

Aero Enterprise uses its new developed helicopter drone

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Aero Enterprise uses its new developed helicopter drone for offshore inspection operations for the first time.



Linz/Austria, 26th August 2019. In July 2019 the Austrian company Aero Enterprise inspected offshore wind turbines for the first time with the self-developed helicopter drone AERO-SensorCopter. So far, the drone operated only onshore.

High quality of images and precise analysis

The inspection flights at the offshore plants took place 70 kilometers (43 miles) from the German/Dutch coastline of the North Sea. The AERO-SensorCopter with its special sensor-head performed the autonomous inspection within a remarkably short time. “We as developer as well as our clients were more than satisfied with the results of this premiere on the high seas” explains Robert Hörmann, managing partner of Aero Enterprise. In the next step, Artificial Intelligence supports the evaluation and analysis of the image data within the AERO-Software Package. As a result, the client receives an automatically generated report. This can be uploaded to the customers ERP-system or is available for download on the Aero Enterprise server.

Stable flight even in rough weather conditions

The robust AERO-SensorCopter is designed especially for harsh offshore conditions, since it flies very stable, even at wind speeds up to 14 meters per second (27 kts or 50km/h) close to the inspecting object. Also protected against salt water it has an operation endurance of more than 30 minutes. The typical aerodynamic benefits of a helicopter drone is a big advantage compared to the conventional multicopter drones and therefore it is an ideal work-horse for the offshore environment. The AERO-SensorCopter operates fully autonomous along the rotor-blades, even then, when industrial climbers are not allowed to work on the offshore plants anymore, because of safety regulations.

Aero Enterprise exhibits at HUSUM Wind 2019

At this year’s HUSUM Wind fair in Germany, Aero Enterprise exhibits together with its partners Reprojekt and On-Site-Service at the Booth 4B16. Both companies work together with Aero Enterprise in the course of the partner program, first introduced by Aero Enterprise in 2018. It is a division of labor between the partners in data acquisition, data-processing and evaluation of anomalies based on the AERO-Software Package licensing model for the onshore business.

About Aero Enterprise

As part of a new and sustainable inspection service Aero Enterprise uses self-developed helicopter drones for the inspection of on- and offshore wind turbines as well as on industrial plants. The high-resolution image data of the inspected objects are recorded with the flight robot AERO-SensorCopter. The latest version is especially designed for harsh weather and wind conditions on high seas. The self-developed AERO-Software Package supports the customer with the evaluation, interpretation, classification and automated-reporting. Thus, Aero Enterprise fulfills the increasing demands of the industry for the necessity of digitization and traceability of the processes.

The start-up was founded 2013 and is located in Linz (Upper Austria). The Aero Enterprise team consists of eight employees. They constantly developing on the flight robot AERO-SensorCopter as well as on the AERO-Software Package.

As per December 2018 Aero Enterprise got EN ISO 9001:2015 certified.