



# Blackhawk News

A Quarterly International Newsletter Published For The Blackhawk Family

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## Blackhawk completes 100th engine upgrade! Welcome to the Blackhawk family, Romco Equipment!



Photograph © Scott Slocum

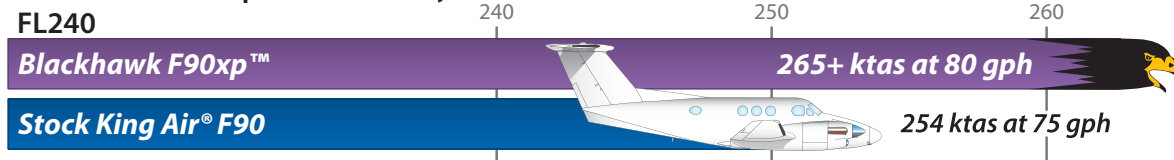
In October, 2006 Blackhawk received FAA approval to upgrade the King Air F90 with the more efficient Pratt & Whitney PT6A-135A engines. Texas corporation Romco Equipment quickly recognized the value of this new STC and signed up immediately. The price for the modern, factory new engines is about the same as overhauling the existing PT6A-135 engines. The added assurance of a 1000 hour, no calendar limit, engine warranty, coupled with a solid speed increase of 10+ knots, aided in their decision.

"Even though my F90 already had low time PT6A-135 engines, I felt it was a good business decision to take advantage of the generous engine

credits, while enjoying factory new engines and a better performing aircraft. We wanted to start with new engines to eliminate down time," said Romco President Robert Mullins. "70% of the maintenance of a King Air goes towards the engines. It was important for us to start with something known to keep maintenance costs low."

*The Blackhawk F90xp™ is a simple, bolt-on upgrade. The existing PT6A-135 engines are simply exchanged for current generation PT6A-135A engines. These modern powerplants have air cooled guide vanes and a larger compressor, which enable the -135A to run cooler and produce more power at altitude. For more information, visit [www.blackhawk.aero](http://www.blackhawk.aero).*

### Performance Comparison\* (ISA Day • Max Cruise Power • 9500 lbs. GW)



\* Individual performance may vary.

Blackhawk anticipates continued growth as the XP™ upgrade expands to new fleets. A growing number of King Air® 200 operators are now enjoying the PT6A-42 engine upgrade available only through Blackhawk.

"This upgrade ensures that the King Air® 200 fleet will maintain a competitive edge in the mid-sized aircraft market," said Blackhawk CEO, Jim

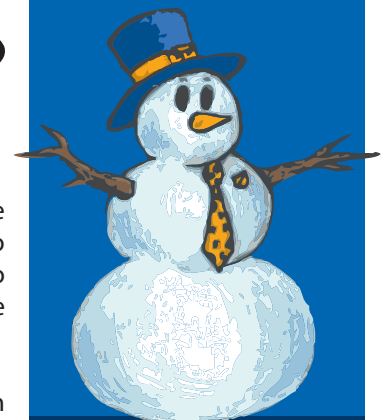
Allmon. "Our 200xp™ engine upgrade boosts the King Air® 200 to performance levels comparable to that of a factory new B200 at a cost relative to overhaul on a PT6A-41, while reducing maintenance and operating costs."

A financial analysis of the King Air 200 with the Blackhawk 200xp™ upgrade is available for download at our website, [www.blackhawk.aero](http://www.blackhawk.aero).

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Q1 2007

General aviation is the primary training source of most commercial airline pilots.

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## From The Cockpit

Jim Allmon, President

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Not a day goes by that I don't have someone ask me what effect the VLJ will have on the turboprop market. My answer is always, "Not much". The VLJ is forecast to be the greatest thing since the Piper Cub and I do believe the VLJ will be a viable product in the years to come. The once hallowed ground of the "Jet Set" is now being replaced by the average "Joe Businessman" who sees private aircraft as a necessary tool rather than the luxury it was 20 years ago. The VLJ could make private jet travel more affordable than anyone ever thought possible. I, however, take a different stance when someone regales me with the predicted doom of the impending turboprop market crash "just as soon as the first VLJ gets approved".

A year ago, one gentleman proclaimed that the average turboprop or cabin class twin would drop 50 percent in value as soon as the first VLJ rolled off the assembly line. This particular customer owned a late model Cessna 421C at the time. When I asked him what he thought his plane was worth then, he proudly claimed that his plane was easily worth \$600,000 considering the times and equipment. I then asked him if he would take \$300,000 for it and he suggested that I must have taken leave of my senses. I told him, "If the pre-owned cabin class market is going to tank, that means YOU have to be willing to accept that kind of price as well". He recommended where I could stick my logic and hung up. It's a shame; I was just getting warmed up!

The *first* VLJ actually came off the line in 1972 with the advent of the small and economical Citation 500. The Citation ISP became the first single pilot corporate jet approved and was considered at the time to be the death knells of the turboprop. Funny, I don't remember seeing a flood of turboprops hit the market after that, much to Cessna's chagrin. Remarkably Cessna, with all of its expertise, reputation and production capability only produced about 3800 Citation 500 series jets in 34 years (CE-500 through CE-560)! That averages only 112 per year. Between the various VLJ builders that are slated to bring their version of the micro-jet to market, they are projecting annual build quotas of 900 – 1000 jets per year. This means they hope to "eclipse" Cessna's 34 year sales record in less than four years! If you believe the manufacturers, they already have everything sold out for the next 4-6 years. It does make you wonder, what are real sales and what is advertising hype? Maybe if I claim that we have sold over 100 Blackhawk upgrades in only six years, people will say "METOO!" and flock to buy a Blackhawk! But wait, we actually HAVE sold over 100 Blackhawk upgrades in six years! **Operators are standing by to take your call!**

Being a **JET PILOT** does sound pretty cool. When I earned my Citation type rating many years ago, I did feel a certain amount of swagger that I



Jim Allmon, CEO and President of Blackhawk Modifications, is an experienced pilot with 8000 hours total time and more than 25 years experience in aviation sales and marketing.

didn't have before. I was an A-1 Sierra Hotel JET PILOT flying a hot little Citation ISP. Sure, I heard all the jokes about "bird strikes from the rear" and "flying a slow-tation". They were just jealous that they weren't a big time **JET PILOT** like I was. I thought the only thing that should have a prop on it was a boat.

That was until the day that I was asked to fly my boss and four big ol' Oklahoma oilmen and their baggage and golf clubs to Las Vegas from Tulsa. When I told my boss that we would either have to stop for fuel or leave a couple of his buddies, that was the end of my **JET PILOT** days. A month later, we were in a King Air® 200 and the Citation was just a short lived ego trip for me. My boss was practical and stopping for fuel or leaving a couple of his friends behind when they were going to Vegas was NOT an option.

Several new VLJs have now been approved and a couple have even been delivered. So where is the sound of a crashing turboprop market? The King Air® market is hotter than ever. Owners are buying new Blackhawk XP™ upgrades in record numbers, flying them for 500 hours and selling them for more than they have invested in them in some cases.

In the end it all boils down to utility. An airplane is a transportation tool. The cost of operation is defined in 'seat miles'. How many can it carry for the distance that is your normal trip? Full fuel and two passengers might be just the ticket for some, but when the loads are serious you need a serious load hauler. The Blackhawk upgraded cabin class turboprop is still the most bang for the buck out there.

Anyway, **JETPROP PILOT** sounds pretty cool too!



## Distributor Spotlight

Superior Aircraft Maintenance, Inc.



2005 was a landmark year for Superior Aircraft Maintenance. Not only did they become a Blackhawk Authorized Distributor, but they also became a Raisbeck dealership, a Raytheon service center and dealers for Rockwell-Collins, Shadin, Meggitt/S-TEC and Garmin. In 2006, Superior broke ground on their new 24,800 square foot maintenance hangar at the Rogue Valley International - Medford Airport in Oregon, allowing Superior to work more aircraft simultaneously.

"We continue to build our company so that we can add value for our clients and increase our

## Blackhawk Partners

Edwin Black, Director of Marketing & Sales

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It is my pleasure to announce that Blackhawk has entered into a partnership with Raisbeck Engineering, a first-rate and technically excellent company that provides performance improvement products for corporate and commercial aircraft. I was fortunate to spend my first eight years in aviation working with Raisbeck and feel it a privilege to continue my involvement now as a Blackhawk team member. This new strategic alliance will synergize our efforts in improving the overall performance and productivity of the King Air.

While Blackhawk enhances aircraft performance by increasing available horsepower with engine upgrades, Raisbeck improves performance through the infusion of advanced aerodynamic technology. With both companies working together in this integral partnership, we can combine our resources to provide the best performance and productivity available for your King Air, better even than factory-new models.

James Raisbeck, Chairman, and his team of aviation experts have the remarkable ability to find aerodynamic opportunities hidden to others. Mr. Raisbeck enthusiastically began fine tuning the King Air in 1981 when he engineered its first enhanced performance system. Now, 2.6 decades later, his name is synonymous with the venerable aircraft.

His success is rooted in one simple principle: "Our systems must provide operators much more than they pay for," says Sam L. Jantzen,

ability to provide outstanding service," said Joe Keith, President of Superior Air. "As the aviation industry continues on its path of technological advancement in a time of change, it is our responsibility to keep pace."

Superior recently introduced a new King Air® upgrade package. The Futurefit™ is available for the King Air® 200/300 and consists of the Rockwell - Collins Pro Line 21 Integrated Display System, Raisbeck Performance Systems, the Blackhawk XP™ Engine Upgrade (King Air® 200 only) and other upgrades to make your aircraft **better than new**.

Raisbeck's General Manager and V.P. of Marketing. "In addition, our systems truly work! This is evident by the staggering number of aircraft owners and operators who continue to install Raisbeck systems on their factory-new and older model King Airs."

Thanks, in part, to innovators like Raisbeck and now Blackhawk, the King Air has become the single most successful serially produced aircraft of all time. In a 40 year span, the fleet now exceeds 6,000! Beech has been complacent to modernize the King Air blueprint of previously certified models. Improvements are typically incorporated with the release of new models while older models remain frozen in time. As Beech continues to produce old generation King Airs, enterprising companies like Raisbeck and Blackhawk are utilizing the STC process to keep the fleet competitive.

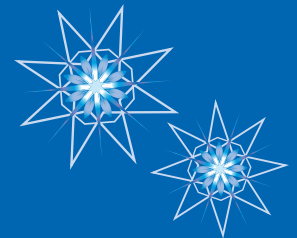
Many of the reasons a King Air appeals to an operator are the same reasons that have made Raisbeck and Blackhawk so successful. Blackhawk's Pratt & Whitney PT6A XP engine upgrade alone improves the overall aircraft performance. Adding the Raisbeck EPIC performance system allows a King Air to safely access thousands of additional short and unimproved fields while increasing payload, range and speed. Also, combining the engine XP upgrade with the EPIC performance system markedly increases the King Airs resale value.

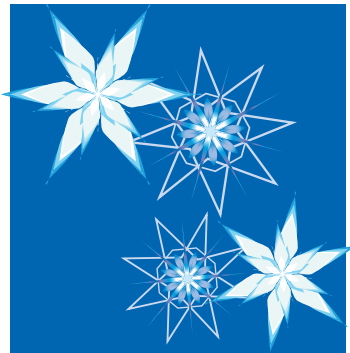
This partnership will undoubtedly reshape the future of the King Air, while providing operators with the luxury of more capabilities and a renewed pride of ownership. After all, our customers are the reason we are in business and deserve the latest in technology. We are thrilled to synchronize our efforts with Raisbeck to perpetuate the next generation King Air, along with currently existing models. This allows us to continue providing you, our customers, with the absolute best performance for your aircraft.



Superior recently sold and installed their first XP™ upgrade with many more to come.

For more information, call Superior at (541) 842-2250 or email John Demario at [jd@samaintenance.com](mailto:jd@samaintenance.com).





## Shop Talk

Mike Moore, Technical Services Manager  
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### ***I don't need to keep a cycle count. Do I?***

I have been looking at aircraft log books now for many years and it amazes me how many pilots and more pointedly, owner/pilots do not keep a cycle count record on their aircraft. There are surely many reasons for this oversight, mostly due to the fact that it's not required by regulation. But none of these excuses could justify the added expense this omission could create.

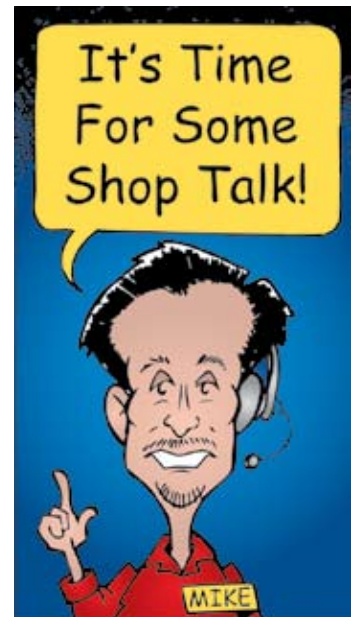
First of all let's make sure everyone knows exactly what defines a cycle. Not to be confused with a landing count, a cycle is an engine start followed by the aircraft leaving the ground (a flight) and an engine shut down. This means that you could start your engines, take-off, land, take-off again, land, take-off again, land, then shut down your engines and count only one cycle and three landings. If, however, you start up, take-off, land, shut off the left engine to deplane passengers, start that engine, then take-off again, land, and shut down both engines, you now have split cycles. The right engine has accumulated one cycle for the trip while the left engine should have been charged two cycles.

So what is the controlling factor that makes this an issue? In reality, what you are counting is the heating cycles of the critical rotating parts of the engine. As long as the engine is running, the operating temperature stays within an operating range, whether it is at full power or idle. At engine shut down the temperature falls below this range and the re-heating of the metal to the operating range is what imposes the molecular stress on the base metals of the rotating parts. Add to that the stresses imposed in opposition to the rotating plane of the parts caused by the turbulences of flight. Scientists and engineers that are far smarter than me have done studies and tests to figure out exactly what the safe heating and cooling cycle limits are for each of the rotating parts of your engine, and these limits

are set in stone by the limitations and life limits set by Pratt & Whitney and are certified by the FAA.

So how does this affect the value of your aircraft or the overhaul cost of your engine?

According to Pratt & Whitney, there is no longer a formula for converting operating hours to cycles (as shown by example two above), even though some shops or overhaulers will count one cycle for one operating hour. Most likely, you are short changing yourself with this formula. If you send your engine to a Pratt & Whitney authorized overhaul facility for an overhaul and there are no cycle records, they will scrap all the time/cycles limited parts of your engine, which will add huge costs to the overhaul because they cannot confirm the actual cycle count on the parts. Now think about aircraft value. If you decide to sell your aircraft with no cycle record, how much will a prospective buyer pay knowing they will have to replace the rotating parts of the engine at overhaul? I'm sure it will be significantly less than the true value of your aircraft. After all, you just put factory new engines on it. So the long and short of it is, in order to ensure you keep the value increase those factory new engines added to your aircraft, it is imperative you keep an accurate cycle record. Blackhawk has even supplied you with a new cycle book. We recommend you keep it handy. It only takes an extra minute to properly fill it in before you leave the pilot's seat. If you calculate the time spent vs. the cost savings, it could be the biggest hourly rate you've ever made.



Nearly two-thirds of all the hours flown by general aviation aircraft are for business use.

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## Announcements



We are pleased to welcome our new Director of Marketing & Sales, **Edwin Black**. Welcome aboard!

### **Blackhawk offers three new performance options.**

- Bleed Air Pressurization (King Air A90-B90)
- Fuel Capacity Upgrade (King Air A90-C90B)
- Digital Engine Instrument Package (King Air 90 series with XP™ upgrade)

### **Blackhawk organizes Brazilian demonstration tour.**

Blackhawk Modifications, along with Raisbeck Engineering, Commuter Air Technology, Quick Aviação, Japi Aeronaves and Pratt & Whitney Canada will make several stops in Brazil to demonstrate the performance and value of the Blackhawk XP™ upgrade with the Raisbeck and Commuter Air Technology enhancements. The **'Better Than New'** tour is currently scheduled for April 22, 2007 to May 3, 2007.