

***Make Your
Airport Great
with the Right
Management
Structure***



Make Your Airport Great with the Right Management Structure

By Mike Jones

Cessna Pilots Magazine, originally published: April 2023

My colleague at this newspaper, Doug Tilghman, has spent the past two months writing about the statistics of pilots. It was great research and I enjoyed every word. He's explored the number of pilots in America, where they live, the airplanes they fly and the airports they patronize. Doug found America is home to 680,000 pilots, 277,000 airplanes and 13,000 airports of different sizes and configurations.

But his work brings up an important question: What makes a good airport? Or even a great airport? But before I answer that question, allow me to pose another (a real softball) just to warm-up your thinking:

The engine on your Cessna swallowed a valve while over a forest, but you made it through the crash. Crawling out of the wreckage, you're thinking survival. You need water, food, heat; maybe some shelter as a storm gathers overhead. Not a problem for our intrepid adventurer. You have come prepared with a bright red multi-tool Swiss army knife. You can chop small branches, sharpen stakes, slice tie-down ropes, and auger holes in the plane cover to make a tent. Good plan. Except it's a very big forest, a very cold night, and a very small pocketknife.

Meanwhile, on the other side of the mountain, your buddy's Cessna met the same malfunction. He's in the same predicament. But instead of a pocket knife, his emergency gear included an axe, a machete, a shovel, a space-blanket and matches.

Who's going to make it until the helicopter arrives?

And, what's this got to do with airports?



I was up at sunrise to capture photos of the hard-working crew which poured concrete for a new hangar at my local airport. Planning for airport construction — with all the regulatory questions, grant requests, financial issues, technical problems, and bidding processes — is a huge hassle but very much worth the effort. In my statistical study of airports, airports with “independent” governance were far more likely to have better infrastructure, better web sites, better customer service and better financial results. Airports which were embedded inside government agencies like the Highway Dept. or the Parks Dept. did not perform nearly as well as independent airports.

A Tale of Three Airports

I fly from the Pinehurst (NC) aerodrome. There are two flight schools, a busy aircraft maintenance company and a number of corporate hangars filled with hard-flying planes. Keep your eyes outside the cockpit because on a busy Saturday there might be ten planes in the conga line. According to the State of North Carolina, the economic impact of this airport is \$107 million annually. Woweee!

About ten minutes north is the equally busy Sanford/Lee County Airport, now rebranded

with the snappy moniker “Raleigh Executive Jetport.” This airport hosts the largest flying club in North Carolina, a brand-new terminal, a couple of Gulfstreams snuggled into big hangars, and an impressive roster of business aircraft. Its economic impact is a robust \$62 million. Well done, Sanford.

A few miles to the west is a third airport, Siler City. It has runways, ramps and instrument approaches roughly equivalent to both Pinehurst and Sanford. But the Siler City airport is an aeronautical ghost-town. It has only a handful of planes on the ramp, no businesses, and no corporate hangars. A friend using the flight planning desk found a soiled pair of men’s underwear jammed into a drawer. One frustrating morning not even the FBO staff could get the self-service fuel system to read my credit card. Not surprisingly, Siler City’s economic impact is a paltry \$8 million.

How does one explain these diverse results? The airports are very similar in services and capabilities; even their runways are aligned identically. After adjusting for the population and the local economy, the differences remain indisputable. Two airports are cranking out planes while one has more vultures than Cessnas.

The answer is that airports are competitive businesses and need to be run like businesses. Some airports compete better than others. Interestingly, there’s a new study which explains why this happens. Even more interestingly, I wrote the study. In a spell-binding 180 double-spaced pages, I statistically compared the performance of facilities where airport managers were allowed to do what was best for the airport to those where the politicians had their sticky fingers in everything. The results were enlightening.

The Predictor of Success

My study, to be published in August by the University of Florida, found there is a strong link between the success of an airport and the independence of the managers running it. The statistics suggests many airports fail to deliver

on their potential because they are government-owned. Governments have difficulty managing for-profit businesses. To be a successful government-owned airport, you need a management structure (technically, an “organizational design”) which accomplishes two tasks: insulate the airport from the politicians, and empower the experts to do what’s right for customers.



An active and engaged Airport Authority is a hard-working group of volunteers. It's best to have a wide variety of expertise, such as marketing, finance, flying, and engineering, because there are many issues to resolve before even the smallest project is launched. There will be engineering questions, funding questions, and forecasts for the airport for five, ten and thirty years from today. For example, paving a taxiway is ferociously expensive. The FAA specifies airports to use a special blacktop resin for ramps and taxiways which is four times more expensive than the stuff you might use on your driveway. Nothing is simple. But get ready: the “thanks” one gets are few and far between.

Think about a private business. Shareholders invest in a company but delegate their authority to a Board of Directors. With public airports, the Board of Directors usually is the City Council or the County Commissioners, most of whom have no interest in the airport. To make things worse, the whole process of government is about fairness (not efficiency), stability (not innovation), and

accountability (not customer satisfaction). This ripples through an airport in many ways, mostly bad.

If an airport is embedded into a department of the government, it's a “multi-function” organization, just like your Swiss army knife. The airport competes for resources with highways, parks, libraries and sewer systems, which — unlike the airport — are systems ever voter knows and uses. Guess who gets the most time, money and attention?

**Regression: Improved Controls for Final Model,
with IV and All Controls, All Airports**

Model Summary

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
Dependent Variable: DV - Log, Total Eco Impact	0.872	0.761	0.749	1.115	1.497

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	817.647	10	81.765	65.777	<.001
Residual	257.313	207	1.243		
Total	1,074.959	217			

	Unstandardized Coefficients	Std. Error	Standardized Beta	t	Sig.	Collinearity Tot.	VIF
(Constant)	1.534	2.290		0.670	0.504		
Dummy_Florida	0.036	0.187	0.008	0.195	0.845	0.665	1.503
Serv - Longest Runway (Ft.)	0.001000	0.000	0.486	10.381	<.001	**	0.528 1.894
Serv - D - Airport included in NPIAS List	1.185	0.296	0.154	4.010	<.001	**	0.783 1.276
Geo - Distance to CBD (Miles)	-0.077	0.025	-0.113	-3.080	0.002	**	0.852 1.174
Base - Multi-Engine AC	0.027	0.006	0.179	4.104	<.001	**	0.607 1.646
Ops - GA Transient	0.0000179	0.000	0.162	3.049	0.003	**	0.411 2.433
Comp - Number Runways, 15-Mi.	-0.042	0.037	-0.041	-1.132	0.259		0.902 1.108
Gen - Log, Eco_Intensity, 15-mi.	0.635	0.132	0.211	4.824	<.001	**	0.605 1.652
IV_D_Med OperCntrl	-0.022	0.325	-0.002	-0.066	0.947		0.842 1.188
IV_D_High OperCntrl	0.471	0.198	0.104	2.377	0.018	**	0.604 1.654

This chart illustrates one of the hundreds of regression models used by the author to measure the impact of an autonomous airport authority. The red circle highlights the “R-squared” for the overall regression; 0.761 is a very high score meaning the model describes most of the variation in the data. The red square highlights the standardized co-efficient for an autonomous airport authority, indicating the presence of such an organization has a pronounced and positive effect on the performance of the airport.

For example, the airport in Hendry County, FL is operated by the county engineer's office, which also manages the county roads and cemeteries. My guess is they're probably not spending a lot of time on airport grants. The Pompano Beach Airport (PMP) is buried in the Department of Public Works while the Gordonsville (VA) Airport is operated by the town manager.

I don't mean to imply these people are ill-willed or incompetent. It's just that running the airport is a side-job for them, not in their everyday wheelhouse. In my career in sales, we often discussed what it took to “delight the customer.” Government agencies never ask that question. It's not in their

vocabulary. You're simply not going to get creative customer service out of that environment.¹

In contrast, a “single-function” management structure is a tool dedicated to one job, like a shovel, axe, or a blanket. In a single-function organization, the airport manager runs the airport and only the airport; no roads, parks, or cemeteries. The airport team will be experts: knowledgeable, focused on the



When it's done right, an FBO can be a sanctuary from the hustle of the ramp and the stress of the cockpit. One of the best FBOs I have ever visited is the Charlottesville (VA) airport. Great customer service, lots of smiles, many offers to help with every little task. This was the flight planning area; notice the comfortable chairs and the excellent lighting. There also was a small kitchen and a quiet zone for snoozing. Snacks were available as well as a coffee maker, a half-dozen televisions and a crew car. Perfect!

customer, and undistracted by roads and bridges. A single-function organization often is called an “airport authority,” an “airport district,” an “airport commission” or something similar. It should be no surprise that a focused and dedicated management team is going to out-perform a bunch of under-motivated civil servants. But now we have

the numbers to quantify what it costs the community. It costs a lot.

My study found 116 of the 235 (49.4%) sample airports suffered from the poorly-fitting “multi-function” design. Extrapolating the results across the U.S.,

¹ One would assume that public servants would do everything in their power to identify and implement the “best” organizational design for their airport. Unfortunately, my study suggests that many do not. A case-in-point is the new Berlin Airport in Germany: it took nine years to fix the airport's documented 120,000 construction defects. “The supervisory board was full of politicians who had no idea how to supervise the project,” Professor Genia Kostka, of the Free University of Berlin, told BBC. “[But] they were in charge of all the key decisions.” Sourced: <https://interestingengineering.com/heres-how-berlin-brandenburg-airport-became-one-of-the-biggest-engineering-failures> on Nov. 4, 2021.

the study suggests that approximately 1,700 small airports of the 3,000+ NPIAS airports across the United States suffer from poor managerial fit. That organizational design stunted the economic performance of the average airport by about 40%, in the range of \$20 million annually for the average politician-controlled airport. If those airports could be freed from their political handcuffs it could release \$34 billion in trapped economic activity into the communities they serve. That's \$34 billion, with a "B." Even today, that's a lot of money. Without raising taxes.

Importantly, the study produced very specific recommendations for airports to improve their performance. All things being equal (that is, controlling for population, affluence, and other factors) the three most important operational decisions an airport can make are (a) have longer runways, (b) do whatever you can to attract more multi-engine aircraft, and (c) set up an independent authority to run the airport. That makes sense to me because an independent management team will focus on the details that make a difference to pilots. It's the right tool for the job.

Here's my abbreviated list of features that make an airport a strong competitor.

Table Stakes

First, just for me to consider landing at a particular airport, I need a runway in good condition. I'm not too fussy about the length of the runway, but potholes, cracks, uneven concrete, and chunks of tarmac pinging into my prop make me and my mechanic unhappy.

I need full-service fuel. Call me old-fashioned, but at my age I don't want to be climbing ladders dragging a twenty-pound hose over my shoulder.

I need a terminal building with bathrooms, a couple of vending machines, decent WIFI, and some sort of flight-planning desk. Humble is fine, clean is better.

Lastly, I won't fly into an airport that doesn't have a decent web site. I want to see photos of the buildings, learn if maintenance is available, and see about hotels, crew cars, tie-downs, and current fuel prices. A one-page listing on the county web site isn't going to get it done. If the government has neither the time nor the enthusiasm to publish this basic information then they aren't thinking about me, the customer. They're probably not going to do a very good job when I arrive. So I won't arrive.

Tiny Delights

To narrow the field, I try to learn if the aerodrome has some of the facilities and services which make life just a little bit easier.

I prefer airports with maintenance services. Years ago, flying to a business meeting in South Carolina, the right hydraulic master cylinder gave up the ghost. All I could do was make left turns. The maintenance services at that field saved me from walking home.

I don't need a tower, but I prefer airports with instrument approaches on both ends, an AWOS, good ATC communications on the ground, and LED runway lights. To be able to talk to Clearance Delivery while on the ground makes a "clearance void" departure much less of a Chinese fire-drill.

On the ramp, a big "plus" are marshals who walk on the ramp to help planes park and tie them down. Please don't throw hand signals at me from inside a hangar; walk out on the ramp and show me where you want me to park.

As for the FBO, I look for a tidy waiting room, comfortable chairs, and modern bathrooms. Fresh-baked cookies or fresh fruit are inexpensive to

provide and a delight to enjoy. And every airport should offer free coffee, period, full stop.

Attractions

If you really want to light my airport rocket, give me a reason to fly there. The number one attraction at any airport is a restaurant, and my flying buddies and I are in total agreement that we will fly way off course to an airport with



Fly-in events are incredibly important because they bring your airport to the non-flying public. My airport hosts roughly a dozen events every year, including an air show, two Young Eagles events, a huge barbeque festival, four car rallies, a 5-K runway run, three blood drives and much more. Yes, it's hard work. But yes, it's definitely worth it.

burgers and fries. Four great airport restaurants are within an hour of my home airport: Greenville, SC (GMU); Williamsburg, VA (JGG); Blue Ridge Airport in Martinsville, VA (MTV); and the Pik-n-Pig barbeque restaurant at Gilliam-McConnell Airport in Carthage, NC (BQ1). I probably fly to those airports more often than any other field in my logbook.

Other great attractions are fly-ins, local air shows, food truck rodeos, poker runs, and Young Eagle events. My local airport sponsors an open house every

spring and an annual air show every Halloween, both of which get huge crowds(huge for a small town, that is). It's a mini-Oshkosh. It's fun, it's different, and dozens of planes arrive just to share the excitement.

But the attraction doesn't have to be on the airport. Loan me a crew car and I'll drive into a town, spending money on the way. The airport in Wilmington, NC is ten minutes from the Battleship North Carolina, which won more battle flags than any other U.S. warship in World War II. Once I made a long detour to the Mid America Flight Museum in Mt. Pleasant, Texas. Give me a fun place to go and I will move the plane.

Welcome, Stranger

My last criteria is more subjective but important: does the airport make me feel welcome? With 4,000 hours in my logbook, I have lost count of the number of fields at which I have landed. But I can count on one hand the ones that made me pleased to be there, and I certainly remember the ones that I was glad to leave.

I flew to Melbourne, FL last month and parked at FIT Aviation. The warm welcome I received from the ground crew and the desk staff was extraordinary. They seemed genuinely pleased to see my wife and I; they asked about our flight, tied down the plane, and helped with our bags. They were equally cordial when we departed that evening. When I return to MLB, FIT Aviation will be my destination.

On the other extreme, do you remember the frazzled receptionist in the movie "Ghostbusters", played by Annie Potts? Once the ghosts start taking over New York City, she answers the phone screaming "Ghostbusters, what do you want?" Well, some FBOs offer their visitors the same tender loving care.

Fernandina Beach is a GA airport serving the beaches of northern Florida, the "sunshine state." Arms crossed, the matron at that FBO — somehow she

reminded me of my mother-in-law — peered over her bifocals at my Cessna as if it had stepped in dog-poop. A protective yellow velvet rope stretched across the front of the desk, keeping visitors at bay. The cavernous lobby was gloomy and dark. The gift shop was closed, a grey staircase went upwards to nothing, and World War II memorabilia inexplicably occupied all the places one might want to sit. “You want fuel?” she snarled. Annie Potts had nothing on her.



Amelia Island in Florida is blessed with beautiful weather and spectacular beaches but not a great airport. First, somebody thought building their new terminal in a design reminiscent of an old airplane was clever — but it isn't. In fact, I would vote it the undisputed winner of “the ugliest airport building on the planet” contest both inside and out. Second, it was under this awkward roof I endured one of the least-friendly customer service episodes I have ever experienced. So much for the “sunshine state.”

How's Your Airport?

Which brings us back to your airport. How's it doing? Are there businesses on the field? Are all the hangars filled? Is the pattern busy? Do you have a charter operator on-site? Is the airport winning grants from time to time? Are there fly-in events the public can enjoy? Is the airport an important part of your community's economic well-being? If it is, call the chairperson of your airport authority and give that person a well-deserved high-five.

Building a dynamic and energetic environment at an airport is hard work. Sustaining that level of performance for years isn't easy. Just keeping the web

site up-to-date is a (semi) full-time job. Airports aren't just about pouring concrete and "being safe." It's about finding new ways to satisfy and attract customers; to discover a hundred little ways to compete and succeed. Send your airport manager a thank-you email, or post a positive comment on Foreflight. It will be appreciated.

Your airport isn't quite so lively? I know the type. In January I attended a hangar party at a satellite airport outside a large metropolis. Among the 235 airports in the Florida study, this airport was rated #32 in terms of population and #20 in economic intensity; I expected it to be an economic dynamo. Unexpectedly, it scored a lowly #110 in terms of economic impact. I attribute the lethargy of that airport to the fact that the airport is run within the city government, with civil service compensation and almost nothing devoted to customer service.

"Our airport manager thinks he has only one customer," one discouraged pilot said, "and that customer is the city manager." Sound familiar?

If your airport isn't out-performing its peers, maybe it's time to call your state representative. Get the airport moved into an independent authority or at least re-established as an autonomous department within the government. It would be good for the airport, it will be good for your planes and pilots, and it definitely will be good for your community.

About the Author

Mike Jones is a 4,000 general aviation pilot, a retired businessman, and has served on his local airport authority for the better part of a decade. By the time you read these words, he will also have been awarded his doctoral degree from the University of Florida with a dissertation analyzing the traits that make for the best airports. According to the school registrar, he is the oldest person to get a doctorate from that University in 150 years. He's always accessible at PilotMike2012@gmail.com.

