

# CASE STUDY

## AIR KING AVIATION SERVICES ELEVATING POWER & PERFORMANCE

### OVERVIEW

Air King Aviation Services developed its business from a passion. Owner Paul Armstrong first began working with Blackhawk Aerospace for engine upgrades when he served as the shop manager at a different maintenance facility. While there, he worked closely with Blackhawk and witnessed firsthand the value, quality, and benefits of the upgrades as well as the company's professionalism and dedication to the final product.

When he ventured out to begin his own business in 2014, Armstrong knew he wanted to continue providing Blackhawk upgrades to customers, helping them achieve increased power and performance as well as long-term savings. In fact, he believed in the product so much, he installed a Blackhawk Engine+ Upgrade in his own King Air, which he flies himself more than 500 hours a year in his Part 91 corporate flight business.

Today, he shares his personal pilot and maintenance facility experience with customers. He praises not only the power and performance boost of Blackhawk upgrades, but also the exceptional support and customer service he receives from Blackhawk. As a result, about half of his business is now providing full-service Engine+ Upgrades for an ever-growing list of very satisfied customers.

### CHALLENGE

Customers come to Air King Aviation Services with a variety of maintenance requirements for their King Air aircraft, including engine overhauls. Engine overhauls are exceptionally costly, often the highest cost of aircraft ownership.

**Frequently, overhaul costs increase a minimum of 30 to 50% over the original quoted price.**

***This is the result of additional issues often found once an engine is opened. This significant price increase lends a frustrating unknown once a customer is already committed to the work.***

Additionally, when engines are overhauled, aircraft can be down for months, adding income loss to the overall cost of an overhaul. What's more, an overhauled engine provides no added benefit beyond resetting time before overhaul. There is no performance or power benefit beyond a return to original output, and an overhauled engine is worth less than a new one, further lowering resale value of the aircraft.





## A COLLABORATIVE PROCESS

When customers come to Air King Aviation Services seeking overhauls, Armstrong works with them to identify their ideal solution. He helps them outline their operations now and in the future, including altitudes they fly, distances they travel, weights they carry, and typical conditions they operate under.

Armstrong then outlines the pros and cons of engine upgrades versus overhauls. He shares the tax advantages of purchasing new engines versus performing an overhaul. He also highlights the 3-week upgrade process, a considerable time savings over an overhaul's typical down time. For those seeking power upgrades before the end of engine life, he helps them identify the credit per hour they will receive if they choose an engine upgrade and locks that price in with Blackhawk before any work is done.

By putting all of this information together, Armstrong gives his customers options to help them understand the value of the aircraft before and after an upgrade or overhaul so they can make highly informed decisions. It is almost always very cost advantageous to consider the Blackhawk upgrade. Seldom is it not. Regardless, Armstrong feels it is his responsibility to ensure customers have all the facts before making a decision.

## THE IDEAL SOLUTION

Armstrong's customers who choose a Blackhawk Engine+ Upgrade have nothing but extraordinary praise for the experience. For them, when compared with the cost of overhaul, the cost difference for an upgrade balances out pretty quickly.

*"While it may seem cheaper to overhaul versus upgrade, those that choose the upgrade experience increased value and savings in the long run," says Armstrong.*

*"With increased performance and power, the aircraft fly the same miles in less time, reducing maintenance requirements. Saving 15 minutes of flight time per flight, they're saving 250 hours before overhaul."*

A Blackhawk upgrade removes the unknowns of overhaul costs and down time. While an overhaul can be more costly if issues are discovered, these are avoided in an upgrade. Also, Armstrong can perform a full upgrade in three weeks, complete with new props, compared with the typical two to three months for engine overhauls.

## BENEFITS REALIZED



**INCREASED POWER**



**FASTER CRUISE SPEEDS**



**BOOSTED PERFORMANCE**



**LOWER MAINTENANCE COSTS**



**SHORT 3-WEEK INSTALLATION**

**In the end, the aircraft is far more valuable. Armstrong is seeing Blackhawk upgraded aircraft sell first and for 30% more than standard aircraft with stock engines.**