



The Revolutionary Vertical Lift Technology (RVLT) Project is one of six projects in the Advanced Air Vehicles Program (AAVP) of the NASA Aeronautics Research Mission Directorate. The overarching goal of the RVLT Project is to develop and validate tools, technologies, and concepts to overcome key barriers for vertical lift vehicles. The project vision is to enable the next generation of vertical lift vehicles with aggressive goals for efficiency, noise, and emissions, to expand current capabilities and develop new commercial markets.

The RVLT Project invests in technologies that support conventional, non-conventional, and emerging vertical-lift aircraft in the very light to heavy vehicle classes. Research areas include acoustic, aeromechanics, drive systems, engines, icing, hybrid-electric systems, impact dynamics, experimental techniques, computational methods, and conceptual design. The project research is executed at NASA Ames, Glenn, and Langley Research Centers; the research extensively leverages partnerships with the US Army, the Federal Aviation Administration, industry, and academia.

The primary facilities used by the project for testing of vertical-lift technologies include the 14-by 22-Ft Wind Tunnel, Icing Research Tunnel, National Full-Scale Aerodynamics Complex, 7-by 10-Ft Wind Tunnel, Rotor Test Cell, Landing and Impact Research facility, Compressor Test Facility, Drive System Test Facilities, Transonic Turbine Blade Cascade Facility, Vertical Motion Simulator, Mobile Acoustic Facility, Exterior Effects Synthesis and Simulation Lab, and the NASA Advanced Supercomputing Complex.

To learn more about the RVLT Project, please stop by booth #1004 or visit their website at <https://www.nasa.gov/aeroresearch/programs/aavp/rvlt>.