



# AIAA

*American Institute of  
Aeronautics and Astronautics  
Dayton-Cincinnati Section*

**Lunch 'n' Learn  
23 Feb 2024**

**Inventing the future of hybrid electric flight**  
**Guest Speaker: Mr. Fabian Isaza**  
**GE Aerospace**



**Abstract:** GE Aerospace has multiple programs underway to develop and mature technologies to help make hybrid electric commercial flight possible. NASA recently selected GE Aerospace to develop an integrated, megawatt-class hybrid electric propulsion system as part of the Electrified Powertrain Flight Demonstration (EPFD) program. Plans for EPFD call for ground and flight tests of the hybrid electric system this decade, in collaboration with Boeing, using a modified Saab 340B aircraft and GE's CT7 engines. NASA also previously awarded GE Aerospace a contract for the Turbofan Engine Power Extraction Demonstration under the Hybrid Thermally Efficient Core (HyTEC) project. In preparation for ground and flight tests, GE Aerospace anticipates increased demand for hybrid electric aircraft engine component testing in coming years. That's why in May 2023, the company announced plans to invest up to \$20 million to add a new test cell and equipment at the EPISCenter in Dayton. GE Aerospace has been developing hybrid electric technologies for more than a decade, involving multiple GE and NASA locations and a global team. EPISCenter is one of the sites playing an important role in the advancement of hybrid electric jet engines for aviation.

**Biography:** As hybrid electric consulting engineer, Fabian Isaza is responsible for providing technical guidance and championing process rigor for hybrid electric technologies at GE Aerospace. Previously, Isaza was the subsection manager for hybrid electric technologies and senior staff engineer focused on electric machine and power electronics development. Through his career, Isaza has held a variety of people leader, program leader, and technical leadership positions. He has a bachelor's degree in Mechanical and Aerospace Engineering from Rutgers University and a Master's degree in Aerospace Engineering from the University of Cincinnati.

**Time:** 11:45 am

**Location:**

*China Garden Buffet  
112 Woodman Dr.  
Dayton, OH 45431*

**Lunch:**

*You will be able to  
purchase the buffet*

