

In an almost eerie example of foreshadowing, his mother told him, "Everything is expensive at the airport." Of course, at the time, she was only talking about the airport's pay-toilets which fascinated her young son! How could she have known that someday he would own and fly a hangar full of beautiful aircraft and know all too well about the expenses associated with aviation?

### The Man, The Myth

Once upon a time, Mike Murdock was a workaholic software entrepreneur; building a company and making it into something that would fund his retirement. When that mission was accomplished, something was needed to fill the void. Being a planner, Mike took an introductory flight lesson in a C-172 before making any decisions about actually pursuing a pilot's certificate. Once he was convinced that flying would be both enjoyable and a worthy challenge, he plunged straight into the deep end and still hasn't come up for air. In less than a year he'd earned his PPL along with an instrument rating and had already bought his first two airplanes – a C-182 and an SR22. From there he rapidly progressed through multi-engine, commercial, ATP, turboprops and two jet type-ratings.

In the midst of all that training and constant flying, Mr. Murdock bought a variety of aircraft. While Mike has previously owned an Eclipse-500 jet and now owns/flies a Cessna Mustang, he still gets a special charge out of the SR22 he purchased new in March 2003 (as his third aircraft). It was then that I first met Mike while we were both waiting out weather in Duluth. I was struck by his outgoing personality and fun-loving attitude. I remember walking away thinking, "Now there's a guy who's passionate about aviation and who is loving life." Our paths have

crossed many times since and Mike's enthusiasm never fails to make me smile.

As a software/computer guru, the Cirrus' highly automated and computerized nature appealed to Mike, almost as much as its speed. He bought an early SR22 in 2001 and quickly became very active within COPA and on the forums. He liked the airplane so much that he traded it for a new one, less than two years later. This time, he obtained one of the first to be equipped with the Avidyne Entegra avionics suite. Many other aircraft have come and gone since, but Mike's Cirrus has always commanded its spot in his spacious hangar.

# The Machine: Extreme Makeover – King Air Edition

In 2005, Mike stumbled upon an opportunity to become a 50% partner in a Super King Air 200. At the time, he was newly multi-engine rated and was enjoying a Cessna Turbo 310R, that he'd had extensively refurbished. Never one to shy away from a challenge, Mike then took his first foray into turbine aircraft. He completed an in-depth training course for operating the King Air, and together with his partner, decided to "trick it out." Let the modifications begin!

Extensive engine, prop and airframe upgrades improved climb and cruise performance, gave more available power at altitude and increased engine life. Those modifications included PT6A-42 engines, new 4-bladed props, adding wing lockers and tail strakes, installing enhanced-performance leading edges, and finally landing gear doors which fully enclose the gear. Their King Air 200 had morphed into a Blackhawk 200XP. Yet, that was only the beginning.

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Data Chart – Beechcraft Super King Air 200 & 200XP		
	Original Configuration – (BE-200)	Current Configuration – (BE-200XP)
Engine	P&WC PT6A-41, 850shp	P&WC PT6A-42, 850shp
Propeller	Hartzell 3-blade	Hartzell 4-blade (Raisbeck Quiet Turbofan)
Seats	2 crew, 8 passenger	Same
Wingspan	54 feet, 6 inches	Same
Length	43 feet, 9 inches	Same
Height	14 feet, 0 inches	Same
Wing Area	302.7 sq. ft.	Same
Max Gross Weight	12,500 lbs.	Same
Wing Loading (1g)	41.3 lbs/sq. ft.	Same
Power Loading at T/O (MGW)	7.4 lbs/hp	Same
Baggage Capacity	410 lbs. internal, 54 cu. ft.	410 lbs. internal (54 cu. ft.) 600 lbs. external (2 wing lockers, 17 cu. ft. total)
Fuel Capacity (usable)	544 gal.	Same
Wheels/Tires/Brakes	22 x 6.75-10 (1 nose, 4 main)	Same
Landing Gear	retractable tricycle	Same
Cockpit Flight Controls	dual yokes	Same
Stall in Landing Config (V <sub>S0</sub> )	80	76
Stall – Clean (V <sub>S</sub> )	102	94
Rotation (V <sub>r</sub> )	95	94
Best Angle of Climb (V <sub>X</sub> )	100	Same
Best Rate of Climb (V <sub>y</sub> )	126	Same
Typical Climb	160 to 10,000 feet, 140 to 20,000 feet, 130 above 20,000 feet	Same
Cruise Climb	180	Same
Economy Cruise	1700 RPM, FL240, ISA, 12K lbs.: 224 KTAS, 452 lbs/hr.	1600 RPM, FL240, ISA, 12K lbs.: 225 KTAS, 463 lbs/hr.
Max Cruise	1900 RPM, FL240, ISA, 12K lbs.: 271 KTAS, 618 lbs/hr.	1800 RPM, FL240, ISA, 12K lbs.: 297 KTAS, 698 lbs/hr.
Never Exceed (Vne)	259/.52 Mach	Same
Flaps Extended (V <sub>fe</sub> )	146	Same
Landing Gear Operating (V <sub>I0</sub> )	181 extension 163 retraction	Same
Maneuvering Speed @ MGW (Va)	181	Same
Final Approach (V <sub>ref</sub> )-Clean	132	122
Final Approach (V <sub>ref</sub> )-Full Flaps	103	97

All Speeds in KIAS or KCAS, unless otherwise noted. Major Differences between original & current configurations shown in blue.

NOTE 1: The Raisbeck 4-blade props allow operation at 1,600 RPM. The original 3-blade prop's minimum RPM cruise limit was 1.700 RPM.

**NOTE 2:** This aircraft is equipped with high flotation main landing gear. As originally delivered, the tires protrude below the closed main gear doors, and impose a performance penalty. The aircraft is now equipped with Raisbeck fully enclosed main gear doors, which erases the performance penalty.



Mike's experience with the Avidyne Entegra in his Cirrus, made him lust for such modern avionics capabilities in his trusty (but longertoothed) King Air. Working directly with Avidyne and a reputable avionics shop, his King Air was the first ever to be certified with a dual-Avidyne-PFD glass cockpit. In the process, the entire panel was redesigned and modernized, adding such features as Garmin Traffic, TAWS, Color Weather Radar, XM Weather, Stormscope, Mode-S transponders, dual GNS-530's and a GMX-200 MFD (complete with approach charts). Other panel equipment enhancements are far too numerous to detail here, but a Meggitt 2100 3-axis autopilot with GPSS and CWS interfaces with all of the avionics. Most recently (summer 2009), full WAAS capabilities were added.

Of course, the passengers are pampered too. In back, they enjoy the latest noise-reduction technologies, DVD players, XM radio, laterally tracking and reclining seats, retractable tables and cup holders, tinted windows, full-service drink and refreshment



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cabinetry, and 110V outlets. The cabin seating also includes a two-place, fully-belted divan (couch) and a belted, flushing potty seat. Passengers stay cool in the summer heat thanks to the extra air-conditioning condenser and blowers.

## The Mission: To Telluride or Just Around the Patch

One of the many annual trips Murdock uses the 200XP for is a multi-family ski trip to Telluride, Colo., where the 10 seats, extended wing lockers and copious baggage space demonstrate their value. One might wonder why Mike would not take his Citation Mustang on such a trip. The answer is simple: capacity. The Mustang, as its name would imply, is a thoroughbred; whereas the 200XP is more like a draft horse. It's built to haul bulky loads, with many seats filled, a long way and not complain about it. However for most trips, Murdock typically operates the 200XP between FL240 and FL260 at mid-weights. On such flights, at near-ISA temps, he sees 285 KTAS at 1,600 RPM, 100 RPM lower than the original 3-blade props allowed, decreasing both noise and vibration levels.

Mike offered me the controls of his 200XP for a local jaunt from his home airport in Huntsville, Ala. It had been 14 years since I'd flown a King Air and almost a decade since I'd flown any twin-turboprop, but the King Air is an honest and predictable bird. Combine that with the Entrega avionics that I am so familiar

with, and I was feeling right at home in short order. All the larger versions of King Airs are heavy-handed, yet have an almost perfectly harmonized in-control feel. The responsive 3-axis trim system can compensate for the hefty control pressures once you have the feel of using them. What's required is for the pilot to learn to find the big aileron and rudder trim wheels (below and behind the throttle quadrant) without having to look down.



The spacious King Air interior with 10 seats and the extended wing lockers (inset) show why Murdock would choose the aircraft for a multifamily ski trip to Telluride, Colo.

#### **Mike Murdock**

#### **AVIATION DATA:**

Earliest Aviation Memory: In the early 60s, visiting an airport with my mom to pick up my dad. I don't remember seeing any airplanes, but I was amazed by the pay toilets. My mom told me, "Everything is expensive at the airport."

First Flight: April 2000, an introductory flight lesson in a C-172. I wanted to start taking flight lessons, but needed to make sure I would enjoy it before committing. I did, and I did.

Aviation Mentors: My first flight instructor, Mike Martin. He took me from private pilot through ATP, from single engines to multi-engines, and from pistons to turboprops. We transitioned to jets together. He's now one of my best friends, and we fly together often. I continue to benefit from his aviation wisdom.

First solo: August 2, 2000 at Madison County Executive Airport (MDQ), in Meridianville, Ala., in an elderly Cessna 172.

Initial Training: At Madison County Executive, all in Cessna 172s of varying vintages.

Private Certificate: December 8, 2000

Instrument Training: March 2001 through May 2001, in a 1997 C-182 (my first aircraft).

Aircraft Owned: 1997 Cessna 182, March 2000 through July 2002; 2001 Cirrus SR22, June 2001 through March 2003; 2003 Cirrus SR22, March 2003 through present; 1975 Cessna Turbo 310R, March 2004 through May 2005; 1979 Beechcraft Super King Air 200, July 2005 through present (with one partner); 2008 Eclipse 500, May 2008 through January 2009; 2008 Glasair Sportsman 2+2 experimental amateur built, July 2008 through present (and he built it too); 2009 Cessna Citation Mustang, April 2009 through present.

Proudest Accomplishments in Aviation: Getting both my private certificate and my ATP certificate.

All-time Favorite Flight: The week of Thanksgiving in 2003, my family rented a beach house in North Carolina. I volunteered to ferry people back and forth in my SR22 between Alabama, Tennessee and North Carolina. Over the next week I made 10 flights, totaling about 20 hours of flight time. All of that flying during my vacation became a bit tiresome, but I'll always remember one of those flights. I was cruising over Charlotte, N.C. at 9,000 feet on a beautiful, clear night. The stars and the moon were out, the city lights spread out before me, and it seemed like you could see forever. I was taking in this incredible scene when I suddenly realized that I was living out what I had dreamed and worked toward for so many years. I was flying! I almost had to pinch myself to prove that it was real life and not a dream. Sometimes when the flying is less than fun, I'll think back to that night and remind myself how much flying has enriched my life, and the lives of my family members.

Total Time: 2,500-plus hours



Murdock's King Air was the first ever to be certified with a dual-Avidyne-PFD glass cockpit. The panel was redesigned and modernized with many other added features.

Do that and you can trim out the "heaviness" while taking advantage of the design's inherent stability. A more solid instrument platform would be hard to find in this size aircraft.

Unlike many newer turbine aircraft designs, the King Air does not incorporate trailing-link landing gear. It's a straight-legged-bird and will, therefore, do nothing to conceal pilot shortcomings in landing technique. Not to say they are difficult aircraft to land, but they can be challenging if it's the squeaker landing you desire (and, really, who doesn't?). Once you have the site picture and flair down, the greaser touchdown may be elusive, but

not unobtainable. Having said that, King Airs are one of the best crosswind landing machines I have experienced. Their huge, powerful rudders and high wingtip-to-ground clearance make reasonably easy work of crosswinds that would have the typical Cirrus pilot scrambling for an alternate airport.

With all this praise for King Airs and Mike's 200XP, what's there to complain about? Well, no airplane is perfect. My biggest complaint about King Airs over the years has been their noisiness. While Beechcraft and many aftermarket modifiers have lowered the interior decibel levels, it's hard to put two giant props spinning





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within inches of the fuselage sides into whisper mode! I consider multi-layered hearing protection a must in nearly all turboprops, not just King Airs. But, if that's the biggest complaint I can come up with, I think it's pretty obvious that I am stretching to find fault with the most-produced twin-turboprop in history.

### **The Legend**

Mike Murdock will be the first to tell you that he is truly a lucky man. He's enjoying his retirement to the fullest. He's found a new passion that drives him just as much as his previous career did. Only this time, it's purely for the challenge, pleasure and enjoyment of it, without the stress (well, at least comparatively speaking). As his aviation experience has expanded and far surpassed the level of the Cirrus, he's not forgotten the passion that his Cirrus aircraft sparked in him. His SR22 and King Air may both fly a little less now that he has other aircraft competing for his attention. The time he does spend flying them is every bit as enjoyable as it was when he was a new pilot leaping into a whole new world of general aviation that aircraft like the Cirrus have helped to create. I have a feeling that Mike will be flying his Cirrus and King Air for a long time to come and that one of the things he'll be doing with them is flying to see other aircraft that might strike his buying fancy. He's a pilot's pilot and just loves airplanes. And who among us doesn't love stumbling upon a hangar full of toys like Mike's? Especially when you get invited right in, given

the grand tour and treated like a guest he's been waiting all day to see. If you happen by Mike's hangar at the Madison Co., Ala. airport (MDQ), that's how you can expect to be treated and you'll likely walk away thinking that if anyone deserves to own such a bevy of flying machines, its Mike Murdock.

Author's Note: With this seventh installment of the series, we continue to introduce Cirrus Pilot readers to some of the many COPA members who own and fly multiple aircraft. If you know a COPA member who owns/flies multiple aircraft types and wish them to be considered for inclusion in this series, please drop me an email at: matt@progaviation.com.

About the Author: Matthew McDaniel is a Master and Gold Seal CFII, ATP, MEI, AGI, IGI and CSIP. In 20 years of flying, he has logged over 10,500 hours total, over 4,000 hours of instruction-given and over 2,500 hours in King Airs and the BE-1900D (and another 2,500 in Cirrus aircraft). As owner of Progressive Aviation Services, LLC (www.progaviation.com), he has specialized in Technically Advanced Aircraft and Glass Cockpit instruction since 2001. He is a member of the Avidyne National Flight Safety Team and is currently teaching clients nationwide, via personal flight training and seminars, and providing a wide variety of contract pilot services. He's also an airline and corporate pilot, having flown a wide variety of airliners and corporate jets and holds five turbine aircraft type-ratings. Matt can be reached at: matt@progaviation.com or (414) 339-4990.



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