(第五届)

5 th 商用航空发动机上海国际论坛 Commercial Aero Engine Shanghai International Forum 2021

6月17日至18日 中国·上海 JUNE 17™ - 18™ SHANGHAI, CHINA

主办单位/Hosted by

上海市航空学会

Shanghai Society of Aeronautics

联合主办单位/Co-hosted by

中国航发商用航空发动机有限责任公司

AECC Commercial Aircraft Engine Co., Ltd.

支持单位/Supported by

中国航空学会

Chinese Society of Aeronautics and Astronautics

上海虹桥商务区管理委员会

Shanghai Hongqiao Central Business District

上海虹桥临空经济示范区

Shanghai Hongqiao Linkong Economic Demonstration Zone

中国商用飞机有限责任公司

Commercial Aircraft Corporation of China

中国东方航空股份有限公司

China Eastern Airlines

宝武特种冶金有限公司

BAOWU SPECIAL METALLURGY CO., LTD.

承办单位/Organized by

上海广尧商务咨询有限公司

Galleon (Shanghai) Consulting Co., Ltd.



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Background.

Aero engine is an important embodiment of a country's high-end power equipment research and development capabilities. The use of advanced technology tools is the necessary means to achieve independent innovation research and development, with data thinking to replace traditional thinking is the premise of the full role of information technology.

AECC had the analysis about the trends of commercial aero engines:



Trend Analysis:

- Narrow-body aircraft engines remain the main market players: It accounts for 65 percent of global deliveries and is growing at an average annual rate of 3.3 percent.
- Regional and wide-body aircraft engines have strong development potential: The world's 65,000-pound thrust-grade wide-body aircraft will grow by 4.3%.
- Demand in the cargo engine market is equally strong: Global demand is expected to reach 5,000 units and new machines will deliver 1,600 units.

In the "14th Five-Year Plan" period, with severe and complex international epidemic and world economic situation, China's aviation engine industry around the "digital engine", "smart engine". With the help of high-performance computing simulation technology, 5G communication technology, Al artificial intelligence technology, VR virtual reality and other related technologies to achieve design and manufacturing synergy, reduce the risk and cost of aviation engine development, reduce physical testing, shorten the development cycle, improve the efficiency and quality of engine research and development.

The Forum will focus on scientific and technological innovation-driven, integration of industry in-depth and with a number of domestic and foreign aero engines and aircraft host development units to focus on the "the aviation industry policy and market trends under the 14th Five-Year Plan," "aero engine simulation technology," "advanced test and test technology for aero engines," "advanced aero engine materials and processing technology" and other hot topics, to build a high platform for aero engine technology exchanges, academic discussions and business cooperation.

Topic Coverage ___

- Policy analyzing
- Single-crystal blade
- MRO

- Cc& ceramic composite material
- Ultra-efficient
- Digital twin technology
- Vertical integration
- AEOS
- Combustion structure

Who will attend?

- OEMS
- Airlines
- Aviation regulators
- Aero engine manufacturers
- Repair supplier
- Aero engine parts manufacturers
- Aero engine TBC suppliers
- Alloy manufacturers
- Institutes & universities







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China Aero-engine News

The existing experimental verification facilities and experimental technical capability of China can not meet the demand of exploiting on large commercial aviation engines, which has become a key factor that restricting the rapid development of China's commercial aviation engine industry.

Breakthrough in Single Crystal Turbine Blade

A research group which is leading by Xu Qingyuan get award for the project"Aviation Engine High Temperature Alloy Blade Directional Solidification Multi-Scale Modeling & Simulation Technology and Engineering Application" Single crystal high temperature alloy turbine blade is one of the bottlenecks for China to develop advanced aviation engine The results of the project have been successfully applied to the manufacture of turbine blades.

(Excerpted from China Aviation News, April 2, 2019)

Standardization of Aero-engine Manufacturing

AECC held a seminar on technical system and systematic engineering, organized experts to exchange technical system framework, construction methods and process control, effectively promoting the construction of AEOS system.

(Excerpted from AECC's Standardization Day Talk Standard, October 15, 2019)

Cooperation between Safran and AECC

Safran and AECC launched the first aviation engine vortex 16. The certification of the Chinese bureau marks an important milestone for Safran Helicopter Engine seilife and China Airlines.

(Excerpted from China Aviation News, October 15, 2019)

Computing Software Analysis Application

The software provides the necessary simulation, analysis and calculation functions for engine research and development activities. Whereas with the increase of the scale and quantity of software required for the development of aviation engine, a series of problems occur, such as software evaluation system, pre-planning, defect of software function.

(Excerpted from China Aviation News, October 16, 2019)

Digital Twins Technology

Through precise reflection and feedback mechanisms based on physical and digital spaces, Digital Twins technology enables the exchange of data and information in both of these spaces, the development of sensor and network technologies enhances the perception capability of complex systems.

(Excerpted from the application of Digital Twin Technology in Aviation Engines, China Aviation News 201910)



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Agenda-Day One _

论坛廾幂式&欢迎致辞					
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Opening Ceremony & Welcome Address

详解"十四五"规划,展望中国"两机"发展

Explain The 14th Five-Year Plan And Look Forward To The Development Of Aero

Engine And Gas Turbine.

关注行业/工业体系能力建设,切实提升我国适航审定能力

Pay Attention To The Capacity-Building Of The Industry / Industry System And

Effectively Enhance China's Airworthy Testing Capacity.

院士报告/Academician Keynote

发动机寿命预测技术方向主题报告

Technology Of Long-Life For Commercial Aero Engine

院士报告/Academician Keynote

陶瓷基复合材料方向主题报告

CMC

上海市航空学会领导

Shanghai Society of Aeronautics

待定 Invited

工信部装备工业二司

Ministry of Industry and Information Technology

Equipment Industry Development Center II

杨桢梅 YANG Zhenmei (拟邀)

航空器适航审定司副司长

Deputy Director of Aircraft Airworthy Audit Division

中国民用航空局

Civil Aviation Administration of China

涂善东 TU Shandong (拟邀)

中国工程院院士

Academician, Chinese Academy of Engineering

华东理工大学教授

Professor, East China University of Science and

Technology

董绍明 DONG Shaoming (拟邀)

中国工程院院士

Academician, Chinese Academy of Engineering

中国科学院上海硅酸盐研究所研究员

Researcher Fellow, Shanghai Institute of Ceramics,

Chinese Academy of Sciences

茶歇&交流/Coffee Break & Networking

新局势、新形势,用智慧的方法提升自主集成能力,加速国产航空发动机产业发展

New Situation, New Relationship, With Intelligent Methods to Enhance the Ability Of Independent Integration, Accelerate The Development Of Domestic Aero Engine

Industry

吴施志 WU Shizhi 总经理 President

李革萍 LI Geping 研究员 Researcher Fellow

中国航发商用航空发动机有限责任公司

AECC Commercial Aircraft Engine Co., Ltd.

开展跨学科交流,运用新技术、新思路提升飞机主机单位推进系统集成能力 Carrying Out Interdisciplinary Exchanges, Using New Technologies, New Ideas To

Enhance The Aircraft Host Unit Propulsion System Integration Capabilities

CR929宽体客机型号副总师 Deputy Chief Designer of CR929

中国商飞上海飞机设计研究院

COMAC Shanghai Aircraft Design & Research Institute

浅谈涡轴-16民用航空发动机适航取证实践

Airworthiness Certification Practice Of WZ-16 Civil Aero Engine

单晓明 SHAN Xiaoming

副总设计师 Deputy Chief Designer

中国航发湖南动力机械研究所

AECC Hunan Aviation Powerplant Research Institute

后疫情时代-商用航空发动机领域合作的"危"与"机"

Commercial Aero Engine Industry In The Post- Coronavirus

待定 Invited

罗尔斯-罗伊斯公司 Rolls-Royce

商用航空发动机产业国际合作与可持续发展的趋势与挑战

Trends and Challenges of International Cooperation and Sustainable Development

In The Commercial Aero Engine Industry

Philippe BARDOL

赛峰集团中国区总代表兼赛峰中国总经理

General Delegate for China and CEO of Safran China

赛峰 SAFRAN

自助午餐&午休/Luncheon Buffet & Break

未来民用飞机混合动力系统发展应用前景与技术支撑

Prospects And Technical Support For The Development And Application Of Civil

Aircraft Hybrid Power System In The Future

肖进 XIAO Jin (拟邀)

中国区工程与技术部高级总监

Senior Director, Engineering and Technology of China

霍尼韦尔航空航天集团 Honeywell Aerospace

沈文佳 Tony SHEN 推动商用航空发动机未来可持续发展

Powering A Sustainable Future of Aviation

商用发动机客户业务大中华区总监

Customer Business Director, Greater China

Pratt & Whitey







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Agenda-Day One _

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航空发动机燃烧不稳定性三维预测理论模型及风	⊽Ш
	<i>1</i> /17

The Theoretical Model And Application Of Three-Dimensional Prediction Of Combustion

Instability Of Aero Engine

数字孪生助力航空发动机跨代发展

Digital Twins Help Aero Engines Develop To Across Generations

面向全生命周期的航空发动机MBSE方法实践

基于模型和数字化驱动的航空发动机研发新模式

Practice Of The MBSE Method For Aero Engines For The Full Life Cycle

Develop New Models For Model and Digitally Driven Aero Engines

孙晓峰 SUN Xiaofeng

教授 Professor

北京航空航天大学 Beihang University

刘永泉 LIU Yongquan

总设计师 Chief Designer 中国航发沈阳发动机研究所

AECC Shenyang Engine Design Institute

李卫锋 LI Weifeng

大中华区技术咨询部CATIA高级技术经理

China Catia Industry Process, Consultant Senior

Manager

达索析统(上海)信息技术有限公司

DASSAULT SYSTEMES

茶歇&交流/Coffee Break & Networking

王岭 WANG Ling

设计研发中心主任

Director of the Design Research and Development

Centei

中国航发商用航空发动机有限责任公司

AECC Commercial Aircraft Engine Co., Ltd.

王占学 WANG Zhanxue

动力与能源学院院长

Dean of The School of Power and Energy

西北工业大学 Northwestern Polytechnical University

李焕 山

安怀信正向研发解决方案-构建数字化企业 Positive Research and Development Solutions - Building a Digital Enterprise

计算流体力学的高保真物理模型及仿真技术

变循环发动机发展及总体仿真技术研究

High-fidelity Physical Model And Simulation Technology For Computational Fluid

The Development Of Variable Cycle Engine And The Study Of Overall Simulation

Mechanics

Technology

李焕 LI Huan

创始人/CEO,首席咨询顾问 Founder/CEO, Chief Consultant 北京安怀信科技股份有限公司 ANWISE Technology Co., Ltd.

刘应征 LIU Yingzheng

教授 Professor

上海交通大学 Shanghai Jiao Tong University

论坛第一天活动结束/End of Day One

Agenda-Day Two _

待定 TBA

IDA

5G赋能航空强度试验,搭建数字化新场景

5G Energy-Enabled Aviation Intensity Test to Build a New Digital Scene

推动以质量为核心的智能制造 Drive Intelligent Manufacturing With Quality At Its Core 待定 Invited

中国航发上海商用航空发动机制造有限责任公司

AECC Commercial Aircraft Engine Manufacturing

Co., Ltd.

刘小川 LIU Xiaochuan

副所长 Deputy Director

中国飞机强度研究所

AVIC Aircraft Strength Research Institute

高仕伟 GAO Shiwei

智慧大事业部运营总监

SMART Date BU Vice Managing Director

海克斯康测量技术(青岛)有限公司 Hexagon Metrology Qingdao

茶歇&交流/Coffee Break & Networking

测试技术相关话题

Test Technology-Related Topics

待定 Invited 中国燃气涡轮研究院 Gas Turbine Establishment









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Agenda-Day Two _

发动机试验台测试设备的技术应用现状 The Current State of Application of The Engine Test Bench Test Equipment	赞助发言机会 Reserve for Sponsor
关于实验测试数据推动航空发动机设计的反向研发报告 Reverse Research And Development Reports On Experimental Test Data That Drive Aeronautical Engine Design	高扬 GAO Yang 发动机所所长 President of Aero Engine 中国飞行试验研究院 Chinese Flight Test Establishment
航空发动机部件级强度试验技术 Aero Engine Component-Level Strength Test Technology	李杰 LI Jie 高级工程师 Senior Engineer 天津航天瑞莱科技有限公司 Tianjin Aerospace Reliability Technology Co., Ltd.
自助午餐&午休/Luncheon Buffet & Bre	ak
探讨关于航空发动机高温合金及复合材料的现状与需求 The Current Situation And Demand Of High Temperature Alloys And Composite Materials For Aero Engines	待定 Invited 中国航发商用航空发动机有限责任公司 AECC Commercial Aircraft Engine Co., Ltd.
制造工艺仿真技术实践研究 Practical Research On Manufacturing Process Simulation Technology	张森堂 ZHANG Sentang 研究员级高级工程师、特级主任工程师 Researcher-level Senior Engineer 中国航发沈阳黎明航空发动机有限责任公司

航空航天领域难加工材	料特种加工技法	术解决方案					
Special Processing	Technology	Solutions	for	Difficult-to-Process	Materials	in	the

Aerospace

航空发动机涡轮盘轴件抗疲劳制造工程应用研究

Research On The Application Of Anti-Fatigue Manufacturing Engineering For Turbine Disc Shaft Parts Of Aero Engines

茶歇&交流/Coffee Break & Networking

航空发动机叶片加工工艺及关键制造技术研究 Research On The Processing Process And Key Manufacturing Technology Of Aero Engine Blades	待定 Invited 副总工程师 Deputy Chief Engineer 中国航空制造技术研究院 AVIC Manufacturing Technology Institute
商用航空发动机长寿命低成本粉末涡轮盘制造技术与发展趋势 Manufacturing Technology And Development Trend Of Long-Life And Low-Cost Powder Turbine Disk For Commercial Aero Engine	王晓峰 WANG Xiaofeng 研究员 Researcher Fellow 工学博士,博士生导师 Doctor of Engineering, Ph.D. Tutor 中国航发北京航空材料研究院 AECC Beijing Institute of Aeronautical Materials
航空发动机的关键单晶叶片的精密铸造技术及控制 Precision Casting Technology And Control Of Single Crystal Blade	张剑 ZHANG Jian 研究员 Researcher Fellow 工学博士 Doctor of Engineering 中国航发北京航空材料研究院 AECC Beijing Institute of Aeronautical Materials
	Paul BURTON

待定 TBA

航空周刊 Aviation

Aviation Week Network

常务董事 Managing Director

AECC Shenyang Liming Aero-Engine Co., Ltd.

Beijing Electricity Processing Research Institute

郭建梅 GUO Jianmei 副所长 Deputy Director

北京市电加工研究所

技术中心 Technology Center

AECC Xi'an Aero-Engine Ltd.

中国航发西安航空发动机有限公司

待定 Invited

论坛闭幕/Ending



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Previous Attendees



Attendees by Location























Attendees by Job Title

President/Vice President	7.51%
Director/General Manager	37.15%
Chief/Design Engineer	5.53%
Embassy	1.98%

CEO/CFO/CMO	6.32%
Marketing/Sales Manager/BD Manager	28.46%
Ph.D/Professor/Research Fellow	9.49%
Media	3.56%

TESTIMONIALS

We are very happy and satisfied from this forum. Great thanks to engine forum team. The forum keeps updated about industrial information.

-Walter Tool

We got many helpful industrial information, and thanks for forum organizer to arrange one to one meeting for us.

—Guobiao (Beijing) Testing & Certification Co., Ltd.

Through the aero engine forum, we talk with number of companies. Happy to participate in the forum.

—GKN Aerospace Engine System (GAES)

The forum is with frontier information and rich in content.

—Shanghai Tobacco Machinery Co., Ltd.



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Previous Speakers

Openning



JIN Hongming
Sult Secretary-General
Shanghai Society of
Aeronautics



SHI Jianzhong Chairman Shanghai Society of Aeronautics



SUN Yin
Vice Director
Shanghai Hongqiao
Linkong Economic
Zone, Office of
Changning District



SHI Ying
Deputy Director of
R&D Center
AECC COMMERCIAL
AIRCRAFT ENGINE
CO., LTD.

Day One



Head of Aviation Industry
Ministry of Industry and Information
Technology Equipment Industry
Development Center



LI Geping
Deputy Chief Designer
CR929 Wide-body Aircraft
COMAC Shanghai Aircraft
Design and Research Institute



YANG YI
Vice President
AECC COMMERCIAL AIRCRAFT
ENGINE CO., LTD.



Marius WEICHSELBAUMER
Project Lead Testing
MTU Aero Engines AG



DUAN Shihui Vice President Aircraft Strength Research Institute of China



David RIORDAN, BSc, MSc, CEng Engineering Fellow, Nacelle Design and Powerplant Integration Bombardier Aerostructures & Engineering Services, Belfast



Marinus POTGIETER
Design Engineer
Flownex Simulation Environment



SONG Yonghui Strategic Project Manager Seco Tools (Shanghai) Co., Ltd.



LI Jiarong
Research Fellow
Deputy Chief Engineer
AECC Beijing Institute of
Aeronautical Materials

Day Two



HOU Huipeng
3D Printing IPT
AECC SHANGHAI COMMERCIAL
AIRCRAFT ENGINE MANUFACTURING
CO., LTD.



Michael KIRBACH
Director
Aerospace Excellence Center
DECKEL MAHO Pfronten
(a factory of DMG MORI)



SONG Jinbang
Leading Engineer
Materials Sciences and Manufacturing
Processes Department
AECC COMMERCIAL AIRCRAFT
ENGINE CO., LTD.



ZANG Jianglong
Key Account Manager
Aerospace Business
Heller Machine Tool (Changzhou)
Co., Ltd.



LI XIAOXIN
Senior Director Engineer
Manufacturing Engineering Technology Center
Shenyang Institute of Engine Research,
Aero Engine Corporation of China
Depuly Director of Materials Sub-Committee
Aero Engine Corporation of China (AECC)



HU Liqiang Sales Manager United Grinding (Shanghai) Ltd.



CHEN Fuquan Sales Manager (Chongqing Branch Office) United Grinding (Shanghai) Ltd.



LIU Hu Surface Engineering Institution AECC Beijing Institute of Aeronautical Materials



DUAN Zemin Research Fellow, Chief Engineer AVIC Hefei Hangtai Electrophysics Co., Ltd.

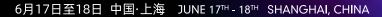
Panel Discussion







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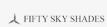


















































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CAE SH 2019 Photo Gallery _



















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Yes, I / we will participate	in CAE SH 2021.			
Participation Option	ation Fee (per Person)			
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Sponsor Package	Key Benefits		Price	
Platium Sponsor	Exclusive Sponsor, 10-minute opening speech+25-minute speech (first day morning)+1 Standard booth+2 pages A5 insert ads in the conference brock to one meetings+Attendee list+Choosing 2 from 3 additional benefits	USD 43,000/ CNY 300,000		
Gold Sponsor	25-minute speech+1 Standard booth+2 pages A5 insert ads in the confere brochure+one to one meetings+Attendee list+Choosing 1 from 3 addition	nce al benefits	USD 29,000/ CNY 200,000	
Silver Sponsor	25-minute speech+4 admission tickets+A 3m*3m table booth+Document +One-to-one meetings	Insert	USD 18,700/ CNY 129,950	
Presentation Sponsor	25-minute speech+3 admission tickets+Document Insert+One-to-one mee	USD 13,000/ CNY 89,950		
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Exhibition Sponsor	A 3m*3m table booth+3 admission tickets+Document Insert+One-to-one	USD 10,000/ CNY 69,950		
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LED Video Demonstration	2 admission tickets, circulate the company's Video on the LED screen in main venue before during opening ceremony and during bresk		USD 5,050/ CNY 34,950	
Documentation Insert	2 admission tickets, an colorful double-sided A5 page insert in conference	USD 5,050/ CNY 34,950		
Exclusive Sponsor Package	Key Benefits		Price	
REG Bag Sponsor	Branding your company through logo exposure on REG bags		USD 8,600/ CNY 59,950	
Lanyard Sponsor	Branding your company through logo exposure on lanyard USD 8,600/ CN			
Stationery Sponsor	Branding your company by logo exposure on pen body & note paper USD 8.600/CNY 59.9			

- Exchange rate is only for reference.
- 2 times pre-arranged VIP meetings.
- The registration fee includes all sessions, luncheon and documentation.
- All sponsor packages are including a colorful A5 advertising page and Please note accommodation is not included in the registration fee. But we can arrange hotel reservation for you at a special rate.

Delegate(s) Details

Full Name	Position	Tel	Mob	Email

Organization Details

Company Name:		
Address:		
Country:	Zip code:	
Tel:	Fax:	
Authorization Signature:	Date:	

Authorization sign	ature.
Payment M	ethods
Bank Transfer: Galleo Bank name: Shangha Bank Address: No 17' USD-Account No.: 98 EURO Account No. 人民币账户 开户名: 上 开户行: 上	Pudong Development Bank, Yangpu Branch 8, Huangxing Road, Yangpu District, Shanghai, China
	ARD * all credit card bookings will be charged in RMB Master Card
Card No [Expiry date [
Signature	
	of your credit card (both front and backside). We require the cardholder's

CANCELLATION AND SUBSTITUTIONS

- If you are unable to attend, a substitute delegate is always welcome at no extra charge. Alternatively, your registration can be credited to a future conference. If for reasons beyond your control you are not able to attend (more than 45days before the conference and there is no alternative Galleon event you wish to attend), we will refund the fee. Please confirm your cancellation in writing. Cancellations made within 45 days will result in loss of half the fee.
- · Cancellation within 30 days of the course will result in loss of the full fee. Failure to attend a course with no prior notice will also result in loss of the fee
- · Occasionally it is necessary for reasons beyond our control to alter the contents and timing of the program or the identity of the speakers. If a conference has to be cancelled at the last moment for reasons outside the control of Galleon, we will refund your fee in total, but cannot be held liable for any other expenses incurred by participants or their companies due to the cancellation.