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Is a Flying Car About to Take Off?

By SHARON GAUDIN, [IDG](#)

It might sound like a scene straight out of the Jetsons, but a Massachusetts company is developing a small airplane that can land, fold up its wings and drive down the highway. Terrafugia Inc., a company founded three years ago by graduates from the Massachusetts Institute of technology (MIT), is in the process of building a prototype of The Transition, a 19-foot, two-seater the company describes as a roadable light-sport aircraft. And it's focused on building something that can take to the roads as easily as it takes to the skies.

"We're not going to have a flying car, as people think of it, for a while," said Anna Dietrich, chief operating officer of the Woburn, Mass.-based company. "I would never say it's not going to happen, but today the infrastructure is not there, nor is the training, nor are the avionics that would make the training unnecessary... What makes sense right now is a roadable aircraft." Dietrich said the idea of a such a vehicle, which has an anticipated price of US\$148,000, is what fired up their imaginations and pushed them to found the company. The problem, however, is that the U.S. doesn't have the infrastructure in place to make roadable planes a viable alternative yet. There are roads, not runways, in front of houses, grocery stores and office buildings. And a sky filled with people who don't have pilot's licenses could be problematic.

"You have to be a pilot to fly The Transition," said Dietrich. "And we just really don't have the technology to have an autopilot built in so people can just get in it and say, 'Fly me to the grocery store.' It's an airplane designed to be flown by a pilot in the infrastructure we already have, which is the airports."

She added that there are about 6,000 public airports in the U.S., and most people are, on average, within 20 miles of one. The idea, she said, is to take advantage of this under-utilized infrastructure. A pilot can fly into a small airport, and instead of getting a rental car or waiting for a taxi to drive out to a rather remote spot, he or she can fold up the wings on the aircraft and simply drive off.

Foldable wings, though, may not give some passengers a feeling of safety when they're 10,000 feet in the air. Dietrich said making sure the wings stay erect while in the flight was one of their biggest design challenges. "We tackled that one first," she added. "There are a number of interlocks in place, some electrical, some mechanical. To activate the mechanism that folds or deploys the wings, you have to be on the ground. There are sensors that tell the plane if you are on the ground. The engine also needs to be off. And you have to enter a personal identification number that only the pilot knows... We built a lot of safety mechanisms into this."

Terrafugia executives expect the prototype to be completed sometime in 2008 and the first production model to be delivered in 2009. Dietrich said once they're in the manufacturing phase, they'll slowly ramp up to full-scale production by 2011 or 2012. Dietrich noted that they've received advanced orders for 30 to 50 Transitions already.