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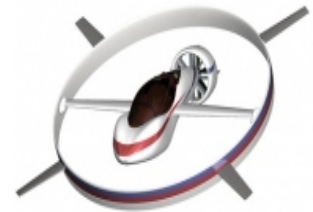
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Startup AeroCopter puts a new spin on air travel

By Efrain Viscarolasaga

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The AeroCopter mono-tilt-rotor

[AeroCopter Inc.](#) in [Boston](#) has designed a mono-tilt-rotor aircraft using a combination of magnetic levitation technology and a traditional propulsion system with the aim of providing a commuter-sized aircraft that can be employed for both consumer transportation and as an unmanned aerial [vehicle](#) for military applications. The design has the potential to provide fuel efficiency and the ability to take off and land in tight locations.

Led by [Siamak Yassini](#), a 25-year veteran of NASA's space shuttle and space station programs, the company has been in the design stage for the past five years, funded in part by an undisclosed amount from Siamak's younger brother [Rouzbeh Yassini](#), the founder of [YAS Ventures LLC](#) and the inventor of the cable modem while he was founder and CEO of [LANcity Inc.](#) in the 1990s.

Now, AeroCopter is moving into its second stage of development, which will include the search for additional funding and the development of a full-scale prototype.

"In the aerospace industry, the lifespan of a company is 15 years," said [Siamak Yassini](#) in discussing how long it takes to get a new aircraft design off the ground. "It's not like an Internet startup."

The aircraft's design takes elements from light aircraft and helicopters, as well as a page from the V-22 Osprey, a dual rotor, vertical take off and landing aircraft designed for military use, which has had a long history of controversy due to some high-profile failures and cost overruns.

While the Osprey uses two rotors, the synchronization of the pair has been difficult, and has been named as a source of some of the Osprey's early failures. AeroCopter's vehicle, dubbed Sarus for passenger flight and Kestrel for the UAV version, uses a single rotor, surrounding the entire vehicle.

During takeoff, the rotor is locked horizontally, and functions like a helicopter, though using frictionless electromagnetic power. Once airborne, the rotor is tilted vertically for cruising, typically at

205 miles per hour. The vehicle runs on traditional aviation fuel and would have a range of about 300 nautical miles.

[William Herp](#), CEO of [Linear Air LLC](#), a new air taxi and charter service in Concord, was not familiar with AeroCopter, but said innovation is welcome in the aviation community.

“I do believe there is a transition afoot in the industry because of the economic environment, which has hindered our ability to bring our platform to market,” he said. “But note, I didn’t say there is a decrease in demand. There is an opportunity for new kinds of aircraft that would make the industry more viable.”

AeroCopter has worked with a number of additional organizations around the country to finalize its design, including [MIT](#)’s Aerospace Computational Design Laboratory, and boasts [Donald Ames](#), a former [McDonnell Douglas](#) executive, [Joe Del Balzo](#) former acting administrator of the [Federal Aviation Administration](#) and [Robert Cruickshank III](#), a former C-130 pilot, among its technical advisory board.

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