



Views from a JetProp

Upgrades

Travis Holland

Travis Holland provides ferry and training services for PA46 aircraft in the USA, Canada and Europe. You can visit his web site at www.holland.aero.



These are exciting times for PA46 owners. In addition to new paint and interior refurbishments now available using a variety of ever-finer materials, a host of avionics upgrades are stimulating major upgrades.

We have truly amazing opportunities to equip our JetProps with sophisticated glass cockpits. The reliability, situational awareness, and ease of navigation that comes from these upgrades are worth the investment. However, utmost care must be taken before you let a stranger turn your old panel into recycled copper.



Buyer Beware

In aviation maintenance, and particularly in the niches of paint, avionics and interior, competent shops are rare gems hidden in a minefield of installers that are in way over their heads. The problem becomes exacerbated with pressurized airframes and JetProp conversions.

In a troubled economy, many shops are willing and eager to perform big panel upgrades beyond their real capabilities. More than a few of my clients have experienced a common set of frustrations at different shops, underscoring the need for a careful selection process.

When planning a major upgrade, owners must consider many factors beyond price alone. With a fairly new product like the Aspen last year and the G500/600 this year, you may have difficulty finding an avionics shop with experience in upgrading a similar-year PA46 airframe, which would be ideal. If your shop has your personal confidence and you do not worry about

educating them at your expense, you might select an installer less experienced with your specific aircraft/avionics configuration. At a minimum your shop should have prior experience installing your new boxes into a pressurized airframe with the same model of autopilot.

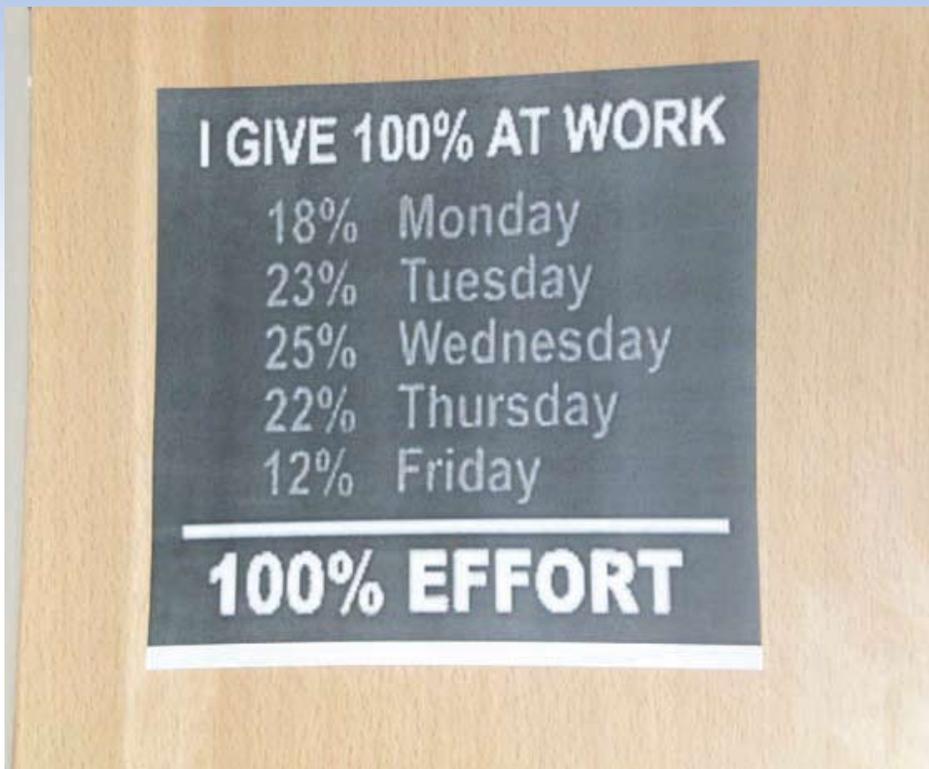
I Was Shocked I Tell You

A few years back I was astonished when an avionics installer in northern Ontario, Canada, told me that he had intentionally wired in the ground clearance switch to power the G530 only when the battery master was ON (obviously he was not a pilot). He reckoned that having bypassed the avionics master switch that his job had been done correctly. Just last week I ran into another JetProp wired exactly the same way, requiring battery master ON for ground clearance to work. Kind of misses the point, don't you think?

Another recent install had the KFC150 autopilot but the GPSS/HDG switch was never installed into the panel. The avionics shop told the customer that roll steering was built into the G500/600, completely missing the concept that the autopilot was not "smart" enough to recognize that. The KFC225 autopilot requires a different approach but also will not work without special settings on the WAAS navigators to support GPS glide slopes on the KFC225.

I have seen airplanes fresh out of delivery with flashing red indicators on newly delivered electronic engine instrumentation, OATs reading in the thousands of degrees, electronic horizons that show three degree pitch angles or two degree bank angles in level flight.

I witnessed a newly-installed Sandel 3500 wired so that 'fly left' commands from the heading bug resulted in the autopilot flying to the right. That was a good time



pilot training costs, and alternative transport arrangements are considered.

Ask the shops directly about recent upgrades they have performed on similar aircraft. Then get actual delivery dates versus those originally promised. Talk to multiple references about delivery delays, squawks after delivery, and invoice amount versus original quote. Make sure you execute a clearly understood agreement as to the delivery schedule; spell out beforehand how you will handle return-to-service checks and test flights.

Dealer Incentive

Consider asking for a performance guarantee. Offer \$500/day for up to two days of early delivery in exchange for a \$500/day discount for each day delivered after the agreed date. The \$1000 bonus for early delivery will be a powerful incentive for the installer while the penalty will help ensure that your airplane will not be delivered five weeks late.

to be in VMC conditions. Needless to say, do not take off with your new panel into low IFR conditions until you have thoroughly wrung out your systems.

Delivery Times

The most common problem with a new panel install is delay beyond the original promised delivery date. As more and more installers unfamiliar with PA46 and JetProp get into the game, delays are in fact becoming endemic. Squawks after completion are the second most common complaint. These common problems are found even with the best shops; issues can go way beyond the common list

when working with shops not experienced with pressurized and turbine airplanes.

While some unavoidable delays can occur during an install even under the best circumstances, most are simply due to inexperience and poor planning. One of my clients recently saw the promise of a three week installation evolve into eight painful weeks. Down time is expensive when lost opportunity, insurance, hangar, annual inspection,

Pretty Bird

Repainting your aircraft is an effective way to achieve the sleek appearance of a new bird, but the same cautions about avionics apply here. Painters have widely varying levels of workmanship and competency. Paint shops in humid climates need to have a way to control moisture in their paint booths. Since

cont. page 36 ▶



Views from a JetProp

(continued)



paint shops must disassemble and reassemble your flight controls, consider a visit to your favorite maintenance shop for an immediate post-paint inspection.

Paint shops, like avionics and interior shops, suffer frequent delivery delays, so performance guarantees are not a bad idea here either. Bottom line is that you must check references with a prospective paint shop and ensure that their workmanship and facilities are worthy of your million dollar aircraft.

MMOPA Resources

Use the MMOPA forum and fellow owners to carefully select a shop to perform any major upgrades on your airplane. Always put in place a clear written agreement, including language addressing payment schedule, post-delivery warranty coverage, and liability for squawks developed during the upgrade process.

Going Home

I know we are all busy, but try not to fly home the same day you arrive to pick up your airplane. Give yourself plenty of time to check out the new work. Take full advantage of the Return to Service

manual from MMOPA for your aircraft type. Make sure to test every avionics function during a couple of test flights. Of particular interest are autopilot operations, flight director and approach operations in both GPS and VLOC modes.

This test flights are an excellent opportunity to hire your favorite instrument instructor to train in the same area the upgrade was done. Any squawks can

be quickly addressed without the burden of returning to the upgrade location.

With proper planning and a measured approach to your major aircraft upgrade, you can add great enjoyment, aesthetics, and capability to your favorite mode of travel. Take care to avoid the common pitfalls. Selecting a competent shop will greatly increase your satisfaction with such a major investment.

