



## Call for papers

# International Conference on More Electric Aircraft

Toulouse, February 6-7, 2019

On-going research and investments in air transportation are driven by the ambition to increase the efficiency of aircraft, reducing fuel consumption and hence carbon emission. Another ambition is to reduce operating costs and to increase reliability. Given the high demand for air transportation and its expected growth, these challenges are of major importance. Recent developments for pursuing these critical requirements concerned the electrification of aircraft systems which significantly increased electrical power needs and impacted aircraft power architecture. More electrical technology is being driven by strong advances in power electronic devices, high efficiency power generators, advanced actuation systems, energy storage technologies, new manufacturing processes, new power generation and distribution architectures. Whilst many concepts have already been demonstrated on more-electrical platforms, developments on more electric aircraft systems are subject to on-going research programmes of major importance. There is much more to do to challenge the power density and improve the reliability while taking the best of the intrinsic advantages of electrical technology. New research programmes in Europe and beyond are also pushing innovative propulsion concepts, all electric, hybrid or turboelectric, potentially distributed. The design for this future generation of more electric propulsion aircraft issues challenges not only structure and aerodynamics but also power distribution, energy storage, thermal management, reliability and certification all of which will be addressed during the conference.

Following the successful European conference held in Bordeaux in February 2017, the organisers of MEA2019 invite industry and research representatives to contribute to this new exciting edition in Toulouse, and to share ideas, lessons learnt and solutions relating to technological developments as well as future concepts associated to more/all electrical aircraft. Transport aircraft, light aircraft, unmanned aircraft, fixed wing as well as rotorcraft, will be considered, either for commercial, military or private use.

The 2-days programme will mostly rely upon highly interactive poster sessions, for which you are invited to submit abstracts referring to the following topics:

1. Hybrid/All Electric Aircraft: architectures, management, operations
2. Propulsion systems, subsystems and equipment for Hybrid/All Electric Aircraft
3. Electrification of non-propulsive loads
4. Power generation
5. Power conversion
6. Energy storage and regeneration
7. Power distribution and circuit protection
8. Power and energy system architectures
9. Thermal management
10. Maintenance and operability
11. Reliability and health monitoring
12. Certification, operation and safety for Hybrid/All Electric Aircraft
13. Standardisation of new components
14. Testing facilities for high power electric aircraft

An industrial exhibition organized together with the conference will give opportunity to the audience to visit booths where labs and industry will highlight their latest achievement related to MEA. Furthermore, MEA2019 will be held in parallel with the DECIELEC event ([www.decielec.com](http://www.decielec.com)) and registration to MEA2019 conference will give the opportunity to attend freely this industrial exhibition with more than 100 booths on connected & embedded systems, power electronics and energy systems management.

Updated information and abstract submission on [www.mea2019.eu](http://www.mea2019.eu)

## Deadlines and general information

Extended abstracts of at least 2 pages are to be uploaded on the website before 9 September 2018 using the suggested template. Following the review by the program committee members, the notification of acceptance will be forwarded to the main author by 12 October 2018.

The program committee may recommend a few submissions to be presented at the oral sessions. Other submissions will be presented in the poster sessions.

The proceedings will be made available to the audience at the opening of the conference. They will gather the extended abstracts, which the authors will be allowed to amend by a full paper until 9 December 2018.

Final program will be available late October on the website, when registration to the conference will open.

## Program committee:

Co-chairs: Jean-Charles Maré (INSA Toulouse – Institut Clément Ader)  
Markus Christmann (Siemens)  
Secretary: Florent Christophe (ONERA)

<b>Baldini</b>	Bernard	Dassault	<b>Kovalev</b>	Konstantyn	MAI
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<b>Bozhko</b>	Serhiy	U. Nottingham	<b>Lisouet</b>	Susan	U. Concordia
<b>Budinger</b>	Marc	INSA	<b>Malkin</b>	Peter	U. Newcastle
<b>Christmann</b>	Markus	Siemens AG	<b>Maré</b>	Jean-Charles	INSA
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<b>Craig</b>	Lawson	U. Cranfield	<b>Meuret</b>	Régis	Safran Electrical
<b>Devautour</b>	Joël	Thales AES	<b>Nieznanski</b>	Janusz	U. Gdansk
<b>Donadille</b>	Christian	Airbus	<b>Orr</b>	Eddie	Rolls-Royce
<b>Duquesne</b>	Nathalie	Liebherr	<b>Pons</b>	Philippe	Aerospace Valley
<b>Engler</b>	Wolfgang	ret. Airbus	<b>Roboam</b>	Xavier	CNRS/Laplace
<b>Eveleens</b>	René	NLR	<b>Roques</b>	Serge	Safran Electrical
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<b>Gatard</b>	Jacques	TTTech	<b>Smyth</b>	Richard	ret. Airbus
<b>Gazzino</b>	Marc	Airbus Helicopters	<b>Sutra-Orus</b>	Régine	IRT Saint-Exupéry
<b>Gerada</b>	Chris	U. Nottingham	<b>Thielecke</b>	Frank	U. Hamburg
<b>Hermetz</b>	Jean	ONERA	<b>Todeschi</b>	Michel	Airbus
<b>Isikveren</b>	Askin	Safran	<b>Vannier</b>	Jean-Claude	Astech cluster
<b>Joubert</b>	Emmanuel	Airbus R&T			

## Organizing committee:

Chair: Valerie Budinger, SEE, Toulouse

<b>Alidor</b>	Valérie	SEE, Paris	<b>Austruy</b>	Hervé	3AF, Bordeaux
<b>Melchior</b>	Pierre	SEE, Bordeaux	<b>Christophe</b>	Florent	SEE, Toulouse
<b>Fabre</b>	Roland	3AF, Bordeaux	<b>Guimera</b>	Francis	3AF, Toulouse
<b>Goetz</b>	Catherine	3AF, Bordeaux	<b>Torgue</b>	Alice	3AF, Toulouse
<b>Stella</b>	Joelle	3AF, Toulouse			



SEE: Société de l'Electricité, de l'Electronique et des technologies de l'information et de la communication  
[www.see.asso.fr](http://www.see.asso.fr)



3AF: Association Aéronautique et Astronautique de France  
[www.3af.fr](http://www.3af.fr)