraft owners. PlaneSyne automatically updates¹ avionics databases, logs flight and engine data and allows aircraft owners and operators to remotely check fuel and systems status via the Garmin PilotTM app².

Using a 4G LTE cellular or Wi-Fi® connection provided by the new GDL® 60 datalink, PlaneSync technology enables avionics connectivity capabilities to streamline an aircraft owner's preflight and post-flight activities. LTE connectivity is utilized to remotely check the aircraft's fuel and systems status², while LTE and Wi-Fi connectivity can be used to download database updates and upload logged flight and engine data¹. Compatible with popular Garmin avionics such as GTN Xi series navigators, TXi series flight displays, GI 275 electronic

flight instruments and select Garmin integrated flight decks, PlaneSyne technology is available for a wide array of Garmin-equipped general and business aviation aircraft.

Automatic database updates

Eliminating the time-consuming process of updating databases via PC and data card, PlaneSync technology automatically downloads databases¹ to the aircraft via Wi-Fi or LTE. Downloads can occur while the aircraft is powered off and the owner is away from the aircraft. Essential databases are automatically synchronized across compatible avionics once the aircraft is powered up. Pilots no longer need to plan around database cycle update timing, or manually update databases using data cards.

Engine and flight data logging

Beginning in early 2024, PlaneSync will add the capability to automatically transmit engine and flight log data¹ to secure cloud storage after landing. Owners can view this data on devices running the Garmin Pilot app or on *Fly.Garmin.com* and have the ability to download the log files for maintenance team viewing. The data log can include GPS position and speed, attitude information as well as engine data when appropriately equipped.

Remote aircraft status

It's easier than ever for aircraft owners to check the status² of the aircraft and its systems using the Garmin Pilot app or their $D2^{TM}$ Mach 1 smartwatch. Viewing the current status of the aircraft can allow the pilot to see its location on the ramp, if it has been fueled for a trip, and more. Convenient for flying clubs or multiple-owner aircraft, service subscribers can assign access for other users to view aircraft status. When appropriately equipped, remote aircraft status features³ include active/ standby database status, as well as Hobbs, tachometer and flight times, fuel quantity, battery voltage, OAT, oil temperature and aircraft GPS location⁴.



Mobile device connectivity

The GDL 60 datalink also offers Garmin Connext® device connectivity, allowing pilots to connect their compatible app or portable device and interface them to the avionics to transfer flight plans and stream weather, traffic, attitude information and other data⁵. The GDL 60 can also act as an interface to a GSR 56 satellite transceiver, allowing pilots to utilize in-flight text messaging or initiate voice calls⁶ via the Garmin Pilot app to stay connected from virtually anywhere. Data streamed to compatible devices and apps can include:

- ADS-B Traffic and Weather
- SiriusXMTM Weather and Audio Control
- GSR 56 Weather and Messaging
- GPS and Attitude Data
- Engine and Flight Data

PlaneSync service subscriptions

The LTE and Wi-Fi enabled features such as automatic database updates, remote aircraft status and flight and engine log uploading require a service plan from Garmin. Multiple service plans are available to provide customers cost-effective choices depending on the connectivity capabilities desired. Service plan details can be found at *Garmin.com/PlaneSync*.



PlaneSync technology is now available for retrofit installations for a list price starting at \$3,995 through the Garmin Authorized Dealer network. For additional information, visit *Garmin.com/PlaneSync* or *Garmin.com/Aviation*.

- Active PlaneSync and database subscriptions required for automatic database updates. Active PlaneSync subscription plan required for flight log uploading. Features are available on-ground only and requires GDL 60 to have active LTE or Wi-Fi connectivity; signal strength and other factors may apply. See Garmin.com/PlaneSyncCoverage for LTE coverage details.
- Remote aircraft status requires active PlaneSync subscription.
 User's smart device must have internet connectivity. Feature
 is available on-ground only and requires GDL 60 to have LTE
 connectivity; signal strength and other factors may apply. See
 Garmin.com/PlaneSyncCoverage for coverage details.
- 3. This information is intended as supplemental information only and is not a substitute for preflight checks.
- 4. GPS location provided by avionics. Select avionics can provide live location with a compatible GPS antenna, otherwise location displayed will be based on the avionics last known location. GPS signal strength and other factors may apply.
- 5. Compatible avionics required.
- 6. Sold separately; subscription required.

Brunswick Aviation Services Joins SmartSky Installation Partner Network

SmartSky Networks®, the innovative air-to-ground inflight connectivity provider, announced Brunswick Aviation Services as a new sales and installation partner for its next-generation hardware. The Pennsylvania-based MRO now offers SmartSky to aircraft owners, operators and fleets looking to upgrade from legacy ATG systems, complement their SATCOM systems or add connectivity to their aircraft.

An FAA Part 145 certified repair station, Brunswick is known for its rapid installation times and special attention to each individual aircraft serviced. The company is headquartered at the Lehigh Valley International Airport (KABE) in Allentown, Pennsylvania.

SmartSky has STCs available for thousands of inservice aircraft, and many others in the process of gaining STC status, including the King Air. The SmartSky LITE is the first-ever streaming-level connectivity solution for smaller business aircraft, like the King Air. View the growing list of STC available models at www. smartskynetworks.com/STC.

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• B90

• C90-1 • C90A

• C90B • C90GT • C90GTi • C90GTx





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