

UTC Project Information	
Project Title	MPC-639 – Automated Image-Based Aircraft Tracking and Record-Keeping for Utah Airports
University	University of Utah
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Funding Source(s) and Amounts Provided (by each agency or organization)	<p>USDOT, Office of the Assistant Secretary for Research and Technology \$28,000</p> <p>Utah Department of Transportation \$35,001</p>
Total Project Cost	\$63,001
Agency ID or Contract Number	69A3551747108
Start and End Dates	October 30, 2020 to July 31, 2022
Brief Description of Research Project	<p>Except for a small number of airports that are equipped with traffic control towers, airports in the State of Utah are controlled in a traditional fashion. The current method relies on forms filled out by the pilots. In some cases, a rough number of the passed airplanes are counted using radio calls for landing permissions. However, these systems are highly prone to error and are not reliable. Also, there is no documented evidence after counting the airplanes using radio transmission data.</p> <p>This project is an attempt to address the above-mentioned issue by proposing an automated traffic control system in small-sized airports. An image-based traffic control system is one promising solution that is already in use for highway traffic control systems. In this system, we can monitor, count, and recognize airplanes flying from or landing in an airport. This can be achieved by using the video data collected from cameras mounted on strategic points in the airport. Using the collected</p>

	<p>video data and relevant computer vision techniques, we intend to build an air-traffic control system able to count the traffic load and to recognize the aircraft models flying from or landing on the airport's runway. Results of the project will improve safety and automation aspects within small to medium size airports within the state of Utah.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	