

NEW SAE INTERNATIONAL COMMITTEES ESTABLISHED FOR AIRCRAFT HYBRID/ELECTRIC PROPULSION

News / Manufacturer



[SAE International](#) is helping the aerospace industry take a big step to more sustainable and efficient future through the establishment of the SAE E-40 committee on Electrified Propulsion.

Backed by a strong cross-section of the global aerospace industry and regulatory authorities and supported by the SAE Electric Aircraft Steering Group, the committee will address hybrid/electric propulsion architectures and associated systems and equipment for a variety of air vehicles to progress technology development and support the regulatory framework through expert consensus documents.

“Studies into the electrification of aircraft propulsion revealed the potential of reducing carbon footprint by 50% between 2005 and 2050 – supporting ACARE goals. This step-change in technology will require new ways of collaborating among airframers, engine manufacturers and system suppliers – and addressing the regulatory framework and means of compliance for these new architectures,” Richard Ambrose, E-40 Founding Chair and Hybrid Propulsion Coordinator at Airbus SAS, said.

“SAE International offers a great opportunity to the industry to work together to establish methods that are suitable to introduce hybrid/electric propulsion architectures in our aircraft in compliance with airworthiness regulations, while maintaining same safety levels – we look forward to welcoming the hybrid/electric propulsion community in the E-40 committee,” Ambrose added.

E-40 will develop technical reports (Aerospace Standards, Aerospace Recommended Practices

and Information Reports) for standardized nomenclature, define applicable terms and fundamental architectures, and address considerations for endurance and other performance criteria, safety, high voltage/high power, aircraft integration and installation, and interfaces between equipment.

Energy Storage and Charging

This new effort comes in parallel with the establishment of the new [SAE AE-7D committee on Aircraft Energy Storage and Charging](#), and to support this effort, knowledge and best practices will be shared from other SAE International committees addressing aircraft and ground vehicle propulsion, electrical power, controls, safety and prognostics, benefitting from collaboration with experts across the mobility industry.

David Alexander, SAE Director of Aerospace Standards said,“SAE International is honored to support the global aerospace industry in advancing new propulsive technologies by providing a venue for the global aerospace community to meet these exciting objectives. E-40 joins over 180 SAE aerospace technical committees dedicated to solving industry’s toughest challenges and is a core part of the growing expert standards community at SAE addressing more electric, hybrid and electric aircraft.”

The E-40 committee will meet globally face to face as well as virtually. The first meeting will take place on 26-28 February in Florida, USA (venue TBC). Anyone interested in joining the committee should contact Nicole Mattern, Aerospace Standards Specialist, by emailing nicole.mattern@sae.org.

The AE-7D committee will meet virtually and face to face. Anyone interested in joining the committee should contact, Dorothy Lloyd, Aerospace Standards Specialist, by emailing dorothy.lloyd@sae.org.

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