

Thursday, 19.09.2013

08:30	Registration,	welcome	coffee
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09:00 Official launch of TCAD

Introduction, targets

Björn Nagel DLR

Daniel Böhnke

Lars Jörgensen

Eike Stumpf RWTH Aachen

Dieter Scholz HAW Hamburg

George Seyfang BAE Systems (ret.)

DLR

Airbus

09:20 Aircraft Design Task

Challenges for the next generation of transport aircraft

Reference configurations as basis for assessment

A cost model for assessment of transport aircraft

Novel aircraft concepts: The FANWING

Discussion

- How to set up aircraft design studies which are of relevance for industry?

- Which are the relevant targets?
- How to assess the benefits of a novel design?
- Are there new aircraft concepts for new operational concepts?

11:00 Lunch

12:00	Collaborative MDO Methods	Thierry Lefebvre ONERA		
	Overall aircraft design optimization in industry: Which are the next challenges?	Christopher Jouannet SAAB		
	Multidisciplinary optimization of aircraft configurations: Which are the next challenges?	Gerd Schuhmacher CASSIDIAN		
	Novel MDO concepts	Jos Vankan NLR		
	Aircraft design in distributed MDO environments: Is collaboration the next big challenge?	Björn Nagel DLR		
TBV	High dimensional multidisciplinary optimization: challenges and current opportunities	Roberto d'Ippolito NOESIS Solutions		
	Towards coupling of different MDO systems	Alexander Schneegans PACE GmbH		
	Discussion - What is the state-of-the-art in Collaborative MDO which is applied in reality?			

- What are remaining and new challenges?

- How to deal with rising non-technical challenges of collaborative MDO?

14:15 Coffee break

Technical Committee on Aircraft Design



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14:45	Aircraft Design Studies 1 – The BoxWing	Jan Vos CFS Engineering
	Introduction to the Prandt'l Plane and activities of Uni Pisa	Aldo Frediani Uni. Pisa
	Configuration studies using the Design Engineering Engine	Gianfranco La Rocca TU Delft
	Aerodynamic studies of box wing configurations	Arthur Rizzi KTH Stockholm
	Design aspects of passenger BoxWing aircraft	Dieter Scholz HAW Hamburg
	<u>Discussion</u> - What do we actually know about the BoxWing? - What are remaining research questions? - How can new research projects complement the existing stu	dies?
16:30	Coffee break	
17:00	Aircraft Design Studies 2 – Towards High Fidelity in OAD	Gianfranco La Rocca TU Delft
	Multidisciplinary optimization of strut braced configuration using high fidelity tools	Gerald Carrier ONERA
	Towards HiFi Optimization of Truss-Braced Wing Configurations via CPACS	Ke-Shi Zang NPU
	Development of new aircraft design semi-empirical methodologies through CFD analysis	Fabrizio Nicolosi Uni. Napoli
	Aeroelastic design studies of strut braced configurations	Sergio Ricci Poli. Milano
	Systems models in aircraft design optimization	Ingo Staack Linköping University
	Discussion - How much do we know about strut braced wings for transport - Which disciplines need to be considered on which level of fic	rt aircraft? lelity?

- How can we move towards higher levels of fidelity?

- How can new research projects complement the existing studies?

19:30 Get together

Mingel (Light dinner)



Friday, 20.09.2013

09:00	Open Software Projects	Petter Krus Linköping University	
	CPACS data model and TIXI/TIGL libraries	Daniel Böhnke DLR	
	RCE open source framework tool	Doreen Seider DLR	
	OpenCDT open source conceptual design tool	Sven Ziemer Bauhaus Luftfahrt	
	CEASIOM computerised environment for aircraft synthesis and integrated optimization methods	Arthur Rizzi KTH Stockholm	
	NeoCASS conceptual aero structural sizing	Sergio Ricci Poli. Milano	
	<u>Discussion</u> - Which tools can be shared and do not need to be re-invented? - Which functionalities are missing? - How can we best create synergies between commercial and open tools?		
11:00	Coffee break		
11:30	Towards the next European project on Overall Aircraft Design	Lars Jörgensen Airbus	
	<u>Discussion</u> Which should be the topics of the next large European project on aircraft design considering the results of NACRE and other projects such as CleanSky? 		
12:30	Terms of reference of the CEAS Technical Committee on Aircraft Design	Thierry Lefebvre ONERA	
	<u>Discussion</u> - Way forward of the CEAS TCAD - Agreeing the TCAD's terms of reference - Planning of the next meeting		
13:00	Lunch		

14:00 End of symposium