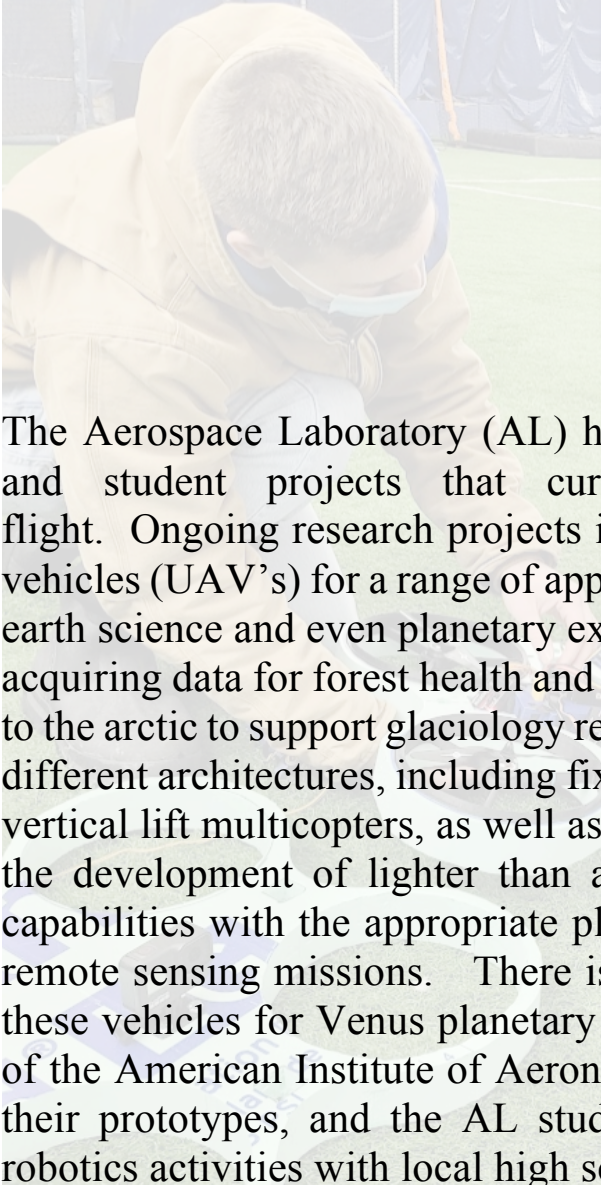


Aerospace Laboratory

Leadership:

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A person wearing a yellow protective suit and a white face mask is working in a laboratory setting. The person is looking down at something on a table. The background is slightly blurred, showing laboratory equipment and a green floor.

The Aerospace Laboratory (AL) houses a range of aerospace related research and student projects that currently focus primarily on atmospheric flight. Ongoing research projects include the development of unmanned aerial vehicles (UAV's) for a range of applications, including infrastructure inspection, earth science and even planetary exploration. Vehicles developed at the AL are acquiring data for forest health and bridge condition in Maine, and have traveled to the arctic to support glaciology research in Alaska. These vehicles incorporate different architectures, including fixed wing, hybrid fixed wing with vertical lift, vertical lift multicopters, as well as lighter than air. A special area of interest is the development of lighter than air UAV's that offer long endurance flight capabilities with the appropriate platform stability to be effective for extended remote sensing missions. There is also interest in exploring configurations of these vehicles for Venus planetary exploration. In addition, the student branch of the American Institute of Aeronautics and Astronautics uses the lab to build their prototypes, and the AL students and faculty support a range of aerial robotics activities with local high schools.