

Flying car should be available next year (w/ Video)

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(PhysOrg.com) -- The Federal Aviation Administration in the US has given approval to the Transition, a two-seater flying car developed over the last four years by Massachusetts Company, Terrafugia.

The flying car, or “roadable aircraft” as the company calls it, was designed by a team of engineers trained at the Massachusetts Institute of Technology (MIT). It can drive like a car at normal highway speeds but can also unfold its wings and fly.

The [vehicle](#) runs on normal [unleaded gasoline](#) and has a cruising speed in the air of around 185 kph (115 mph). Its flying range is 740 kilometers (460 miles). When driven like a car with its wings folded the [fuel consumption](#) is around 7.85 liters per 100 km (30 mpg). The use of normal fuel instead of a reliance on [aviation fuel](#) will make the Transition the most environmentally friendly plane in the air. The vehicle will have features of regular road vehicles, such as crumple zones and airbags.

On the road, with its wings folded, the Transition is driven by a conventional front-wheel drive, and can fit in a regular sized garage. When it is ready to take to the air via an airport, airstrip, or suitable flat land, the wings are folded out and the rear-facing propeller engaged to enable the vehicle to take off. It needs a runway of just over 500 meters (one third of a mile).

Federal approval of the vehicle was delayed because its weight of 600 kg (1,430 lb) was over the limit for a light sport aircraft (LSA), but the Transition has now been granted a special exemption to allow it to fly legally. The additional 50 kg in weight allows the vehicle to include safety equipment needed to meet federal motor vehicle standards in addition to aviation standards.

The vehicle has better crash survivability than a normal light sport aircraft because of the safety features such as the safety cage and crush zones required for driving on the roads, but it is also safer because if the weather turns bad the plane can land and drive home instead of flying through unsafe conditions.



The Transition is not as fast as traditional small aircraft and does not have as great a range or cargo capacity (Transition can carry just 195 kg (430 lb), including passengers and fuel), but the less stringent requirements for flying light sport aircraft may make it attractive to people who would not normally consider training for a full pilot's license. Training for a light sport aircraft license in the US requires only 20 logged hours in the air.

The retail price of the Transition is expected to be \$194,000 and Terrafugia expects the vehicle to be available by the end of 2011. The company has already received 70 orders.



More information: www.terraflugia.com/aircraft.html

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