

Thomas Maloney graduated from Rutgers University with a Bachelor's of Science degree in Mechanical and Aerospace engineering in 2010 and with his Masters of Science degree in 2012. His M.S. degree thesis centered around fuel icing studies that he conducted at the FAA Technical Center. His graduate student research also included study of flow field phenomena with the use of tools such as Particle Image Velocimetry (PIV) and Schlieren imaging. Following completion of his M.S. degree studies, he continued his work at the FAA Technical Center in the Fire Safety research group where his primary studies involved lithium-metal and lithium-ion battery fires. The lithium battery studies he has been involved with include testing related to lithium battery extinguishment, lithium battery packaging, lithium battery vent gases, various lithium battery chemistries and sizes, and personal electronic devices containing lithium batteries.



Most recently, Mr. Maloney continued his studies at Rutgers University, completing his PhD in Mechanical Engineering in May 2022. While in the doctoral program, his area of research expanded on his previous lithium battery and extinguishment research to include extinguishment in aircraft cargo compartments.

He now leads the Electric Propulsion program at the FAA Technical Center, where he continues his work with battery performance, also performing research in additional areas including synchronous motors, invertors, high voltage wiring and fuel cells.