



Modernizing an **ARROW**

By Bill Waters

Transforming a 1978 Turbo Arrow III
into a 21st century flying machine.

I owned a 1975 Arrow II when I lived in California, but sold my interest in the wonderful little plane when I moved to Raleigh, NC. I was looking for something a lot bigger and faster, but my pocketbook was much less enthusiastic about the idea. So in 1992 I located a 1978 Piper Turbo Arrow III in Myrtle Beach, SC with a clean history, 1600 hours on the airframe and 400 hours on the engine. Inside, the interior was an "8" out of 10. The exterior, however, was about a "6."

After a good look-over and a pre-purchased inspection (and \$47k of my cash), N47807 was mine. That first year I added a WX900 Series II Stormscope, a Garmin XL250 VFR moving map GPS and a new King Audio Panel. With the two KX170B Nav/Coms I now had three VHF coms, two VHF nav radios and a GPS.

I just seemed to keep adding equipment and investing in upgrades. By 1996 we had relocated to Annapolis, MD and hangered the airplane at the fine airport at Easton, MD (ESN). During this time the addition of



Photos courtesy of Bill Waters.

Above: The Arrow ready for priming at Dan Smith Aero, located in Houston, MS.

Below: Bill also made changes to the interior of the aircraft, including numerous panel improvements and upgraded interior finishes.





a backup electric powered vacuum pump found its way into the logbooks.

In 1999 we moved to Memphis, Tennessee where a JPI EDM700 Graphic Engine Monitor and later a JPI Fuel Flow computer were installed. Then came a Vertical Compass Card and digital altimeter as a backup to the standard altimeter, as well as new cowl baffles and a Merlyn Automatic Turbo Wastegate Controller. In 2001 I had the interior redone at Memphis Aircraft Interiors of Memphis, Olive Branch, MS (OLV) along with new plexiglass all around. The service and results were excellent.

In 2002, a new Garmin 430 GPS/Nav/Com replaced the #1 KX170B while an S-Tec 30 with altitude hold and GPSS replaced the aging Piper autopilot. The work was completed by Precision Aerospace Technologies of Batesville, MS. I have found this avionics and A&P shop to be one best anywhere in the country.

In 2003 I added Knots 2 U lighted wing tips, wing root fairing, flap seals, and main gear speed spats. Later that year the plane was completely



Above and at Left: New interior includes leather seats, new side panels that have both new surfaces but plastic inserts that replace the old fiberboard, and panel top surface. The headliner was in good enough shape to be dyed in place. Plastic interior was repainted. New curtains. All materials met FAA certification. Front seat covers are sheepskin to protect high-wear seating surfaces.



Above: Panel upgrades since purchasing in 1992 include: Garmin 430, Garmin SL30 Nav/Com, new CDI's, Garmin CTX327 digital transponder, Stormscope, S-Tec 30 autopilot w/GPSS, Monroy ATD300 Traffic alerter w/external antenna (panel mounted left of Turn Coordinator), 12v power on both left and right side of panel for portable avionics, vertical compass card, King audio panel, JPI EDM700 graphic engine monitor with fuel flow computer, Aeroflight electric powered backup vacuum pump, and wing tip landing/taxi lights (switches on lower left side of panel). **Below:** The finished aircraft.

stripped and painted by Dan Smith Aero, located in Houston, MS. They also accommodated my FAA approved registration number change. It's now N579W. (If you are curious, May 1979 is when I met my wife.) Mr. Smith and his crew did an outstanding job on the paint work. This month, Precision Aerospace Technologies is replacing the old King transponder with a new Garmin GX327 digital transponder while also replacing the remaining KX170B with a new Garmin/Apollo SL60 digital Nav/Com and CDI. A Monroy ATD300 Traffic Alerter is also being panel-mounted with audio alert fed through the audio system. Additionally, a 12V power source was added to the left side of the panel to power wire my portable Garmin 196 GPS (used as a emergency backup) and a connection to the external com antennas is now available for connection to my ICOM hand held Nav/Com should it be needed. As for other components, I must add that I have used Lightspeed ANR headsets for years and find them comfortable and effective if

not the most durable units available. N579W is based at Charles Baker Airport (2M8), just north of Memphis Int'l Airport. I have been privileged to have flown this airplane from Halifax, N.S. to Florida, from Wisconsin to the Hill Country of Texas and lots of places in between. *PIPERS*

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