mahepa

AIRCRAFT DESIGN HACKATHON

"Changing the future of air travel"

PIPISTREL

University of Maribor

TU Delft

Compact Dynamics

ulm university universität uulm

H2FLY

DLR Deutsches Zentrum für Luft- und Raumfahrt

POLITECNICO MILANO 1863

If you share the passion for aviation and you have some insights on how to change future air travel, join us on “Aircraft Design Hackathon” **on 17-20 July 2017 in Ajdovščina (Slovenia)**, the hometown of Pipistrel, and:

BE PART of the innovation process in aeronautics and contribute with your ideas,

WORK with leading experts in the fields of electrical, design and aeronautical engineering,

INCREASE your employment opportunities by gaining new knowledge and skills,

LEARN something new in a thriving application field,

GAIN new social connections and friends.

WHAT AND WHY?

Hybrid electric propulsion is an enabling technology for the design of new aircraft that can change the existing mode of travel.

Hybrid-electric aircraft with short take-off and landing capability, can provide new commercial services – microfeeding – by connecting grass airstrips with airports served with scheduled airline services.

We invite **young people/students** to investigate and propose innovative concepts on hybrid-electric aircraft design, their ergonomics and operation to enable a new dimension in European mobility.

WHAT IS THE CHALLENGE?

Among **the inefficiencies of current air travel system** is the time to reach the airport from areas not served by mass transit systems.

Driving to and from airport is a time-inefficient way of traveling resulting also in **higher emissions and congestion costs.**

With distributed hybrid electric propulsion, small **19-seat commuter ("micro-feeder")**, capable of operating from grass airstrips could bring passengers from a wide range of small airfields to the neighboring airports serviced by scheduled airliner service with lower environmental impact.

WHAT WILL WE "HACK"?

Cockpit designs

Operating hybrid-electric aircraft with distributed propulsion requires a paradigm shift in Human Machine Interface (HMI), from screens to new data presentation means.

Acceptance of hybrid-electric aircraft

How design features can make aircraft be perceived as safer, more comfortable and an attractive transport alternative.

Micro-feeder cabin design

Comfort of embarking and disembarking passengers on airstrips without elaborate airport infrastructure.

Micro-feeder configuration and systems design

To increase comfort of ride, from turbulence alleviation and grass-airstrip operations to control principles for distributed propulsion.

Airframe efficiency

How micro-feeder aircraft with distributed propulsion can compete on operating costs with land travel.

PRIZES AND BONUSES

The winning team will receive:

- 3 months paid Internship at Pipistrel d.o.o. Ajdovščina
- exclusive flight experience with Pipistrel aircraft

All participants will receive:

- MAHEPA hackathon experience certificate
- Pipistrel factory guided tour
- entry ticket for aviation fair AERO 2018

HOW ABOUT THE COST?

Reimbursement of **travel cost** up to 300€
Free organized **food and accommodation**
Free organized **transfers** to Ajdovščina

HOW TO APPLY?

The participant can apply via **registration form** and by sending on email (**info@mahepa.eu**):

- CV (preferably Europass CV)
- transcript of records and degree certificate
- short motivation letter for participation (1-page maximum).

Submit your application until 2nd July 2017

MORE INFORMATION

The selected candidates will be informed via e-mail with all additional information.

For additional question, contact us on:
info@mahepa.eu

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