

## Hoverbike drone project for air transport takes off

July 24 2014, by Nancy Owano



What happens when you cross a helicopter with a motorbike? The crew



at Malloy Aeronautics has been focused on a viable answer and has launched a crowdfunding campaign to support its Hoverbike project, "The Hoverbike is the result of years worth of research and development," said Chris Malloy of Malloy Aeronautics. "We combined the simplicity of a motorbike and the freedom of a helicopter to create the world's first flying motorcycle."

The Hoverbike flies like a quadcopter, and can be flown unmanned or manned. The team is selling a one-third scale drone model, not a fullsized, for the Kickstarter campaign, so that they can continue their work in bringing their dream flying machine to market. Its origins go back to when Chris Malloy built himself a Hoverbike in 2011. In this early version, the wheels were rotated horizontally and <u>replaced</u> with big ducted fans. Malloy has since changed the design from a bicopter to a quadcopter, said the report on their work in IEEE Spectrum.

As Malloy explained, "we moved to a proven quadcopter design, because with current technology we could not design a bi-copter cheap enough for safe and competitive sales." He said the company is in the final construction stages of the latest manned prototype of Hoverbike. They are to start flight testing in a few months and then will build a final engineering prototype for submission to aviation certification authorities.

The quadcopter design uses two pairs of rotors that overlap to help conserve space and weight, said IEEE Spectrum. For about \$1,000 the company is offering a "barebones" one-third scale model as part of the campaign, with an estimated delivery date of November this year. This is a stripped-down package that comes with a fully assembled frame, motors and propellers, "and is for a person with experience and desire to use their own flight controller, batteries, and ESC." For about \$1,200 dollars, one can have a one-third scale Hoverbike – that is ready to fly, but you need to supply your own choice of radio. The delivery date is



also targeted for November.

The team did not build the device just for entertainment purposes; they said they believe it would be ideal for practical applications, such as ski and mountain rescue, airborne logistics and time-sensitive personnel insertion/extraction during major disasters. It can be folded and palletized.

"Our goal is to produce an extremely reliable helicopter, designed with rugged simplicity at its heart and true pilot safety built into the design and operation of the aircraft," said the company. "Nothing we are doing is new. We are not developing any component or system that has not been designed and thoroughly tested before. If we are doing anything new it is the combination of existing systems."

More information: <a href="http://www.hover-bike.com/MA/the-hove">www.hover-bike.com/MA/the-hove</a> ... /how-you-<a href="http://can-own-it/">can-own-it/</a>

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