NEW HORIZONS

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Commercial Air Service Now a Reality in Pike County, KY

Scheduled commercial air service is now a reality in Pike County, Ky.

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On October 27, 2014 Appalachian Air started to provide one daily roundtrip flight between Pikeville-Pike County Regional Airport (PBX) and Nashville International Airport (BNA). The maiden flight had fewer than 10 aboard, but Appalachian Air officials say they think seats will fill up as more people learn about the service. The flight came about six months later than originally planned.

Upon arrival at BNA, passengers will be able to connect to any of the nine airlines which currently serve BNA with nonstop service to 50 major destinations throughout the United States, Canada and Mexico.

The aircraft which will be used for the flights, a jetstream J32, was also unveiled at the airport ceremony. It holds 19 passengers.

Donovan Blackburn, Pikeville City Manager, believes the air service will serve as a catalyst for continued growth in Pike County and Pikeville.

"The development of passenger air service has been a long held goal of the Pikeville community," said Blackburn. "In fact, one can go back as far as 1968 to see when this issue was first discussed."

"Scheduled passenger air service will open new opportunities for much of Eastern Kentucky," said Gov. Beshear. "What has historically been one of the more difficult regions of the Commonwealth to reach will now be less than an hour and a half flying time from connecting to the global air system in Nashville."

"As we face a new era in eastern Kentucky and work to expand our industrial portfolio, this commercial air service launches us into the competitive market," said Congressman Hal Rogers. "With new economic challenges ahead, we have to access greater opportunities, embrace new technology and create innovative strategies to shape our future, and this air service will provide unprecedented access to this important energy producing region."

“We think that by connecting Pikeville and Eastern Kentucky to the global air system, It will help create jobs,” Appalachian Air spokesman Luke Schmidt said. “It will help people interested in investing in the region to get here and find out what a great community it is and what is available here.”

Passengers boarding flights in Pikeville will undergo security screening and upon arrival in Nashville will deplane at a gate in the main terminal in a sterile area. Passengers will not have to go through any additional security screening in Nashville.

For more information or to book a flight, visit AppalachianAir.com

Tips On Winter Flying
by Bryan Neville
Reprinted with permission from FAA Aviation News

Winter flying poses unique challenges for the general aviation pilot. Here are a few ideas to consider for a safe flight.

PREFLIGHT PLANNING
Careful consideration must be given to several areas before "Old Man Winter" actually arrives. Installation of winter baffles, removal of wheel pants, grade of oil, condition of hoses, clamps, fittings and seals, condition of batteries, and tension of control cables are all items to review before the cold temperatures of winter cause difficulties. The route of flight itself may prove to be the most important consideration. Do you plan to fly through a valley or over mountains? Can you follow a well-traveled road or will you chance flying across wilderness territory? The difference may only be minutes, but may prove life saving if you have to make an off-airport landing.

PREFLIGHT INSPECTION
If you have or can use a heated hangar, your preflight will not be much different than in the summer months. If your airplane is out in the cold, you may have a tendency to rush your preflight. DON'T! If you park a warm airplane outside with less than full tanks, condensation of water may occur. Be sure to carefully sump each tank. Preheat is a good idea not only for the engine, but also for the cockpit. If you use a heater be watchful for the danger of fire; have a fire extinguisher handy. Don't tune your radios before they have had a chance to warn up. Cold temperatures have been known to cause instruments, buttons, and knobs to stick or break. Be sure to remove all snow, frost, and ice. If you cannot blow it off yourself, don't count on the takeoff roll to do it for you. If the aircraft surface is warm and you let it sit in falling snow, the snow may melt and refreeze and then this ice is covered with new-fallen snow. Always check. During engine starting, there is a tendency to over-prime which results in washed-down cylinder walls. This can also result in fires under the engine cowling. This is not a pleasant way to start a skiing vacation. Read and follow the manufacturer's suggestions for cold weather starting. It's always a good idea to ask pilots who live and fly in the cold climate for ideas. After the engine starts, the use of carburetor heat may assist in proper fuel vaporization until the engine develops sufficient heat.

TAXI AND TAKEOFF
The need for braking and/or sharp turns while taxiing should be minimized. Taxi speeds should be slow enough to allow for every contingency. Skiing into a ditch is not only embarrassing but can also bend metal. Cold weather can cause "below sea level" density altitudes. You should be aware of engine power, particularly with turbo or supercharged engines. Don't over-boost. During climb-out, be aware of cylinder head temperatures. Because of winter baffling, you may need to climb at a faster airspeed.

EN ROUTE
Winter weather is very changeable. Always obtain a weather briefing and always file a flight plan. You should keep your radios on and listen on a commonly used frequency for your area. Flight Watch on 122.0 is always a good one. Flight following with center is also a good idea.
Carburetor ice generally forms in temperatures between 32 and 80 degrees F, if humidity is 50% or more. If visible moisture is present, ice will form at temperatures between 15 and 32 degrees F. Winter flying also involves the use of cabin heaters; be watchful for the signs of carbon monoxide poisoning. And last, but not least, do not continue VFR flight into adverse weather conditions. The aviation statistics are full of pilots who thought they could. Don't become a statistic.

DESCENT
During descent be watchful for signs of carburetor ice. It is better to carry a little power during the descent. You may need to use flaps and/or gear to keep speeds reasonable. Be careful you don't descend into low visibility conditions, such as fog or low clouds.

LANDING
Landing at a busy airport is generally safer because the landing conditions can be passed from pilot-to-pilot. Again, be aware that braking may be minimal or non-existent.

POSTFLIGHT
Some items to consider are: top off the tanks to forestall water condensation and install engine and pitot covers, wing covers (if you have them), and control locks.

SURVIVAL
Always file a flight plan and keep it updated. Don't file a round robin flight plan; it covers too much territory. Experts say that survival is 80% mental, 10% equipment, and 10% skills. Plan ahead. File a flight plan. Expect to be found. Stay dry, don't eat snow, and stay warm. Carry a blanket, a sleeping bag, a first aid kit, matches and a copy of your filed flight plan. Do all this and you'll have an excellent chance of greeting your rescuers with a smile.

This article is reprinted from Plane Talk, the FAA Northwest Mountain Region's Safety Program newsletter.

Mass Production of Flying Automobile Nears Liftoff

BY JOSH DEAN

The first time Carl Dietrich brought his flying-car concept to the Experimental Aircraft Association's annual AirVenture gathering in Oshkosh, Wis., he had only a video to show the aviation geeks who wandered by his modest stall. The following year, he brought the mock-up of a wing. Six years later, in July 2013, he was finally ready to fly the prototype.

As the announcer who introduced the Terrafugia Transition put it: "Ladies and gentlemen, this is one of the most incredible things we've seen, ever, here at Oshkosh. Twenty-five minutes ago, this was a street-legal automobile. Now, it's in the air."
Pilot Phil Mateer buzzed the crowd while the announcer patched into his cockpit microphone to ask him how it felt up there. "I'm in a car looking down on traffic," Mateer replied. "And it flies real nice."

The promise of a mass-produced flying car has taunted aviation enthusiasts for generations. But Dietrich is today closer than anyone since pilot Moulton Taylor's ill-fated attempt to make the Federal Aviation Administration-approved Aerocar in the 1950s.

"What Carl and his team are doing is a re-creation of that same dream, with another lifetime's worth of technology, computing, crashworthiness and aerodynamic modeling," says Jake Schultz, a technical analyst at Boeing and author of 'A Drive in the Clouds: The Story of the Aerocar.'

More than a hundred people have paid deposits of $10,000 each for the Transition, which will be capable of 70 miles per hour on the road and 100 mph in the sky when it finally comes to market within the next three years. Dietrich is refining details on the third-generation prototype of his $279,000 vehicle before attempting certification by the FAA, which regulates planes, and the National Highway Traffic Safety Administration, which oversees cars.

A year after that triumphant flight in Oshkosh, Dietrich, 37, sits in his sparsely decorated office at Terrafugia's modest headquarters behind a Best Western in Woburn, Mass. He says he first proposed a flying car as a doctoral candidate in aeronautical engineering at the nearby Massachusetts Institute of Technology, where he partnered with a pair of Sloan School of Management students and two other engineers (including the woman who's now his wife) to win second place in the 2006 MIT $100K Entrepreneurship Competition.

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That same year, Dietrich also won a $30,000 Lemelson-MIT National Collegiate Student Prize, part of which he put toward that initial trip to Oshkosh, where he met his first angel investors and even signed up prospective buyers.
"We had seven people write us checks for a product that didn't even exist yet," Dietrich recalls. "That's a pretty powerful indicator that people really want this."

One reason the Transition is further along than any previous flying-car concept is that, in 2004, the FAA created the so-called light sport aircraft designation for planes that weigh less than 1,320 pounds and seat no more than two people. Manufacturers of those aircraft are given an easier path to market to encourage entrepreneurship and innovation in a niche of the industry that has seen very little of either.

"Personal aviation is basically a fun, expensive hobby," Dietrich says. "My goal is to actually make it useful."
Critics say flying cars are unlikely to be both great airplanes and great automobiles. But that misses the point, says Dietrich, who explains the Transition is intended to expand the definition of an airplane, solving a number of persistent problems in the process.

First and foremost is that small planes are virtually useless in inclement weather. If a storm rolls in while you're flying the Transition, on the other hand, you can land at many of the 5,000-plus airports in the United States alone, push a button to fold up the wings and hit the road until conditions improve. At home, you can park it on the street or in the typical suburban garage. And it runs on regular unleaded gas, which is cheaper and cleaner than aviation fuel and available at your local service station.

"You're getting comparable gas mileage to your road car, but you're going 100 miles per hour over all the traffic," Dietrich says.

That makes the Transition ideal for weekend jaunts or for salespeople and others whose jobs require regular trips of a few hundred miles — although, at the expected price, even Dietrich admits it won't be within reach of your average salesperson any time soon.

Dietrich rocks back in his chair. "It can be frustrating," he says of the endless refinements and the pending approvals process, "but I wouldn't be doing this if I didn't think we had the potential to inspire a trillion-dollar industry."
The way he sees it, flying cars are inevitable, and once the first one proves its way in the world, others will follow. Already, he's at work on a semiautonomous, vertical-takeoff model.

"I wouldn't waste my time if I didn't think we could change the world," he says.

RHS Aerospace Program speaks to Rotary

Ms. Tracy Naylor and several Russellville High Schoolstudents recently made a presentation to the Russellville Rotary Club about the Aerospace Program at RHS and the importance of the aviation industry in the Commonwealth. RHS sophomores Johnny Drumgole, Milam Watkins, Riley Lawson, and Spencer Statton and RHS freshman Phillip Wilkerson told the group about their ambitions to enter the fields of flight, aerospace engineering, and aircraft maintenance. They also relayed how the program at RHS is helping them reach their goals through increased science and math instruction and hands-on activities such as building and flying model planes, launching model rockets, and going to competitions in flight simulation, flight plans, and aircraft recognition.

RHS is among 25 Kentucky high schools who, though thepartnership with the Institute for Aerospace Education (IAE), offer an aerospace program. The program, which began at RHS during the 2013-14 school year, is designed to be a mix of hands-on industry applications with an intense, college-ready STEM curricula. The program prepares students for several possible aerospace career paths including flight/aero technology, flight & aeronautics, aircraft maintenance, aviation operations & management, air traffic control, aerospace engineering, aeronautical engineering, space systems engineering, aerospace computer engineering, airport design and construction (civil), unmanned aerial systems, and advanced manufacturing systems.

The freshman year of the program covers basic orientation of the aerospace industry: flight/aeronautics, aircraft maintenance, aeronautical engineering, and space. In their sophomore year, students develop more in-depth, practical knowledge and experience in aeronautics and flight. In their junior year, students specify a career pathway, and classes become more focused. Seniors can focus theirstudies in either advanced aviation science, preparation for the private pilot written examination, or flight. Many classes are dual credit for college. During the course of the program, students have opportunities to operate regional jet simulators, take specialized courses for career pathway completion, and develop mentoring relationships with industry professionals.

Naylor, who administers the aerospace program at RHS, stressed to the Rotarians the many opportunities presented to students by program, stating that that there is a “wide open job market here in Kentucky” for aerospace students because the aerospace industry is at least a $12 billion industry that employs over 130,000 Kentuckians. According to Naylor, there are 47 manufacturers of aviation-related products in the state, making the aerospace industry the number one exporter of products in Kentucky, surpassing even the automotive industry.

The IAE program partners with several universities to provide high school seniors with dual credit opportunities. Participating universities include Embry-Riddle, Eastern Kentucky University (9 credits in flight & aeronautics and operations & maintenance), Morehead State (6 credits and in space systems engineering, satellite applications and astrophysics programs), Kentucky State University (14 credits in aerospace computer engineering program), and Middle Tennessee State University (3 credits for air traffic programs). Depending upon their career path, students may also obtain their private pilot’s license prior to graduating from high school.

Officials hope to land airline

By KATIE BRANDENBURG The Daily News
kbrandenburg@bgdailynews.com

The Bowling Green-Warren County Regional Airport is continuing to work toward luring commercial air service. Airport Manager Rob Barnett said he discussed the airport's incentive package with major hub connectors during the past few weeks, and airlines are reviewing the package. Barnett presented information to Delta, SkyWest, American, United and Via Air.

The airport's about $2 million incentive package includes $750,000 from state government as well as ticket purchase guarantees from organizations including Western Kentucky University and Fruit of the Loom, Barnett said. That money would help offset the risks and costs involved in an airline setting up service in an unproven market, he said. Funding from the state has been a "tremendous help," Barnett said.

Challenges to attracting an airline include Bowling Green being an unproven market and the city's proximity to the airport in Nashville, he said. The local airport does a lot of charter work with WKU for basketball and football games. Charters have been hired through airlines that Barnett has been talking with, he said. "I think the airlines that are looking at our airport have a certain level of comfort in operating in and out of this facility," he said. "Now we just have to convince them to do this on a daily basis twice a day to Chicago."
Support from local, state and federal government officials has been helpful in moving the proposal forward, Barnett said. He said he would like to see two flights a day offered six or seven days a week to Chicago or Atlanta.

Barnett said he wants to accommodate the travel patterns of people in the region, a majority of whom fly to or through Chicago. In 2012, more than 720,000 airline tickets were sold in the 10-county Barren River Area Development District region with an average of 986 passengers per day each way, he said. The 10-county BRADD region includes Allen, Barren, Butler, Edmonson, Hart, Logan, Metcalfe, Monroe, Simpson and Warren counties. The airport also is looking at establishing services to a leisure destination on a seasonal basis, Barnett said."So it's kind of, you know, two missions on parallel tracks, but realistically the most important in prioritized order is going to be that hub connector so that people can get to places beyond Chicago," he said. The airport is also updating its airport layout plan by doing an geographic information system study of the airport that will be included in a centralized Federal Aviation Administration system, Barnett said.

The FAA has the capability of putting information about the layout of the airport into its GIS system. That information includes such things as pavement strength and infrastructure, he said.
That allows the FAA to have that information in a centralized location so that the administration can quickly respond to the airport's needs, Barnett said. State Rep. Jody Richards, D-Bowling Green, said money the governor set aside for the airport will be helpful in drawing commercial air service to the airport. He said commercial air service is something the county has been missing. "I think that it's one of the key pieces right now that would move our county forward," Richards said.

Having commercial air service would make air travel much more convenient, he said. It would mean that travelers from the area wouldn't have to drive to Louisville and deal with the time change or to Nashville onto a stretch of Interstate 65 that is just two lanes each way, Richards said. "When you go into Tennessee, you go into a funnel," he said. Bowling Green Mayor Bruce Wilkerson also said he hopes to see an airline commit to providing commercial service at the local airport. "I believe that there's a high probability that we'll be able to sign up a carrier to help us with that project very, very soon," he said.Wilkerson said adding air services would help local executives who need to travel to business locations across the country. "I think it would do a lot for us from an economic development standpoint," he said.

The presence or lack of commercial air service is likely something that companies look at when they are searching for new locations, Wilkerson said.

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Kentucky Department of Aviation
200 Mero Street
3rd Floor, Rm. 306
Frankfort, Kentucky 40622

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