

# FlyNano electric sea plane takes first test flight

18 June 2012, by Nancy Owano



(Phys.org) -- A single-seat carbon-fiber airplane designed for water operations and proposed as a "fun flyer" has taken its first test flight at Finland's Lake Hepar. The June test flight comes after more than a year since its introduction at an air show in Germany in 2011. The [earlier FlyNano](#) was showcased as a single-occupant petrol/electric microlight amphibious aircraft. The new FlyNano has undergone key changes to advance its readiness for takeoff. Gone are the petrol-engine models. The new engine, propeller, controller and batteries combine to produce a stronger model than the earlier structure.

FlyNano has stated that due to advances in batteries and electric motors, they ditched combustion models. The carbon fiber-bodied aircraft is now electric.

"When the FlyNano concept was presented last year at the Aero 2011 trade fair in Friedrichshafen, Germany, it was envisioned to be primarily powered with a combustion engine," said the Finnish aeronautics firm by the same name, FlyNano." However, the development of electric

motors and batteries has been immense during the past year and the demand for electric powerlines has been increasing continuously."

The cruising speed is around 140 km/h (87 miles per hour). The rudder is controlled by pedals. "Elevons" (ailerons + elevators) and throttle are controlled intuitively by a stick with the right hand. The designers say their electric sea plane is quiet, and power-train vibration is reduced.

FlyNano's goal is to start production and deliver the first 35 planes to dealers by the end of 2013. The FlyNano plane has an ex-factory price listed on the company site as 32,000 euro (\$40,000). Transport and storage trailer charges are extra.

A promotional portion of text on the site tells prospective customers that, "If you've ever had a pilot's licence you'll fly Nano right out of the box." For the rest, knowledge of simple rules of the air will be required, says the team. The FlyNano FAQ page, however, directly answers the question of whether customers need a pilot's license to fly the plane. According to the European Aviation Safety Association regulation. FlyNano is below the necessary weight of 70kg, which means that national authorities decide on the classification. "Nevertheless a good understanding of water plane operation, rules and aviation safety is requested." The company adds that "We will clear the situation in several countries around the world within the following months."

FlyNano does not have a windshield, but in keeping with the company's philosophy of "feel the wind," the recommended gear includes helmet or at least goggles and drysuit/wetsuit or similar clothing.

© 2012 Phys.Org

APA citation: FlyNano electric sea plane takes first test flight (2012, June 18) retrieved 16 June 2019 from <https://phys.org/news/2012-06-flynano-electric-sea-plane-flight.html>

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*