



CFJ Quarterly

A newsletter from your Board of Aviation Commissioners

Greetings to people of 2116!

Thanks to the time capsule, we are showing you how the Crawfordsville Municipal Airport looks now in 2016. We believe we have some of the very latest in aviation technology here. Now, in the 21st century, our airport is an important part of life for people in Montgomery County. It is a key method of transportation. It is a useful tool in developing local business activity and promoting economic growth in our community. It serves as a gathering place for local organizations. It provides a learning tool for school students. And it is a source of pride for the residents of this community. Let us show you around in these four pages...



1968 Cessna 310



2005 Cessna 680



1972 Beechcraft Bonanza



2010 Cessna Citation



2006 Cirrus SR22



2003 Falcon 900



CFJ is the three-letter identification code for the Crawfordsville Municipal Airport.

A note to people of 2016: A copy of this airport newsletter is being placed in a time capsule to help show conditions in Montgomery County at the time of the Indiana bicentennial. The capsule is to be opened for the Indiana tricentennial in 2116.



To you of the 22nd century, our life in 2016 may seem quaint.

To us, we are amazed by the present world that surrounds us. But we wonder what the future will be. You know the answers to some of our most perplexing questions, like: How did lives change after 2016? What were the changes in aviation? What were the effects of medical advances in controlling disease and aging, the consequences

of growing population, of global climate change, of changes in governments, of peaceful coexistence of nations. And you know what Montgomery County looks like 100 years after our time.

Right now we are surrounded by the latest developments. Our airport is modern and up to date. We have all the conveniences of the larger airports of the world,

but in a more compact form. Our airport is part of the national airport system. It is one of the nicest and most successful airports of our present day.

On these four pages we are proudly giving you a tour of the Crawfordsville Municipal Airport. Here's how it looks in 2016:

Our terminal building

Our terminal building is new, modern, and serves as the central hub of airport activity. Built in 2008, it quickly attracted high praise from visitors who admired its colorful design and excellent accommodations. It features a wide glass wall that provides a panoramic view of airport activity, along with special-purpose rooms that welcome pilot groups and meetings of community



organizations. The terminal has a large lounge area, a smaller lounge for visiting pilots, a flight planning room, a kitchen, meeting rooms and free coffee and soft drinks for tired or thirsty visitors. It has a steel roof and steel girder frame with

a concrete block exterior. We built it to last. How does it look after 108 years?



Maintenance

Aircraft are complicated machines that must be kept in excellent condition. Our maintenance staff is composed of certified technicians who are licensed to maintain all types of aircraft. They stay busy in a large hangar doing the occasional repairs that are needed, plus annual teardown inspections which are required of all aircraft at least once a year. The excellent work of our maintenance staff is widely recognized and draws aviators from other airports for our top-quality service.



Aircraft 2016

We have two general types of aircraft at the Crawfordsville Municipal Airport.

Smaller airplanes are generally privately owned and piloted by their owners. They have one or two propeller-driven reciprocating piston engines. Most smaller airplanes are constructed of special-alloy



1979 Cessna 182

tempered sheet aluminum which is shaped in a way that provides impressive strength with light weight, in a technique called "stressed skin" design. Some newer planes are being



2008 Diamond D20

constructed of composite material, which is fiber-reinforced plastic resin. Some older designs still use a steel or wood frame covered by fabric, a time-honored technique dating back to the Wright brothers' era.

Larger airplanes are generally owned by businesses or other organizations, and are typically flown by professional pilots.



2002 Turboprop

They usually have one or two jet engines, either reaction-type pure jets or propeller-driven



2006 Cessna Citation

turbojets. Larger planes are mainly made of aluminum "stressed skin" construction, though some newer ones are adopting composite construction.

All airplanes today, here and elsewhere, are powered by internal combustion engines burning some type of fossil fuel. The smaller piston engines burn highly volatile gasoline that is similar to the fuel used in automobiles, but specially formulated for aviation. The larger jet engines burn a less volatile petroleum fuel called "Jet A" which

is refined for aircraft use. Some experiments are in progress on other fuel types, including fuel fermented from plant biomass. Experiments are also being done with other types of power plants for aircraft. Electric power has shown some possibilities, but today's aviation in our country relies on internal combustion of fossil fuels.



An airport in transition

Our airport is currently in the midst of a major transition. You, in 2116, are likely to see the results of these changes.

Our airport is advancing from its original orientation toward serving the needs of private owners of small airplanes. Small planes were the heart of aviation when our airport was founded in 1944. These aircraft were used for transportation, business, recreation and flight training.

We continue to improve these services for small planes, but a new emphasis has emerged. Larger corporate airplanes, usually jets, are now the fast-growing segment of our country's aviation industry. They

transport personnel to support business activity, delivering people direct to their destinations quickly and efficiently while bypassing the limitations of travel on the airlines.

To adapt to this change in aviation, many plans are under way:

✓ We have a newly-**extended runway**, now more than a mile long (5,500 feet) to provide fast-moving jets with the length they need to take off and land.

✓ We have a new **single-point fuel system** that loads jet fuel more quickly, in the manner jet operators prefer.

✓ We have plans for a **fuel truck** to deliver jet fuel wherever the jets are parked.

✓ We have a program in place to create **new hangars** on the airport for jets and smaller airplanes.

✓ We now have a **professional staff**, all employees of the City of Crawfordsville, that has replaced the previous hired Fixed Base Operator approach.

✓ We have a modern **terminal building** with the amenities needed by multiple people arriving on jets, and for jet pilots who must wait while their passengers conduct their business. Our terminal's conference room has been used by companies flying in to hold meetings.

**SPECIAL
TIME CAPSULE
ISSUE**
OPEN IN 2116

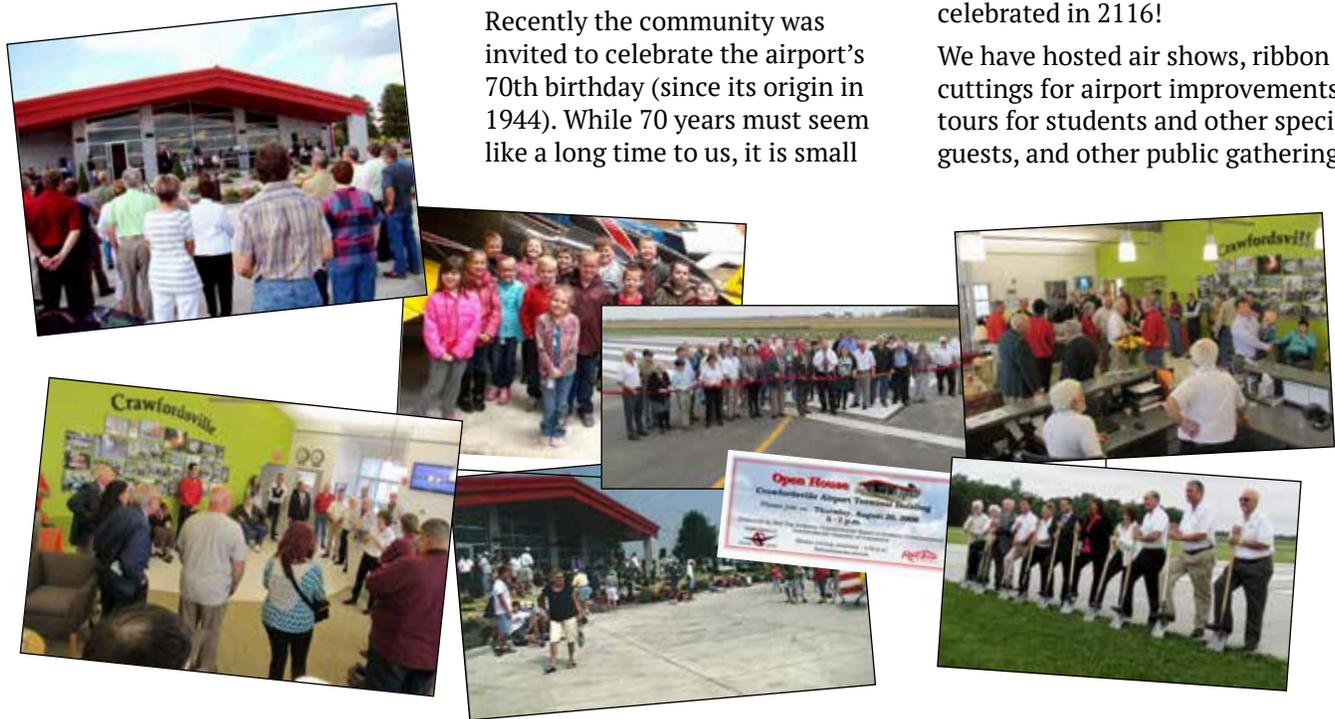
Special events

From time to time our airport hosts events to celebrate important occasions.

Recently the community was invited to celebrate the airport's 70th birthday (since its origin in 1944). While 70 years must seem like a long time to us, it is small

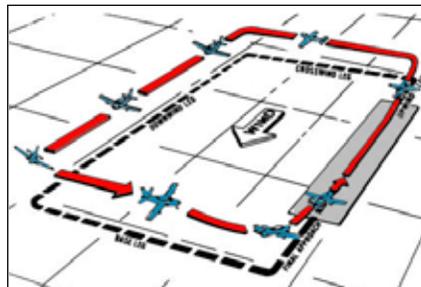
when viewed in comparison with the 172-year history that could be celebrated in 2116!

We have hosted air shows, ribbon cuttings for airport improvements, tours for students and other special guests, and other public gatherings.



How do we control air traffic?

Air traffic control here is done in the same manner as airports of similar size. Instead of a control tower commanding movements around the airport, pilots follow an established approach pattern, which keeps aircraft separated. Pilots report their positions on the radio and make adjustments in their positions as necessary. All takeoffs and landings are made by manual control one at a time on the same runway, so this system works extremely well.



When flying cross country, pilots sometimes navigate by simple methods such as pilotage (looking out a window), dead reckoning

(following a set course) or following ground-based beacons. Today, pilots usually navigate by reference to GPS (Global Positioning System) satellites. This system is so accurate that, even in bad weather with zero visibility, pilots can descend following a GPS-based pattern. It can guide them to a position exactly over our runway where they can see it, down as low as 253 feet above the ground.

Airport management

The Crawfordsville Municipal Airport is managed by a Board of Aviation Commissioners (BOAC). They are appointed by the mayor and serve without compensation. Most of them typically are pilots. Current members of the Board are:

- Left to right, front row
- John York, President
- Steve Rasmussen, Vice President
- Myra Dunn Abbott, Treasurer
- Russ Stath, Secretary
- Back row
- Bill Cramer, Airport Manager
- Randy Coakes, BOAC member
- Ken Ross, Airport Engineer
- Andy Biddle, City Council Liaison

