

How Upgrading your Citation Can Actually Net You Money

Silverhawk has performed many full-panel avionics upgrades equipping aircraft such as King Airs with the latest in Garmin avionics including G600 PFD/MFDs, Garmin radar, remote audio panels and transponders, and touchscreen GTN750/650 Nav/Coms. As part of our charter operations, we are fortunate to operate one King Air with this package in our fleet with another currently undergoing this same transformation.

Our crews have come to really appreciate the functionality and ease of use of this equipment, which led us to look at the financial feasibility of performing a similar facelift for the Citations in our fleet. As you can imagine, with a retail cost of nearly a quarter million dollars, the project seemed doomed from the beginning. After all, this is a business tool that needs to generate a profit! Thankfully, we took a closer look and were surprised at what we found.

After a deeper dive into the financials including both short-term and long-term benefits, it became apparent that not only was this an affordable installation, but we'd actually be better off financially after factoring in all of the tax and maintenance savings and would have a safer, more reliable, and more functional airplane in the meantime. This is a clear win-win situation, and similar arguments could be made for most any business airplane in need of updating.

But don't just take our word on it, the table below shows the net financial impact 1 and 6 years from the time of doing the upgrade:

	TIME SINCE UPGRADE	
	1 Year	6 Years
Retail Cost	\$240K	\$240K
Avionics Re-sale	\$(60K)	\$(60K)
Net Initial Cost	\$180K	\$180K
Tax Savings at 40%*	\$72K	\$72K
After Tax Cost	\$108K	\$108K
Maintenance Savings**	\$18.9K	\$113.4K
Net Cash Expense (Surplus)	\$89.1K	\$(5.4K)
Added Equity***	\$120K	\$60K
Net Benefit	\$30.9K	\$65.4K

*Federal and state, assumed use of accelerated depreciation through Sect 179 expensing or bonus depreciation

**Assumes 15% savings from average maintenance cost of \$350/hour with utilization of 360 hours/year

***50% of retail cost after 1 year, 25% after 6 years

The first factor helping the cause is that the avionics being removed from the panel are still in demand and can be sold to cover a sizable portion of the initial cost. The next large consideration results from the potential tax savings since this is a depreciable asset. This analysis assumed that the full amount would fall under Section 179 expensing, but even if that had already been used for other purchases this would still qualify for 50% bonus depreciation since it involves new equipment.

Additionally, we found on the two Citation V's we've been operating that approximately 20% of our maintenance expenses were due to repairs on the



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A new glass panel with all of the bells and whistles may seem like an expensive – though attractive – luxury, but it can also be a very smart financial move under the right conditions.

avionics. This upgrade would replace the vast majority of that aging equipment, so the potential for maintenance savings also becomes very substantial over time. In our case, we projected that the maintenance savings alone would pay for the after-tax cost of the installation in less than 6 years.

Finally, the new equipment adds value to the airplane if it were to be sold. Not all of the up-front costs will translate into additional equity, and the percentage of the added value will decline over time. However, as that percentage drops the accumulated maintenance savings outweigh any loss in value of the equipment.

Overall, it's clear that this is a smart financial move for us that will also add many great tools and features for our pilots. We plan to upgrade our entire fleet of Citation V's by the end of the year.

If you would like to talk through the financial and practical aspects of upgrading your equipment, please give us a call at 800.479.5851 or visit silverhawkaviation.com!

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