

his past October, Ab and Wendy Fuoss hosted the annual, four-day Duke Flyers Convention in picturesque Brunswick, Maine. This yearly gathering of friends is as much a treasured social event as a technical one. The Association has a little over 300 members, including 24 that hail from foreign countries including Switzerland, Australia, Hong Kong, Germany, England, New Zealand, Guatemala, Italy, South Africa, Cyprus, and Canada. Over 50 members were in attendance and 15 Dukes flew in, two of which were Royal Turbines - the PT6A-converted fire breathers. Several members flew in commercially but one member who writes for Twin & Turbine was conspicuously absent, due to an engine issue; the fly-in host unable to persuade him to ride in the back of an airliner. Notwithstanding his absence, what sort of journalist would the coachclass intolerant writer be, if he didn't eventually pen an article bragging on the other woman in his life, the Beechcraft Duke? Unlike most vehicles, machinery, and hurricanes, however, I like to refer to the Duke as a "He." So, I suppose that makes it the other man in my life, not that there's anything wrong with that, according to Jerry Seinfeld.

Ab and Wendy Fuoss, hosts of

the Duke Flyers Convention.

Most of the Duke's maintenance and operational issues are now relegated to folklore, having been resolved over the years with a thicker engine case, carbide lifters and engine pre-oilers, vortex generators, lightweight starters, alternators; and a very helpful, intelligent, and persistent owner's association: the Duke Flyers Association (DFA). The one anomaly that remains is unfortunately true of all high-performance, cabin-class piston twins, best explained here as it was to me 11 years ago. A fellow owner pointed out the simple reality of every fast, loadcarrying airplane: It takes money. I can imagine some of you jumping to your feet over the perceived expense of owning a Duke, shaking your head in amazement. Surely, only a dim-witted airline pilot would own one instead of a another cabin-class twin. Truth be told, other than some parts having become as rare as proverbial hen's teeth, the Duke's total ownership costs are in-line with other cabin class piston twins. Nowadays, however, and often due to folklore, Dukes can be purchased at a very reasonable price. The money metric now suggests a close look at them when you consider a cabin-class twin.

Beech employed royal titles for a line of twins: the King Air, Queen Air, Baron, Duchess, and Duke. Have you ever heard anyone bad mouth the workmanship and flying characteristics of a blue-blooded Beechcraft? Built in 1966 and flown for the first time in December of that year, the Duke was born not in Wichita, but in Salina (as was the Duchess). The story goes that Mrs. Piper and Mrs. Beech were close friends. The Director of Manufacturing at the Salina plant for the last five

18 • TWIN & TURBINE DECEMBER 2012

Event



years of the production run (1978 to 1982) was none other than John Piper, grandson of William T. The first delivery was in August of 1968 and 596 Dukes were made. Three hundred and eighty six Dukes remain registered in the U.S. and another 50 or so are overseas, mostly in Germany, a country well-known for its appreciation of engineering excellence. Three models were built throughout its production run: the straight 60, the A60, and the B60. Many of the improvements in later models, with the exception of cabin size changes, have been retrofitted to the older models through the use of the newer engine and some airframe additions and modifications. Having owned a Duke for 37 years, Jim and Marge Gorman bought the last one and have since sold it to their son, Jeff. Jim has published the Duke

Bob Hoffman, Duke guru, presenting operating tips.

Flyers Newsletter since 1988 and, coincidentally, the upcoming newsletter will be his last after a 24-year run. Many thanks to Jim Gorman for his dedication to Duke owners and pilots.

True Grit

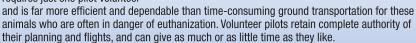
The model name has extra-manly connotations, thanks in part to an entertainment legend, The Duke - John Wayne. Remember, he not only performed as some great cowboy heros, such as Rooster Cogburn in True Grit, but a couple of aviation greats as well, in the movies Flying Leathernecks and Flying Tigers. The Duke carries six people in the mid-20s, all in pressurized, air conditioned, radar equipped comfort—also very manly. Beechcraft executives intentionally advanced the manly image in their advertising as well. An original print ad pictured a Duke taxiing behind the follow-me at an FBO. The headline read: "This is the only time your pressurized Duke will play follow-the-leader." Another said: "A special airplane for a special kind of man." And yet another: "This adventure classic is not for everyone." Beech was obviously promoting exclusivity and targeting the upwardly mobile, trend-setting leader – a plane for the man who knows who he is! Today, we would not fall for such propaganda and bravado... or would we? Have facts and figures, political correctness, balance sheets, and



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practicality taken us to the point that we are unwilling to indulge our chest-thumping passions? Besides, what if the propaganda is actually true? Well, we all know of at least one airline pilot/writer who found it to be so.

Just the Facts, Ma'am

Pilots, male pilots especially, are influenced not only by performance and manufacturing quality, but by aesthetics, and not just that of airplanes: boats, motoreveles, cars, guns, ladies, lawnmowers – heck, everything. One of the original design goals for this new Beech was to offer a medium twin with a swept empennage. When you combine a sleek nose and large engine nacelles with a sweeping tail, you get the marvelous Duke profile. You must agree: Beech got this one very right. To find oneself in an aesthetic trance over an airplane with lines such as the Duke is, therefore, quite logical. Let us stop then for a moment, leaving our school boy grinning and giddiness over the look and sound of the machine, and discuss the facts, like Sergeant Joe Friday. Here are some common myths and folklore that are no longer accurate.

The most persistent, and expensive, problem faced by Duke owners was no joking matter: cam and lifter scaling in the 380-hp TIO-541-E1C4 Lycoming. This issue was originally thought to be caused by everything from infrequent use to inadequate oil filtering and delivery to bad steel. The camshaft design and manufacturing process had never changed, so focus shifted to the lifters that were manufactured by Eaton. When Eaton moved production to Europe, the problem began and persisted. After Eaton was unwilling or unable to resolve the issue, two Duke Flyers members. Jerry Burnham and Gary Bongard, took it upon themselves to design and get approval for carbide tipped lifters. Adding engine pre-oilers from Oil-a-matic was the icing on the cake, and the problem was gone.

20 • TWIN & TURBINE DECEMBER 2012



A couple of electrical gremlins were put to rest with an alternator conversion, lightweight starters and the change to a lead acid battery instead of the original NiCad. Vortex generators should be mandatory on all twins and you will find them on most Dukes. Their effect on performance allows not only a gross weight increase, but single engine flight to near stall speed. The two 380-hp turbo Lycomings like fuel, and lots of

it. I flight plan 64 gph in the climb and, at 65 percent, about 44 gph in cruise. This setting will get you an honest 210 KTAS. The myth that the Duke is a ground lover is only partially true. While my personal minimum for a gross weight takeoff at sea level is about 3,400 feet of runway, many owners, and the Duke training guru Bob Hoffman, will show you that 2,500 can be acceptable.

Aerodynamically Voluptuous

The average Duke owner, I would hypothesize, is substantially wealthy, on the high end of the Twin & Turbine readership food chain: oil barons, engineers, inventors and manufacturers of popular devices and machines - carbide lifters and the zero-turn-radius lawn mower, for example. For some, the Duke is their second or third "other woman", after the companies they built from scratch, their jet, and their boat. And, of course, some have turned their Duke into a real fire-breather by installing Pratt turbines. With that kind of company owning Dukes, perhaps I'm not just a dim-witted, chest-thumping airline pilot after all. The Duke is aerodynamically voluptuous and I'm simply in love with a wonderful, but moody, challenging and occasionally expensive partner - and sometimes impoverished because of it. Hmm, maybe my Duke is a woman after all. TED

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DECEMBER 2012 TWIN & TURBINE • 21