The Enabling Technologies of Electrified Aircraft

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Vision: To reduce carbon emissions with electrified systems

Mon-Electric Aircraft

Hybrid Electric Aircraft

Fully Electric Aircraft

Challenges

Enabling Technology

Benefits

Methods

Conclusions

Future Work

Becoming specific components of power electronics are generalized due to time constraints, techniques worth mentioning for continued research include: one-stage power conversion to produce a >90% increase in efficiency and lightweight direct-drive electric motors. Review emphasis in component versus motor losses. Also, improved by power electronics, specifically power electronics, which are the next generation of power electronics.

Dr. Kripa Hanum Associate Professor of Electrical and Computer Engineering at UIUC and Director. Alumina Oxide makes work with ETS and Member, NSF Alumni Working Group. The enabling technologies of electrified aircraft to provide a significant reduction in emissions for future aircraft.