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CycloTech Reveals Noise Level of CycloRotor

As CycloRotors become a new propulsion option for urban air mobility vehicles, offering the unique 360 degree thrust vectoring capability coupled with compact design, CycloTech conducted the most extensive CycloRotor outdoor noise test campaign ever conducted in aeronautical industry.

The data gathered are used to investigate the influence of different parameters on the acoustic characteristics of CycloRotors and guide the design of CycloRotor-driven AirCar concepts in order to leverage the noise reduction potential of electrically powered air vehicles and thus minimize noise exposure in populated areas.

The noise test campaign was conducted at Wels General Aviation Airport, Austria. The CycloRotor CR-42 was mounted vertically on a mobile frame and placed far away from any reflective surface. Measurements were performed in moments of no air traffic and wind speeds below 2.5m/s, with eight microphones, arranged in five distinct configurations, to characterize the noise generation and propagation of the CycloRotor.

A key result of the test campaign is that the CycloRotor generates a sound pressure level of 59 dBA at a distance of 100 meters, which is equivalent to the level of a typical conversation between two people. "This is a promising result and CycloTech will continue to investigate and optimize the aeroacoustic signature of the CycloRotor", said Pedro Carrasco Laraña, Aeroacoustics Engineer at CycloTech.

[Noise Test Executive Summary](#)

About CycloTech

CycloTech GmbH is the world leading company for aviation propulsion systems based on the Voith-Schneider-Principle. The Austrian company develops the unique 360° thrust vectoring CycloRotors, a new, electrically driven, sustainable, highly maneuverable propulsion system for the new air mobility demands of the 21st century. The compact design and instant control of magnitude and orientation of the omni-directional thrust of CycloRotors enable easy transition from hover to forward flight regimes, gust control and precision landing, ideal for safe operation in crowded airspace and confined areas. CycloTech aims at making individual air mobility as normal as driving a car - opening the sky for everyone.

<https://www.cyclotech.at>